

PRIVATE STAKEHOLDERS' PERCEPTION ON LEVERAGING PROVIDER PAYMENT METHODS
FOR BOTH PUBLIC AND PRIVATE SECTORS TO HELP MEET NATIONAL HEALTH GOALS
IN MYANMAR



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ประเทศเมียนมามีความมุ่งมั่นในการบรรลุเป้าหมายให้เกิดหลักประกันสุขภาพถ้วนหน้าในปี พ.ศ. 2573 เนื่องจากสภาวะทางเศรษฐกิจของประเทศที่ยังขาดแคลนรัฐบาลไม่สามารถบรรลุ เป้าหมายดังกล่าวได้โดยขาดความร่วมมือจากภาคเอกชน ซึ่งมีบทบาทเพิ่มขึ้นในการดูแลสุขภาพใน ประเทศเมียนมา ประชาชนพึ่งพาภาคเอกชนในการดูแลสุขภาพเนื่องจากความสะดวก ระยะเวลาใน การรอที่สั้น ความพร้อมของพนักงานและยา รวมถึงคุณภาพของการบริการ เพื่อเพิ่มการเข้าถึงบริการ ด้านการดูแลสุขภาพที่มีคุณภาพด้วยการป้องกันความเสี่ยงทางการเงินจึงมีความจำเป็นต้องทราบถึง วิธีการชำระเงินของผู้ให้บริการที่เหมาะสม ซึ่งสามารถใช้เป็นกุญแจสำคัญในการสนับสนุนให้เกิด หลักประกันสุขภาพถ้วนหน้าได้ ดังนั้นการศึกษานี้จึงได้จัดทำขึ้นเพื่อสำรวจการรับรู้ของผู้มีส่วนได้ เสียในภาคเอกชน และแนวทางในการชำระเงิน โดยมีการสัมภาษณ์ผู้ให้ข้อมูลหลักจำนวน 23 ราย จากภาคเอกชนในประเทศเมียนมา ได้แก่ โรงพยาบาลเอกชน ผู้ปฏิบัติงานทั่วไป องค์กรสาธารณสุข กลุ่มชาติพันธุ์ องค์กรนอกภาครัฐ องค์กรภาคประชาสังคม และผู้เชี่ยวชาญด้านสาธารณสุขอื่น ๆ ใน เมืองย่างกุ้ง และอำเภอแม่สอด จังหวัดตาก หลังจากการวิเคราะห์พบว่าประเทศเมียนมายังคงใช้ วิธีการซื้อแบบดั้งเดิม ได้แก่ งบประมาณรายรับตามรายการและค่าธรรมเนียมที่ไม่ได้รับการควบคุม สำหรับบริการทั้งภาครัฐและเอกชน ซึ่งไม่สามารถสร้างแรงจูงใจกับผู้ให้บริการได้ ผลการศึกษานี้ เป็นหลักฐานเชิงประจักษ์สำหรับผู้กำหนดนโยบายในเมียนมา เพื่อประเมินการรับรู้ของผู้มีส่วนได้ส่วน เสียจากภาคเอกชนเกี่ยวกับทางเลือกในการเปลี่ยนแปลงวิธีการจ่ายเงินของผู้ให้บริการรายต่างๆและ ตัดสินใจเลือกวิธีการชำระเงินเพื่อช่วยให้บรรลุเป้าหมายให้เกิดหลักประกันสุขภาพถ้วนหน้าได้ตาม แผนสุขภาพแห่งชาติ

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Myanmar has committed to achieving universal health coverage (UHC) by 2030. With a poor economy and scarce resource, the government alone cannot achieve UHC without the collaboration of private stakeholders which has an increasing role in the health sector with evolving political and administrative circumstances. To uplift equitable access to essential quality health care services with financial risk protection and efficiency, the country is eager to know a suitable mix of provider payment methods which can be used as key levers to support achieving UHC goals. This study is designed to explore the private stakeholders' perception on leveraging provider payment systems to help meet national health goals in Myanmar. 23 key informant interviews were conducted with private stakeholders including private hospitals, general practitioners, ethnic health organizations, non-government organizations, civil society organizations and other public health professionals in Myanmar, using a guideline question. After analysis, the result showed that Myanmar is still using traditional passive purchasing methods, i.e. line-item budget and unregulated fee for service in both public and private sectors, which cannot produce explicit incentives for desired provider behavior towards aspired national health goals. The results of this study provided an empirical basis for policy-makers in Myanmar to assess the perception of private stakeholders on different provider payment reform options and make decisions about a mix of payment methods to help meet national health goals in Myanmar according to the roadmap of National Health Plan.

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LIST OF ABBREVIATIONS

3MDG	Three Millennium Development Goals
AIDS	Acquired immune deficiency syndrome
ASEAN	Association of South-East Asian Nations
BE	Budget estimates
CBO	Community-based organization
CME	Continued medical education
CPI	Community Partners International
CSO	Civil society organization
DEA	Data Envelop Analysis
DFID	Department for International Development
DHS	District Health System
DMR	Department of Medical Research
DOTS	Directly observed treatment, short course
DRG	Diagnosis related groups
EAO	Ethnic armed organization
EHO	Ethnic health organization
EPHS	Essential package of health services
ERC	Ethics Review Committee
FDA	Food and Drug Administration
FFS	Fee-for-service
GB	Global budget
GDP	Gross domestic product
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
GGE	General Government Expenditure
GGHE	General Government Health Expenditure
GP	General Practitioner
HC	Health center
HFS	Health Financing Strategy

HIV	Human Immunodeficiency Virus
HSS	Health Systems Strengthening
IMR	Infant mortality rate
INGO	Internal non-government organization
IT	Information Technology
LIB	Line-item budget
LMIC	Lower middle income country
JICA	Japan International Cooperation Agency
JLN	Joint Learning Network for Universal Health Coverage
MCH	Maternal and child health
MMR	Maternal mortality ratio
MoD	Ministry of Defense
MoF	Ministry of Finance
MoH	Ministry of Health
MoHS	Ministry of Health and Sports
MoLIP	Ministry of Labor, Immigration and Population
MoPF	Ministry of Planning and Finance
MoSWRR	Ministry of Social Welfare, Relief and Resettlement
MPHA	Myanmar Private Hospitals' Association
MTC	Mae Tao Clinic
NA	Not available
NCA	Nationwide ceasefire agreement
NGO	Non-government organization
NHP	National Health Plan
NHSO	National Health Security Office
NIMU	National Health Plan Implementation Monitoring Unit
OECD	Organization for Economic Co-operation and Development
OOP	Out-of-pocket
PHD	Provincial Health Department
PPS	Prospective payment system
PSI	Population Services International

PSS	Provincial Social Security
RHC	Rural health center
SDC	Swiss Agency for Development and Cooperation
SQH	Sun Quality Health
SSB	Social Security Board
THE	Total health expenditure
TSG	Technical Strategy Group
U5MR	Under-five mortality rate
UHC	Universal Health Coverage
UHC	Urban Health Center
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
URBMI	Urban Resident Basic Medical Insurance
USAID	United States Agency for International Development
VSS	Vietnam Social Security
WHO	World Health Organization

CHAPTER I

INTRODUCTION

1.1 Problem and Significance

Myanmar is a country in South East Asia Region where 51.49 million population are resided. More than 70% of the population reside in the rural areas and average life expectancy is 64.7 years at birth (MoIP, 2015). Myanmar was reclassified as a lower-middle income country (LMIC) by The World Bank in July 2015, whereas previously it was a low-income nation. Myanmar citizen has suffered from poor health as a result of decades of underinvestment in and neglect of the health system by military rules. Low investment in rural health services, disparities in health between rural and urban areas, poverty, inadequate funding for health care and high mortality rates continue to be significant challenges. The infant mortality rate (IMR) and under-five mortality rates (U5MR) were 62 and 72 per 1,000 live births while the maternal mortality ratio per 100,000 live births was 282 in 2014. So, it can be clearly seen that the mortality rates are still high in Myanmar compared with other LMIC countries in the region such as Bangladesh (IMR 38, U5MR 46) and Cambodia (IMR 28, U5MR 35, MMR 170) (MoHS, 2016) (DHSProgram, 2018; StatCompiler, 2018; TheWorldBank, 2018a).

The ultimate goal of the country is uplifting the health status of the entire population and there are two objectives; firstly to enable every citizen to attain full life expectancy and enjoy the longevity of life and secondly, to ensure that every citizen is free from diseases (MoHS, 2017a). As a mean as well as overarching objective to achieve this goal, Myanmar government is already committed to achieving Universal Health Coverage (UHC) in Myanmar by 2030. This UHC goal will be fulfilled by the implementation of three consecutive five-year long National Health Plans. According to Myanmar National Health Plan (2017-2021), national health goal is *“everyone in Myanmar receives the health services they need without suffering financial hardship”*. The guiding principles include efficiency, equity, accountability, inclusiveness, quality and financial sustainability (MoHS, 2016).

The democratic changes and political reforms in Myanmar had prioritized the social welfare of citizen, resulting in an increase in government expenditure on health care sector from 0.2% of country's GDP to over 1% between 2009 and 2014. However, the government spending on health is still low and only 3.65% of its general government budget was allocated on health in 2015, which is significantly low in compared with that of other countries in South East Asia as well as around the globe. As a result, out-of-pocket (OOP) expenditure of households stands as the major source of financing for health, pushing households into poverty and preventing many from access to essential health care.

According to Myanmar Ministry of Health and Sports (MoHS), the out-of-pocket (OOP) spending on health as percentage of total health expenditure (THE) has obviously reduced from 82.2% in 2010 to 54.3% in 2013 due to an increase in government spending on health since 2011. However, Myanmar citizen's OOP of 54.3% is still higher than the World Health Organization's recommended threshold of maximum OOP as 30 to 40% of THE (WHO, 2008). Many studies in Myanmar showed that 12 to 18% of the households faced with catastrophic spending on health while they felt sick (Sein et al., 2014). So, this situation shows that Myanmar haven't met with its health system goals of "financial risk protection" for the citizens.

A pluralistic mix of both public and private health systems both in financing and provision is seen in Myanmar health care system. The majority of the health care services are provided by MoHS which acts not only as a regulator, but also as purchaser as well as provider for health care system in Myanmar. Additionally, other ministries like ministries of Defense, Mines, Industry, Energy, Railways, Home and Transport, are responsible for providing health care services especially curative care to their employees and families (Sein et al., 2014).

More than 95% of government health expenditures is managed by MoHS and it is received by the ministry as traditional line-item budget which is not based on the performance. As the payment is not linked with actual service utilization and just input based financing, providers have no incentive and poor motivation for health system outcomes. As described in Myanmar health system review 2014 (Sein et al., 2014), generally, public providers are paid by salary as one of line item budget which is quite

low and private providers are paid in fee for services (unfixed fee schedule). Other payment method like per diem is used in some projects, but not on a large scale. Providers tend to expand input uses, under provision of services, increase referral to other level of care and resulting in insufficient use of scarce resources. So, these situations do not meet with the guided principles of accountability and efficiency. Myint et al (2015) mentioned that inefficient allocation of scarce resources are seen in health system of Myanmar. Moreover, many poor households receive health care from private health care sector because of physical proximity and few waiting time. However, inadequate private sector regulation results in poor people experiencing overpriced services which are often of very poor quality (Myint, Sein, & Cassels, 2015b).

Different provider payment methods create a large variety of different incentives to the providers in positive as well as negative ways. In other words, each payment method has pros and cons. The decision on the usage of a mix of different provider payment mechanisms depends largely on the wisdoms of a particular country after reviewing the country actual contexts carefully. The government should be in a leadership and stewardship role to provide a clear regulatory framework and appropriate guidance, making sure that resource allocation and purchasing decisions link to public health priorities (Munge, Mulupi, & Chuma, 2016). How providers are paid is the key policy tool, leveraging health system performance and to attain objectives related to improving quality, efficiency, responsiveness, and equity. Leveraging can be referred as boosting or maximizing the incentives created by the provider payment methods to influence the provider behavior to achieve national health goals in Myanmar, reducing inefficiency, inequity and high out-of-pocket spending as stated above with evidence. Provider payment mechanisms affect provider behavior not only by creating incentives but also by changing who bears financial risk for provision of care. Studies in many countries show that strategic mix of provider payment methods can contain cost and increase access, equity, efficiency, service availability and supports achievements of UHC goals (Liu, Hotchkiss, & Bose, 2008; Loevinsohn & Harding, 2005; Tangcharoensathien et al., 2015; Tangcharoensathien, Witthayapipopsakul, Panichkriangkrai, Patcharanarumol, & Mills, 2018). The job satisfaction and motivation of the health care providers are critical to the retention,

performance and the outcomes of patients (Robyn, Bärnighausen, Souares, & Traoré, 2014). Provider payment methods can influence the retention and satisfaction of providers; the quantity and quality of services provided to the patients; risk pooling and financial sustainability (Robyn, Sauerborn, & Barnighausen, 2013). Therefore, the performance of the providers as well as health outcomes of the system can be leveraged by strategic and blended mix of provider payment methods.

To achieve desired national health goals, Myanmar needs to undergo several refinements and reforms in health system, health care financing arrangements such as resource mobilization, pooling and purchasing especially provider payment systems. It is undeniable that Myanmar's current provider payment mechanisms need to be analyzed to find out the bottlenecks and weaknesses. Moreover, it is necessary to replace traditional passive purchasing methods with active purchasing mechanisms to reduce the patient out-of-pocket payment, prevent catastrophic household expenditure on health and increase access to essential health care services. Myanmar National Health Plan (2017-2021) also stated that Myanmar requires to prepare for health financing transformation, dealing with current fragmentation of different financing pools which leads to considerable inefficiencies and implement strategic purchasing creating explicit incentives through a given provider payment mechanisms to ensure a desired provider behavior (MoHS, 2016). However, in-country experience of and study on provider payment methods in Myanmar is limited and scarce. According to accessible information, the mentioned studies (Myint, Sein, & Cassels, 2015a; Myint et al., 2015b), (Phyu, 2013)) of health care financing in Myanmar focus more on resource mobilization, pooling, and enabling environment, but not intensively on purchasing especially provider payment methods. The studies emphasized more on public sector rather than private sector. According to National Health Plan, a certain portion of population seeks health care from private sector and engaging health providers outside of MoHS is important for the country's moving towards UHC (MoHS, 2016). Purchasing makes mention of the mechanisms and arrangements used to transfer or allocate pooled funds to health care providers for their given services. Although the answers for purchasing related questions of what should be bought, from whom it should be bought and for whom it should be bought, are clearly stated in

Myanmar National Health Plan, it is needed to find the answer of through which methods should payment be made and to whom.

According to World Health Organization, stakeholders are defined as actors who could be either person or organization, with a vested interest in the policy or action being promoted (Schmeer, 2000). The scope of the study will focus mainly on private sector because these players took increasing roles in private sector with changing political as well as administrative contexts in Myanmar, e.g. practicing open market, democratization, etc. Additionally, as the country's economy is still poor with scarce resources, the government alone cannot achieve Universal Health Coverage without the collaboration of huge private healthcare sector, due to insufficient geographic coverage. Experiences of countries such as Cambodia, Mexico, etc. showed that contractual partnership with private sectors to deliver publicly financed services improve accountability, transparency, quality, efficiency and coverage (Nigenda & González, 2009; Palmer, 2000). Stakeholders from private sector for health system in Myanmar are grouped into private-for-profit (i.e. private hospitals and general practitioners (GP)), selected ethnic health organizations (EHOs), civic society organizations and non-government organizations (CSO/NGO) and freelance public health professionals in Myanmar.

Before any policy reforms or setting a new policy, it is important to generate and collect evidence. For provider payment system reforms, it is important to know where we should start. To simulate the pilot projects for evidence generation, a good start will be exploring the opinion of private stakeholders on different provider payment methods to leverage the providers' performance as well as desired health outcomes, maximizing the incentives. Therefore, it is important to fill in the gap by finding out the challenges of current payment methods, options, private stakeholders' perception and policy recommendation for leveraging provider payment system in Myanmar. The findings of this study can benefit to designing the future strategic purchasing pilots for health financing reforms as well as drafting the national health insurance law or Universal Health Coverage law in Myanmar.

1.2 Research Question

What are the private stakeholders' perceptions on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar?

1.3 Research Objectives

1.3.1 General objective

- To determine the private stakeholders' perceptions on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar.

1.3.2 Specific objectives

- To examine private stakeholders' opinions on strengths, weaknesses and consequences of current provider payment methods for both public and private sectors practiced in Myanmar
- To explore the stakeholders' perception on the potential mix of provider payment methods for both public and private sectors to help meet national health goals in Myanmar

1.4 Scope of the study

This study aims to identify the strength, weakness as well as challenges of current provider payment methods practiced in Myanmar's health system and explore the private stakeholder's opinion and perception on whether current payment methods meet with national health goals and guiding principles. Then, private stakeholders' perception and opinion on the potential mix of provider payment mechanisms to help meet national health goals which could incentivize the providers as well as potential challenges and difficulties for implementation, were explored.

This is a cross-sectional descriptive qualitative study using pre-structured

guideline question to conduct key informant interview with key stakeholders from private sector in Myanmar. The key stakeholders from private sector include private hospitals and general practitioners (GP) representing private-for-profit sector, selected ethnic health organizations (EHOs) who are the health wings of ethnic armed organizations in Myanmar, civic society organizations and non-government organizations (CSO/NGO) and freelance public health professionals in Myanmar. 23 key informant interviews were conducted mainly in June 2018, in Yangon, Myanmar as well as Mae Sot, Tak Province, Thailand where stakeholders were located.

1.5 Potential benefits and policy implication

This study aims to identify the strength, weakness as well as challenges of current provider payment methods practiced in Myanmar's health system and explore the private stakeholder's view on whether current payment methods meet with health system goals and guiding principles. Then, private stakeholders' perception and opinion on the potential mix of provider payment mechanisms to help meet national health goals which can incentivize the providers as well as potential challenges and difficulties for implementation, were explored.

The stakeholders' opinion on potential mix of provider payment methods can be used as a basis for piloting strategic purchasing of health services from both public and private sectors. This pilot can in turns produce evidence on which payment method is suitable for Myanmar. Therefore, I believe that the findings of this study can benefit to an evidence based decision making by MoHS for provider payment reforms to national health goals in Myanmar according to the roadmap of National Health Plan (NHP). Moreover, the evidence from this study can be used on developing legal framework (Myanmar national health insurance law) and legislation of the law to support health reforms to achieve UHC in Myanmar.

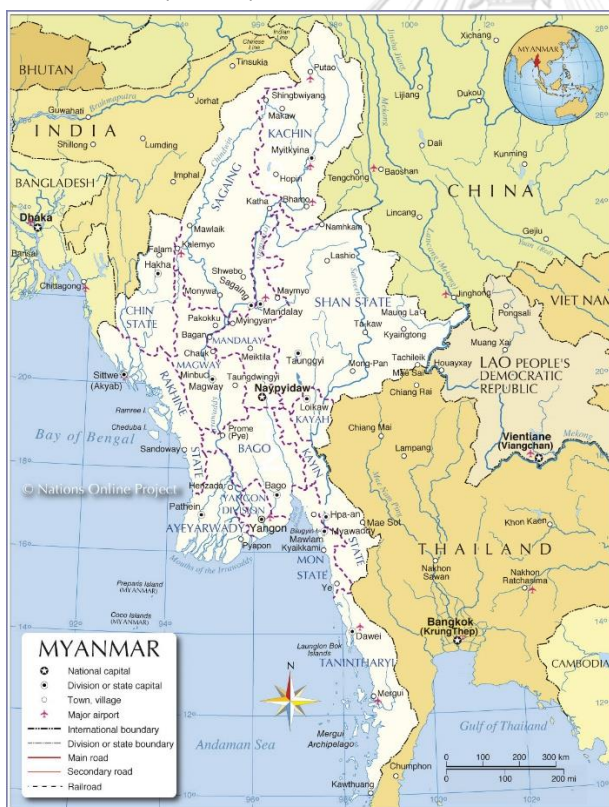
CHAPTER II

BACKGROUND INFORMATION

2.1 General Background on Myanmar

2.1.1 Location

The Republic of the Union of Myanmar is situated in South-East Asia with a total area of 676,577.2 square kilometer. The territory of Myanmar is measured as 800 kilometers from east to west and 1,300 kilometers from north to south. It is surrounded by many countries; the People Republic of China on the north and north-east; the Kingdom of Thailand and the Lao People's Democratic Republic on the east and south-east; the Bay of Bengal and Andaman Sea on the west and south; the Republic of India and the People Republic of Bangladesh on the west (MoIP, 2015).



Source: (Nationsonline, 2018)

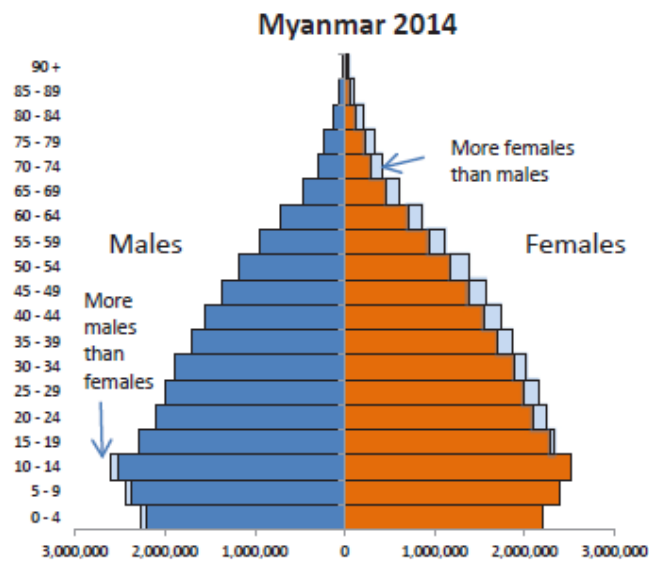
Figure 1 The map showing Myanmar with its neighboring countries

2.1.2 Geography

According to Constitution of the Republic of the Union of Myanmar, the country is administratively comprised of seven regions, seven states, the union territories (under the direct administration of the President), five self-administered zones and one self-administered Division. Nay Pyi Taw, designated as union territory, is the capital city of Myanmar. It consists of 74 districts, 412 townships and sub-townships, 398 towns, 3063 wards, 13,618 village tracts and 64,134 villages (MoIP, 2015). There are three well-marked natural divisions in Myanmar namely, the western hills, the central belt and the Shan plateau on the east with a continuation of this high land in Taninthayi Region in the south. The Irrawaddy is the longest river in Myanmar and other three important rivers flowing in line with Irrawaddy are Thanlwin (Salween), Sittaung and Chindwin rivers. This different geography and terrains critically show the importance of consideration for adjustment in payment for providers when purchasing health care services.

2.1.3 Demography

The total population of Myanmar in 2014 is 51,486,253 (51 millions) with annual population growth rate of 0.89%. 48.22% of the population is male while 51.78% is female. 70% of the population are resided in rural areas. Population density per square kilometer is 76.1. Total fertility rate is 2.29. Around 40% of the total population live in Yangon, Ayeyawady and Mandalay Regions. The mean household size is 4.4 persons. 89.5% of the population aged 15 and over are literate. This urban and rural population density differences significantly highlight the importance of consideration for adjustment according to demography in payment for providers to avoid under/over payment when purchasing health care services.



Source: *The 2014 Myanmar Population and Housing Census (MoIP, 2015)*

Figure 2 Population Pyramid of Myanmar (2014)

2.1.4 Race and Religion

There are 135 distinct ethnic groups, speaking over hundred dialects, officially recognized by the government which are the constituents of eight major national ethnic races namely, Kachin, Kayah, Kayin, Chin, Mon, Bamar, Rakhine and Shan. 87.9% of the population are Buddhists while that of Christianity, Islam, Hinduism and others are 6.2, 4.3, 0.5 and 1.1 respectively. So, it is important to ensure that every citizen in the country could have access to health care service without discrimination for such a country like Myanmar with multi-ethnically and religiously diverse country.

2.1.5 Economy

Myanmar's economy is emerging with an estimated nominal Gross Domestic Product (GDP) of USD 74 billion in 2018 with an annual GDP growth rate of 8%. 37.1% of the economy is contributed from agriculture while that of industry and services are 21.3% and 41.6% respectively. 67% of the population aged (15-64) are participated in labor force. 64.4% of the population are employed. The economy growth is quite important for a country to get more fiscal space in the government budget for health.

Table 1 Economic outlooks of Myanmar (1990-2016)

Indicators	1990	2000	2010	2016
GDP (current USD) (billions)	..	8.91	49.54	63.23
GDP growth (annual %)	2.8	13.7	9.6	5.9
Inflation, GDP deflator (annual %)	18.5	2.5	7	3.6
Agriculture, value added (% of GDP)	..	57	37	25
Industry, value added (% of GDP)	..	10	26	35
Services, etc., value added (% of GDP)	..	33	37	40
Exports of goods and services (% of GDP)	..	1	0	17
Imports of goods and services (% of GDP)	..	1	0	28

Source: (TheWorldBank, 2018b)

2.2 Overview of Myanmar Health Care System

A pluralistic mix of both public and private health systems both in financing and provision is seen in Myanmar health care system. The majority of the health care services are provided by MoHS which acts not only as a regulator, but also as purchaser as well as provider for health care system in Myanmar. Additionally, other ministries like ministries of Defense, Mines, Industry, Energy, Railways, Home and Transport, are responsible for providing health care services especially curative care to their employees and families (Sein et al., 2014). MoHS is comprised of seven departments where the Department of Medial Services (DoMS) is responsible mainly for curative and rehabilitative care while the Department of Public Health (DoPH) is the key player for preventive, promotive and disease control functions, protecting the health of the people. The network of health care facilities ranging from sub-rural health center to hospital, delivers both preventive and curative services in a spectrum of primary to tertiary care. According to Health in Myanmar 2014, there are 1,056 public hospitals with a total of 56,748 beds. These number includes 348 maternal and child health centers, 1,684 rural health centers, and 80 school health teams (MoHS, 2014).

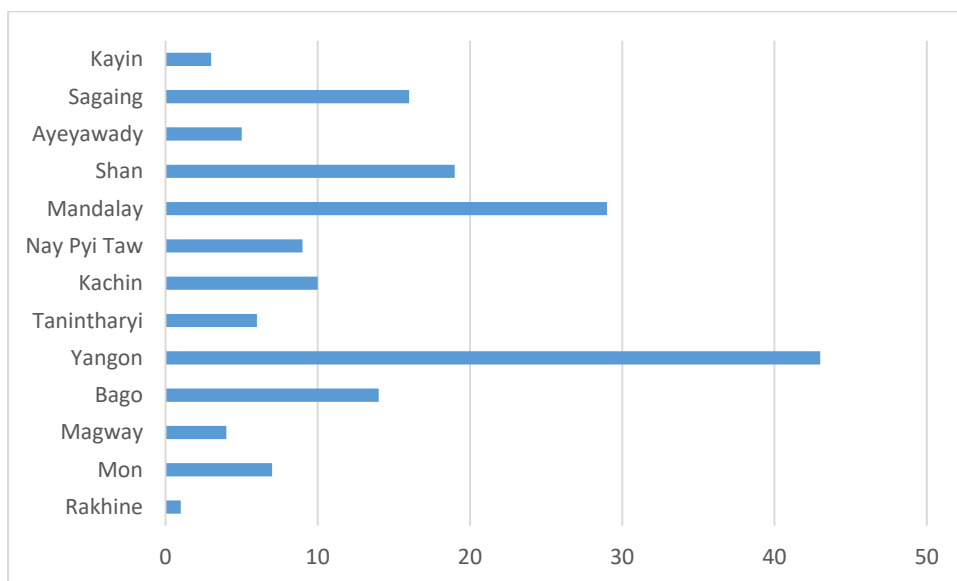
Table 2 Number of health facilities in Myanmar

Health Facilities	2010-11	2011-12	2012-13	2013-14
Hospital (Public sector)	924	987	1,010	1,056
Ministry of Health and Sports	897	921	944	988
Other Ministries	27	66	66	68
Total no: of hospital beds	43,789	54,503	55,305	56,748
No. of Primary and Secondary Health Centers	86	87	87	87
No. of Maternal and Child Health Centers	348	348	348	348
No. of Rural Health Centers	1,558	1,565	1,635	1,684
No. of School Health Teams	80	80	80	80
No. of Traditional Medicine Hospitals	14	14	16	16
No. of Traditional Medicine Clinics	237	237	237	243
No. of registered private hospitals	-	-	166	-

Source: Annual Hospital Statistics Report, Health in Myanmar (MoHS, 2013, 2014)

On the other hand, many key players took increasing roles with the changing political as well as administrative contexts. Changing government rules on private sector, open market economy and democratization facilitates to increase the number of private health facilities in Myanmar. People also seeks health care from the private health care facilities because these facilities are not far from their residence with staff and drugs availability, perceived quality of care and few waiting times (Sein et al., 2014). The private health care sector which are commercial, is regulated by the Ministry of Health and Sports according to law for private health care sector legislated in 2007. There are 193 private hospitals, 201 private specialist clinics, 3,911 private general

clinics, and 776 private dental clinics in Myanmar. According to one survey conducted in Myanmar, 47% of respondents reported seeing health care provider for recent episode of a common illness took care from private clinics. Moreover, nearly 30% of the hospitalization was taken care by private sector (Aye et al., 2013). However, according to annual hospital statistics report (2013), the distribution of registered private health facilities are varied among state and regions as shown in the following figure (MoHS, 2013).



Source: Annual Hospital Statistics Report, (MoHS, 2013)

Figure 3 Distribution of registered private hospitals among state and regions

The private not for profit sector and non-government organizations as well as religious-based societies also provide ambulatory care with some outreach services (Latt et al., 2016). Ethnic health organizations (EHO) are the sole health care providers in the areas controlled by ethnic armed organizations (EAO) and delivering essential health care services to the ethnic community in coordination and collaboration with government health departments and non-government organizations (MoHS, 2016). These ethnic and community based health organizations had developed their own primary health care delivery system via a network of stationary clinics and mobile medical teams which were outside of the government health system. These establishment has initiated and developed for more than five decades to fill in the

gap of health care needs by the rural community resided in conflict affected areas in eastern Myanmar (Naing, 2015). According to the Mae Tao Clinic, there are 240 ethnic health organizations' clinics under the network of ethnic health system strengthening initiatives, situated along the Thai-Myanmar border (MTC, 2017). With about 3,000 health care providers ranging from village health volunteers to medics and health assistants, ethnic health organizations are delivering services to a target population of more than half million people (Davis & Jolliffe, 2016).

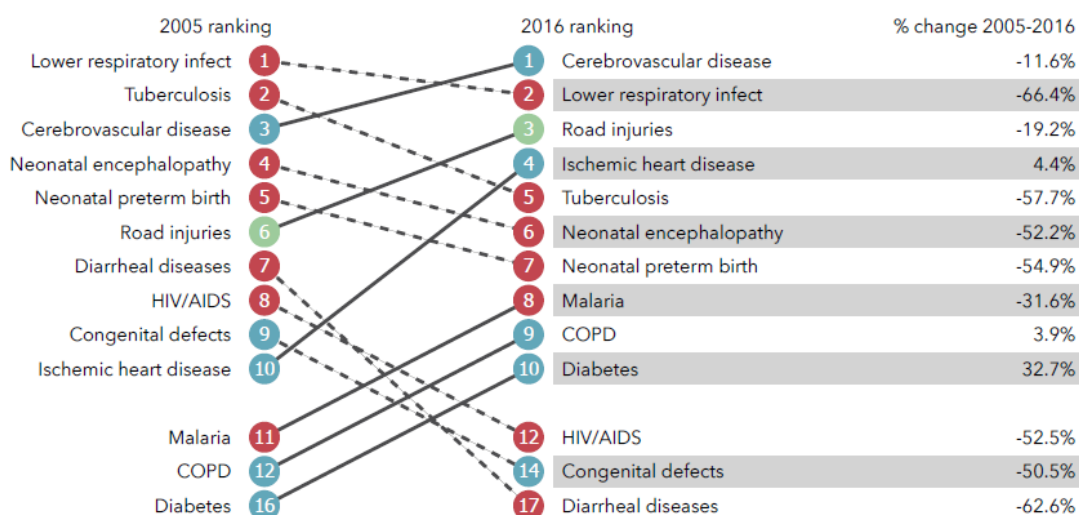


Source: *Achieving health equity in contested areas of southeast Myanmar*, (Davis & Jolliffe, 2016)

Figure 4 Ethnic and community based health organizations' facilities in southeast Myanmar

2.3 Key health indicators

Although MoHS is has a strong responsibility for every citizen to attain full life expectancy and enjoy longevity of life, there is a long way to go to attain this goal. A huge gap of health inequity and disparities can be seen throughout the country. At the union level, average life expectancy at birth is 66.8 years and the life expectancy is shorter in rural areas (65.5 years) than in urban areas (72.1 years). The 2014 census information shows that infant mortality rate and under-five mortality rates per 1,000 live births are 62 and 72. Mon state has the lowest mortality rate while the highest mortality rates are seen in Magway and Ayeyawady Regions. Union figure of maternal mortality ratio is 282 per 100,000 live births while the highest is in Chin State with 357 while the lowest in Yangon with 213 (MoIP, 2015). The prevalent rate of malnutrition is high, with more than one-third of the under-five children stunted. The country is experiencing the double burden of diseases and non-communicable diseases is increasing with an alarming rate, already accounted for more than 40% of all deaths (MoHS, 2016).



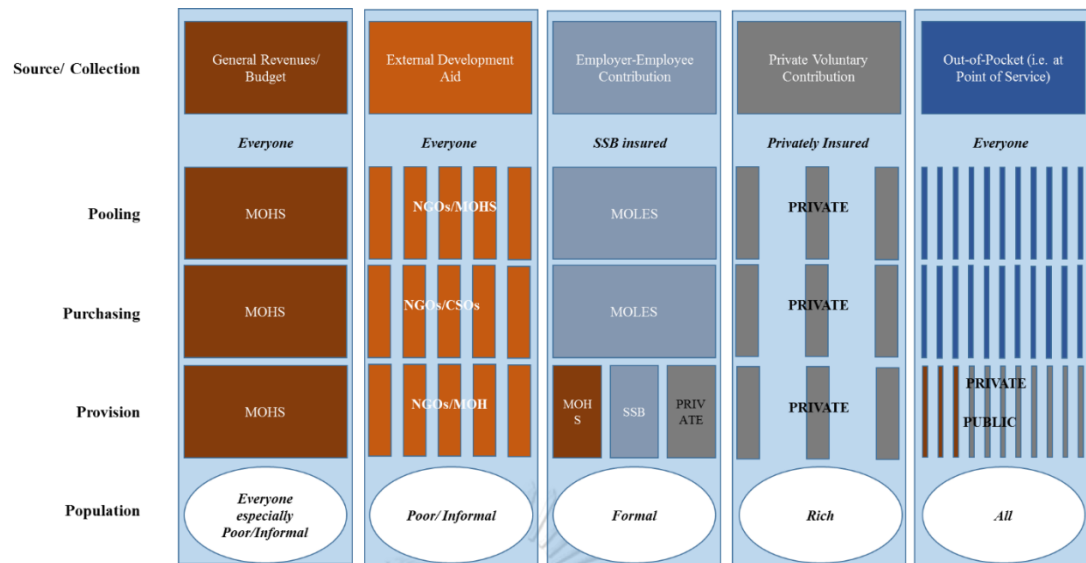
Source: (IHME, 2018)

Figure 5 Myanmar's Top 10 causes of years of life lost (YLLs) in 2016 and percent change, 2005-2016, all ages, number

2.4 Health care financing situations

Health care financing in Myanmar is mixed by both public and private systems. Before the introduction of user charges in the form of cost sharing in 1993, the government used to be the principal source of financing for health. Around mid-1990s, patients were charged for paying rooms (if used), drug supplies and diagnostic services at the point of service. Then, the household out-of-pocket (OOP) payment became the primary source of financing health care system. A formal and proper social protection mechanism or national health insurance system is not seen in Myanmar, to protect and prevent families and households from falling into poverty as a result of health payments. The current social security scheme covers only a small fraction of formal sector which is just around 1% of the total population (Sein et al., 2014).

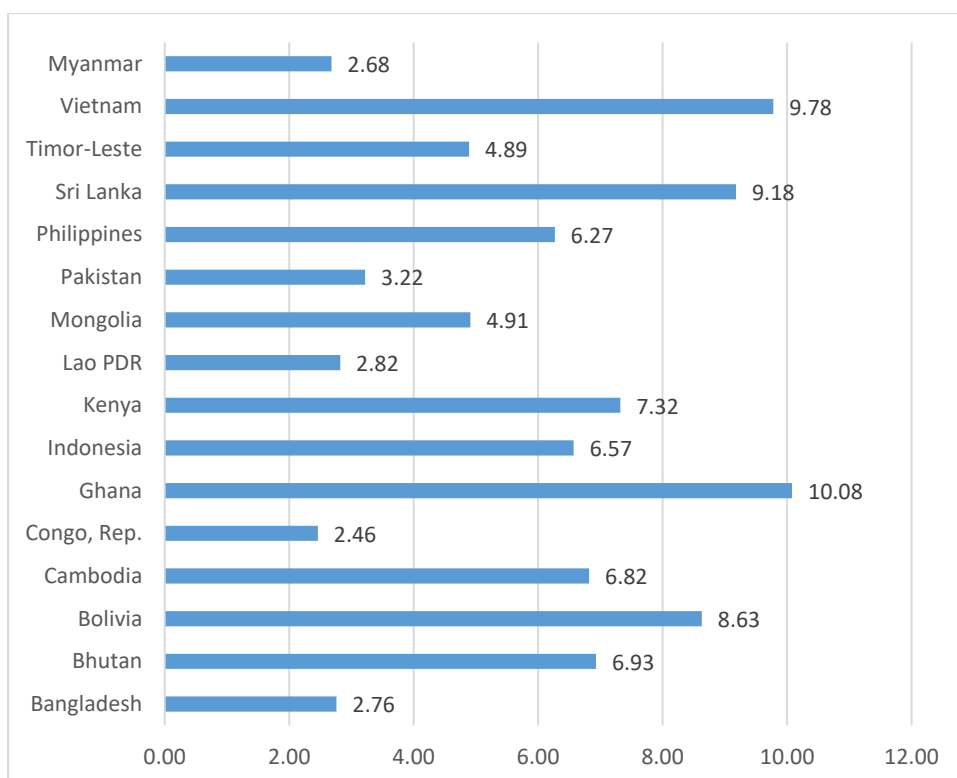
There are five major sources of financing for health care system in Myanmar as shown in Figure 6, namely, general revenue, external development assistance, employer-employee contribution, private voluntary contribution and out-of-pocket expenditure. Among them, it is estimated that general revenue and OOP accounts for 85-90 percent of the total health expenditure in Myanmar. Social Security Scheme managed by social security board (SSB) under Ministry of Labor, Immigration and Population (MoLIP) covers just a very few percent of the total population who are public employees including the members of the civil services, state corporations, state boards, military personnel and municipal authorities as well as employees in limited private sector industries including railways, commerce, mines, oilfields and ports. The social security scheme is contributory with 2.5% of contribution coming from the employer, 1.5% by the employee and a capital investment by the government.



Source: Presentation on risk pooling, (Bredenkamp, 2015)

Figure 6 Health care financing in Myanmar

Among the countries of the Association of South-East Asian Nations (ASEAN), Myanmar has the lowest Tax-to-GDP ratio which is 8% in 2014–2015. Total health expenditure in Myanmar is around 2.0 to 2.4% of its GDP between 2001 and 2011, which is the lowest among countries in the World Health Organization (WHO) South East Asia and West Pacific Regions. However, the expenditure shows an increasing trend over a period of time. Total expenditures on health at current prices were estimated as 3194.874 billion kyats for 2014 and 3611.920 billion kyats for 2015. Per capita total health expenditures at current prices for the year 2014 were estimated at 62048.43 kyats and as for 2015 were 70147.98 kyats (MoHS, 2017b).



Source: (TheWorldBank, 2018a)

Figure 7 General Government Health Expenditure (GGHE) as percentage of General Government Expenditure (GGE) among LMIC countries (2013)

According to World Bank indicators, government spending on health as percentage of general government expenditure in Myanmar was 2.68% which was below the lower middle income countries' average of 5.42% (TheWorldBank, 2018a). The democratic changes and political reforms in Myanmar had prioritized the social welfare of citizen, resulting in a rise in government spending on health from 1.03% in 2010 to 3.38% in 2015 (MoHS, 2017b). However, government expenditure on health care is still inadequate, resulting in high out-of-pocket expenditure by households, which become the principal source of health care financing, accounting for 79% of total health expenditure (MoHS, 2017b). Other ministries' expenditure on health care for their employees is few; while contributions of donors remain abundant, at 7% of total health expenditure in 2011, which is half of government spending on health (Sein et al., 2014).

In 2015, if health expenditure was categorized by financing agents, 20.84% of total health expenditure was financed by Ministry of Health and Sports. Other

ministries, social security scheme, private out-of-pocket and non-profit institutions serving households accounted for 2.52%, 0.42%, 73.71% and 2.52% respectively (MoHS, 2017b). According to functions, Ministry of Health and Sports allocated 16.9% of its budget to curative and rehabilitative care, 0.4% to ancillary services, 13.6% medical goods dispensed, 14.6% to prevention and public health, 8.4% to health administration and 46.1% to health-related services respectively in 2015 (MoHS, 2017b).

Financial flows in Myanmar seemed to be complex. Tax collected from general population and income of different ministries flow to Ministry of Planning and Finance (MoPF). Then, after getting approval from the parliament, MoPF makes budget allocation to MoHS, other ministries and social security board. The social security board (SSB) is also financed by employer/ employee contribution. Then, MoHS, other ministries and SSB allocate budget for curative and public health services to tertiary hospitals, state and regional hospitals and township health departments. Funding or grants from international donors and development partners flow to non-government organizations which make direct service provision to patients or flow to township health system or private providers through certain non-government organizations. Population encounters direct out-of-pocket expenditure at the point of service delivery through fee-for-service method when they take services from private providers including private hospitals and clinics (Sein et al., 2014).

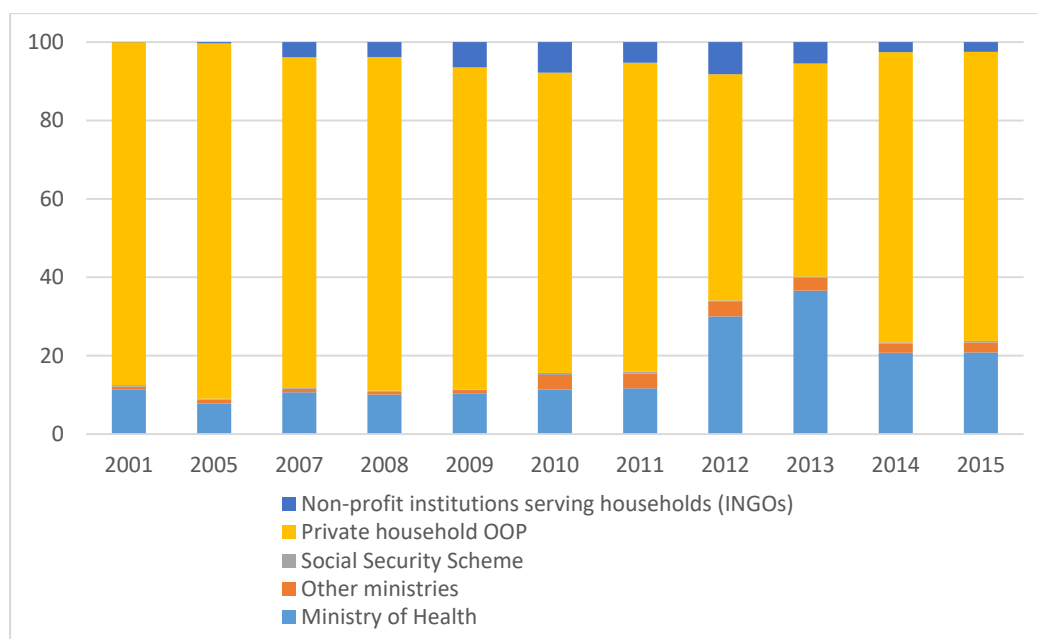
Table 3 Trend in Health Expenditure (2001-2015)

Selected key indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total health expenditure per capita (in kyats at current prices)	1442	2550	3291	3799	4684	6113	7890	10179	12095	12800	13419	23020	25998	62048	70148
Total health expenditure per capita (in current US\$)	2	3	4	5	5	5	7	10	13	15	19	24	18	20	-
Total Health Expenditure (billion kyats)	73.7	133.1	175.1	206.3	259.5	345.5	453.7	594.2	715.2	765.2	810.3	1197	1351.9	3194.9	3611.9
GDP (billion kyats)	3523	5625	7717	9079	12287	16853	22683	29165	33761	39847	46344	51060	56680	65437	76822
Total health expenditure (% of GDP)	2.1	2.4	2.3	2.3	2.1	2.1	2	2	2.1	1.9	1.7	2.34	2.39	4.88	4.7
Public	11.3	13.8	10.6	11.6	7.8	12.7	10.1	8.2	8.5	13.47	13.62	32.28	38.53	22.77	23.24
Private	87.6	84	86.5	85.4	90.8	81.8	84.5	85.3	82.3	77.1	79.26	57.92	54.56	74.07	73.83
External	1.1	2.2	2.9	3	1.4	5.5	5.4	6.5	9.2	9.43	7.12	9.8	6.91	3.16	2.93
Others															
Social security fund (% of GGHE)	3.1	2.5	2.2	1.5	2.1	1.6	1.6	1.4	1.3	1.3	1.3	0.7	0.7	1	1.8
GGHE (% of GGE)	7	10.3	1.6	1.7	1	1.3	1.1	1.2	1.3	1.3	1.3	3.03	3.62	3.81	4.09
GGHE (% of GDP)	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	1.15	0.96	0.96	0.93
OOP exp (% of private exp)	99.9	98.8	98.6	98.6	99.6	95.3	95.6	96.7	92.7	92.7	92.7	99.6	99.5	99.9	99.8

Notes: GGHE: general government health expenditure; GGE: general government expenditure; GDP: gross domestic product;

OOP: out-of-pocket; exp: expenditure. a World Bank (2018).

Source: Myanmar National Health Accounts (2001-2015), (MoHS, 2017b)



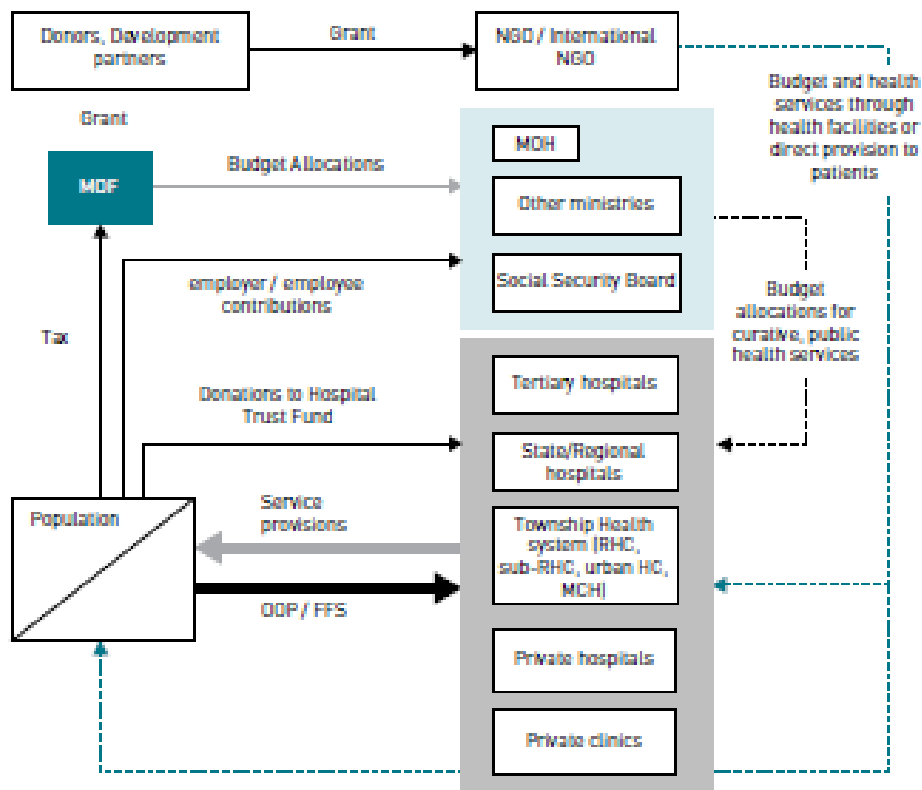
Source: Myanmar National Health Accounts (2001-2015), (MoHS, 2017b)

Figure 8 Health expenditure by Financing Agents (2001 – 2015)

Table 4 Distribution of Ministry of Health expenditures by functions 2001-2015 (%)

Functions	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Curative and Rehabilitative	29.6	11.5	15.2	15.1	21.1	37.0	37.7	32.0	31.6	36.5	33.6	14.9	18.4	14.7	16.9
Ancillary services	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.6	0.2	0.2	0.1	0.1	0.2	0.4
Medical goods dispensed	6.5	3.5	3.8	3.1	4.7	3.7	3.4	3.6	3.2	2.6	4.9	20.7	28.6	18.8	13.6
Prevention and public health	9.4	11.1	17.7	17.6	20.7	21.6	24.0	30.6	32.3	21.2	22.3	8.3	8.9	8.2	14.6
Health Administration	3.7	7.0	7.5	11.3	12.8	3.7	3.9	3.6	2.9	3.2	2.8	1.0	1.6	9.2	8.4
Health-related services	50.6	66.7	55.7	52.7	40.5	33.7	30.7	29.8	29.4	36.3	36.2	55.0	42.4	48.9	46.1

Source: Myanmar National Health Accounts (2001-2015), (MoHS, 2017b)



Abbreviation

NGO – Non-Government Office

OOP – Out-of-pocket

FFS – Fee for service

RHC – Rural Health Center

HC – Health center

MCH – Maternal and Child Health

MoH – Ministry of Health

MoF – Ministry of Finance

Source: *Asia Pacific Observatory on Health Systems and Policies*, (Sein et al., 2014)

Figure 9 Financial flow in Myanmar

2.4.1 How health care providers are paid for purchased health care services

Health care services rendered by the public health care providers are funded by government budget, although household OOP (formal and informal) payment and external sources are the major source of financing for services rendered in public facilities. Budget allocation for public health care services is very low and so, the expenses have mostly relied on external assistance and there is inadequate allocation of operational budget for health promotion and prevention services (Sein et al., 2014). In Table 5, it can be seen that providers are mostly paid by two distinct payment

methods. Public sector mostly uses salary; and private sector fully uses fee for services, most of which are unfixed fee schedules.

Table 5 Provider payment methods currently practicing in Myanmar

Provider	Payers			
	Ministry of Health	Other ministries	Social Security Board	Direct payment
General practitioners (GPs)	NA	NA	NA	Fee for service (FFS)
Hospital outpatient and inpatient care	Salary	Salary	Salary	FFS
Hospital dispensary	Salary	Salary	Salary	FFS
Pharmacies	Salary	Salary	Salary	FFS
Dentists	Salary	Salary	Salary	FFS
Public health services	Salary	Salary	Salary	No

Source: Asia Pacific Observatory on Health Systems and Policies, (Sein et al., 2014)

The patients have to pay fee (mostly not fixed) for all services taken from private hospitals, polyclinics, GPs, laboratories and investigation, and purchasing drugs directly at the point of service delivery. In public hospitals, although government provides subsidies together with community cost-sharing fund, for the poor, the patients have to purchase medicines from outside vendors if the stock is out and may need to pay informal under-table fees for services. Community cost sharing was intended for the community to take some share of health care costs if the patient was able to pay while poor people were protected from the cost burden through trust funds and revolving drug funds which were part of community cost-sharing fund (Sein et al., 2014).

As one of the budgetary lines in government line item budget, the public providers are paid in salary (only mean of financial benefits and no other incentives at all) which results in poor motivation of health care providers. The salary of public

providers is much lower than that of other countries, for example, a senior township medical worker gets only a certain amount in Myanmar Kyats which is equivalent to USD 150-200 per month (Sein et al., 2014). At the same time, the average monthly salary for personnel from administration, general labor and information technology in Myanmar are around USD 650, 260 and 1,200 respectively (Paylab, 2018). It is believed that self-motivation, sense of professionalism and academic opportunities are the main intrinsic factors for health care providers to remain in the low-paying public service. As a result, some public providers earn secondary income by opening clinic, ask for under-table payment for services, and have no incentive to provide quality services with hospitality. Moreover, high drop-out and attrition rates are observed and many vacant positions especially in remote areas results in inequitable distribution of human resources for health (Sein et al., 2014).

Although government provides subsidies for the poor, the amount of subsidies is insufficient and there is no clear guidelines for the subsidies. As one of the subsidies mechanisms, revolving drug funds were established nationwide with seed funding from WHO, United Nations Children's Fund (UNICEF) and Nippon Foundation, to make subsidies on cost of drugs. With funding from community donation, hospital trust funds were also established where interest generated from these funds were used to subsidize cost of hospitalization for poor people. However, the provider's understanding and management on subsidies is different. The issue of how to identify the poor become a challenge for public health care providers. Therefore, although the poor are the people in needs, the subsidies are not met with the needs. As a consequence, the health seeking behavior of people (especially the poor) shifts from public health care providers to cheaper traditional healers and evenly quacks, resulting in poor health outcomes (Sein et al., 2014).

2.4.2 Current discussion on strategic purchasing and payment systems reform

Myanmar National Health Plan (2017-2021) stated that Myanmar requires to prepare for the health financing reforms because when the country's economy grows, the external development assistance will definitely and gradually decrease. Moreover, it is needed to deal with current fragmentation of different financing pools which leads

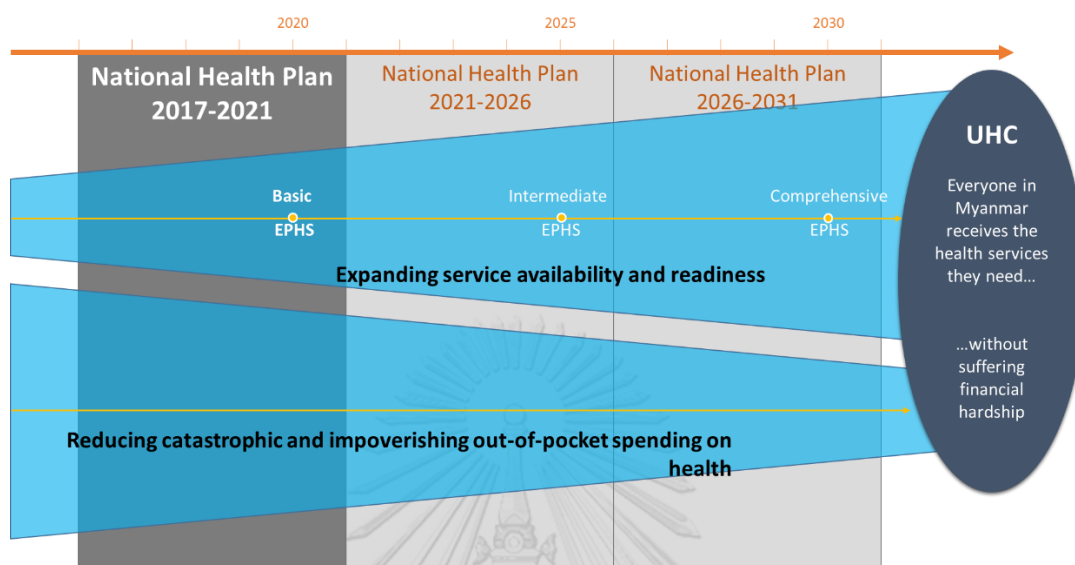
to considerable inefficiencies. The NHP mentioned that it is quite important to implement strategic purchasing in the country, which can create explicit incentives through a given provider payment mechanism, ensuring a desired provider behavior (MoHS, 2016).

A strategic purchasing pilot project is implementing in two townships, namely, Darbin and Shwepyithar, in Yangon Region, simulating a purchaser-provider-split model where Population Services International (PSI) contracted with private general practitioners (GPs) which is one of the four main providers in Myanmar as recognized in Myanmar National Health Plan. A blended mix of payment system is used in this pilot which includes capitation payment and performance-based incentives to reduce out of pocket spending by households and to incentivize the private providers to deliver the basic package of health services identified by PSI (PSI, 2017). The Ministry of Health and Sports takes an active part in this implementation research and it is also trying to test the purchasing of basic essential package of health services (EPHS identified by MoHS) from MoHS providers (MoHS, 2016). Some organizations are also trying to conduct implementation research of purchaser-provider-split model with the rest two main providers; ethnic health organizations and civic social organization/ non-government organizations in Myanmar.

2.5 Myanmar National Health Plan (2017-2021)

Myanmar is aiming to achieving UHC by 2030 through a series of three consecutive five-year long National Health Plans (NHP) and the first step of National Health Plan (NHP) covering 2017 to 2021 was formulated with all-inclusiveness, marked by significantly greater participation from a range of stakeholders including private sectors, EHOs and NGOs. The plan specifically acknowledges the key role of private sectors, EHOs and NGOs in the implementation process and is focused on improving both the demand and supply for health care services throughout Myanmar. The NHP aims to lay the foundations for the achievement Universal Health Coverage by 2030 so that everyone, regardless of their social or economic circumstances, can access the health services they need without suffering financial hardship. A core component of the first phase of implementation of the NHP is to expand the coverage of access to a

basic essential package of health services (Basic EPHS) to the whole country by 2020-2021. The NHP intends to strengthen, shape and reform the country's health system to achieve UHC, choosing a path that is explicitly pro-poor.



Source: Myanmar National Health Plan (2017-2021), (MoHS, 2016)

Figure 10 Roadmap towards universal health coverage (UHC)

According to Myanmar National Health Plan (2017-2021), the goals of Myanmar health system is "everyone in Myanmar receives the health services they need without suffering financial hardship". The guided principles include equity, inclusiveness, accountability, efficiency, sustainability and quality (MoHS, 2016).

National health plan (2017-2021) also endorses to formulate a health financing strategy for the country to support the move towards Universal Health Coverage. To do so, the Sub-Technical Strategy Group (TSG) on Health Financing Strategy (HFS Sub-Group) is established to provide and support the specific technical area of health financing under the broader Health Systems Strengthening Technical Strategy Group (HSS TSG). HSS TSG is one of the eight TSGs under Myanmar Health Sector Coordinating Committee (M-HSCC). M-HSCC is mandated as a national coordinating committee to deal with all public health sector issues and it guides MoHS in health system strengthening (M-HSCC, 2016). The HFS Sub-Group is an inclusive multi-stakeholder mechanism established with the purpose of providing technical, policy and strategic

recommendations including national strategies related to HFS strengthening as well as assist in coordination among stakeholders in order to improve HFS in the context of the national health system. The sub TSG is organized with around 20 representatives from public and private sectors: Ministry of Health and Sports (MoHS), Social Security Board (SSB) under Ministry of Labor, Immigration and Population (MoLIP), Ministry of Planning and Finance (MoPF), Ministry of Social Welfare, Relief and Resettlement (MoSWRR), Ministry of Defense (MoD); Development partners and international donors; civil society organization; local and international non-government organizations and private individual technical resource persons. Through a series of workshops and meetings with multi-stakeholders and technical resource person, Health Financing Strategy for Myanmar is planned to develop since mid-2018 and will be finalized by the end of 2018.



CHAPTER III

LITERATURE REVIEW

3.1 Introduction

Since last few decades, the term “Universal Health Coverage” has become increasing popular among countries around the world and drawn a public attention on that. Several governments reforms their health system to achieving Universal Health Coverage (UHC). Universal Health Coverage is not a totally new concept, but just “Old wine in the new bottle” because it is reconstructing the concepts of Primary Health Care and “Health for All” declared in Alma-Ata back in 1978 before the fall down of Soviet Union. In other words, UHC can be regarded as repackaging of the long-standing health system goals which are access, quality, equity, better health outcomes together with financial protection. World Health Organization (WHO) defines UHC as “*All people receive the health services they need without risking financial ruin or impoverishment*” (WHO, 2017b).

Health Care Financing plays an essential role in a country’s health system to bring desired health outcomes with financial risk protection, governance and to make sure that all six building blocks of health systems performing their functions synergistically. In the World Health Report published by WHO in 2010, it is commented that there is no single, best pathway or ideal roadmap to reform the health financing mechanism of health systems on the way towards UHC to improve the access to essential health care services while protecting the beneficiaries from financial risk (WHO, 2010). Purchasing is one of the three main functions of health care financing and an important control knob to adjust the direction towards favorable health outcomes. Different provider payment mechanisms create a large variety of different incentives to the providers in positive as well as negative ways. In other words, each payment mechanism has pros and cons. The decision on the usage of a mix of different provider payment mechanisms depends largely on the wisdom of a particular country after reviewing the country actual contexts carefully. Therefore, it is of paramount important to learn the lesson and experiences of different countries and make these experiences applicable in specific area by adjusting to be suitable with local contexts.

3.2 Health Care Financing

If we compare health system of a country with a human body, health care financing is resembling to gastrointestinal tract which is important for ingestion, digestion, absorption of nutritious materials, and distribution of this materials to whole body via bloodstream for proper functioning of the human body. The reason for describing in this way is that health care financing plays an essential role in a country's health system to bring desired health outcomes, governance and to make sure that all six building blocks of health system performing their functions synergistically. Health care financing is not simply about raising money to be utilized in health sector, but a matter of who is asked to pay, when they pay, and how the money raised is spent.

World Health Organization refers health financing as the *“functions of a health system concerned with the mobilization, accumulation, and allocation of money to cover the health needs of the people, individually and collectively, in the health system...the purpose of health financing is to make funding available, as well as to set the right financial incentives to providers to ensure that all individuals have access to effective public health and personal health care”* (WHO, 2008).

As described in the World Health Report (WHO, 2010), health care financing has three functions, namely, resource mobilization (revenue collection), risk pooling and purchasing.

People usually correlates resource mobilization with health care financing and it is about how financial resources from different channels are mobilized or raised to cover the costs of a health care system. The resources are primarily collected from and/ or contributed by households, organizations and sometimes from external aids which are the financing source outside of the country. Resources can be mobilized through taxes which is general or specific; contributions from mandatory or voluntary health insurance; donations and direct out-of-pocket payments by households.

Risk pooling is generally referred as the collection, accumulation and management of financial resources so that unpredictable individual financial risks can be predictable and are distributed among all members of the pool. The main objective of pooling is to spread the financial risk on the individual associated with the needs to utilize health care services. It includes cross-subsidization of risk from healthy to sick,

rich to poor and across productive to non-productive part of the life cycle. The funds are pooled by prepaid mechanism before the occurrence of illness through insurance or taxes. Most health financing systems are designed through pooling funds by prepayment, in combination with direct payment from individuals to service providers, usually known as cost sharing.

Purchasing can be explained as a system or mechanism of allocating pooled funds to the providers for the specified or unspecified set of health care services. Purchasing can be conducted in a passive or strategic way. There are three main ways to purchase health care services. The first one is that the government allocates budgets directly to its own health facilities (integration of purchasing and provision) using general revenues and sometimes, insurance contributions. The second model is known as purchaser-provider split while an institutionally separate purchasing entity, health insurance company or semi-autonomous or autonomous agency as an example, purchase health care services from the providers on behalf of a population. The third way is that individuals or households make the direct payment to the provider for the received health care services. Many countries use the combination of above ways (WHO, 2010).

3.3 Purchasing

Purchasing can be referred as a process by which a third party agent (either autonomous or semi-autonomous entity or government) manages and pays health care providers for delivering pre-determined or unidentified set of services to the identified groups (e.g. insurance scheme members) or the entire population, using at least one or mix of provider payment methods (Kutzin, 2001). Purchasing consists of three types of decisions to lift the performance of health system by allocating financial resources in an effective way (Figueras, Robinson, & Jakubowski, 2005),

1. Identification of health care services to be purchased based on population needs, health priorities of the nation, efficacy, effectiveness, efficiency and equity.
2. Choosing service care providers based on provider's capacity and skills, service quality, equity and efficiency.

3. Consideration on how services will be purchased, determining contractual agreement and provider payment systems.

Purchasing is conducted by a purchasing body or entity which can be either an insurance company or government or an autonomous agency as an example. So, as an operational definition, purchasers can be referred as those who manage fund and allocate them to the providers for the purchased health care services for the population (RESYST, 2014). Purchasing should not be misunderstood with procurement, which is usually just referring the buying medicines and other medical supplies.

In the World Health Report published in 2000, strategic purchasing is referred as a continuous process of searching for the most suitable ways to maximize the performance of the health system by deciding which health care services should be purchased, for whom, from whom and through which payment method should payment be made. Strategic purchasing requires the purchasing entity to engage actively in three essential and focal relationships with the Government, healthcare providers, and citizens. A large variety of proofed evidence are widely available that strategic purchasing is the important mechanism that can increase access, equity, quality, and efficiency as well as the correct management of scarce resources in health (WHO, 2000) (Mathauer, Dale, & Meessen, 2017).

The World Health Report (2000) distinguished between passive and strategic purchasing (also known as active purchasing or contracting) as follows.

“Passive purchasing implies following a predetermined budget or simply paying bills when presented. Strategic purchasing involves a continuous search for the best ways to maximize health system performance by deciding which interventions should be purchased, how, and from whom.”

In strategic purchasing, the purchasing entity requires active engagement and relationships with the Government, healthcare providers, and citizens. A large variety of proofed evidence are widely available that strategic purchasing is the important mechanism that can increase access, equity, quality, and efficiency as well as the correct management of scarce resources in health (Mathauer et al., 2017).

An study is conducted to explore the factors affecting implementation of the strategic purchasing of health services in the world and finds out that the following six categories of intervention, namely, "The target group of users of the service" (Demand-side), "purchased interventions," "providers and suppliers of interventions" (Supply side), "Methods and incentives" (Payment method), "price," and "Structure and organization", have effects on the strategic purchasing of all health interventions in different countries (Bastani, Samadbeik, & Kazemifard, 2016).

Purchasing from private sector for clinical as well as non-clinical services are seen in many countries. Contracting with private sector for services which are easy to specify and monitor, is common, e.g. hospital catering and supply of commodities than complicated medical services (Mills, Brugha, Hanson, & McPake, 2002). Liu et al conducted an extensive review of research studies from both electronic and manual sources in 2018 using two inclusion criteria: content and quality criteria. Purchasing of health care services especially primary health care, immunization, nutrition, etc., from private sector such as non-government organizations is seen in many countries such as Cambodia, Bangladesh, Bolivia, Costa Rica and Croatia to improve health care access (Liu et al., 2008).

Mills et al (1997) examined the historical background of selected South Africa countries and Zimbabwe to know how the contractual agreement had come about and investigated details on relative performance of a sample of government district hospitals and contracted hospitals. Then, the researchers assessed the contract agreements and finally, detailed cost analysis was conducted. Studies from South Africa and Zimbabwe prove that contracting with private health care resulted in service delivery with cost containment and no obvious reduction in service quality. One critical lesson learnt is that capacity development of governments is essential to design and negotiate contracts with providers to ensure efficiency gains. The study pointed out the needs for identification of inefficient areas, followed by introduction of reforms such as greater management flexibility, decentralization of management authority, and planning and budgetary mechanism reforms to provide enough space for the providers to response to incentives created by purchasing and provider payment methods (Mills, Hongoro, & Broomberg, 1997). Similarly, the needs in capacity development of

government to monitor contractual agreement were found out in another study conducted by Loevinsohn & Harding in 2005. The researchers reviewed the management and services delivery contracts in Bangladesh, Cambodia, Bolivia, Haiti, Guatemala, India, Senegal, Madagascar & Pakistan and the structured interviews with people who had in-depth knowledge of the particular experience were conducted. It was found out that if the government could handle well, purchasing from private sector using contracts enabled delivery of services on a large scale. Contracting out could be more cost-effective than services delivery directly by the government. Service coverage expansion, even in poor, remote areas, can be realizable by contracting (Loevinsohn & Harding, 2005).

3.4 Provider payment methods

A provider payment system is generally referred as the payment methods in combination with all backing systems, including accountability and contracting mechanisms that guide the payment method, and management information systems. Hence, the actual meaning of provider payment systems go further beyond a simple allocation of funds to cover the health care costs. A provider payment method could be narrowly described as the system of transferring funds from the purchaser to the providers for health care services being purchased (Langenbrunner, Cashin, & O'Dougherty, 2009).

How providers are paid is key policy lever impacting health system performance and to attain objectives related to improving quality, efficiency, responsiveness, and equity. Provider payment mechanisms affect provider behavior not only by creating incentives but also by changing who bears financial risk for provision of care. Incentives can be referred as the economic signals that direct the individuals and organizations towards self-interested behavior. Health providers respond to the economic signals in payment systems to maximize the positive as well as minimize the undesirable effects on their revenue, profits and other interests.

The job satisfaction and motivation of the health care providers are critical to the retention, performance and the outcomes of patients (Robyn et al., 2014). Provider payment methods can influence the retention and satisfaction of providers; the

quantity and quality of services provided to the patients; risk pooling and financial sustainability (Robyn et al., 2013).

Provider payment methods can also be differentiated into two groups depending on whether the rate and payment to providers is made in advance prospectively or after receiving services retrospectively. Prospective payment methods fix respective payment rates depending on predisposed factors and allocate this payment to the health care providers before rendering the services. Conversely, in retrospective payment plans, the payment to the health care provider is made depending on the submitted claims after delivering of services to the beneficiaries. Payment rate can be set prior to the payment or it could be based on provider's actual charges in retrospective payment system (Blank, 2017).

The popular payment methods for both outpatient (especially primary health care) and inpatients are described as follows.

3.4.1 Primary Health Care payment methods

There are three main types of primary health care (including outpatient care) payment methods, namely, line-item budget, fee-for-service (with or without a fixed fee schedule) and per capita. Each payment method creates a different set of incentives; the payment methods may be used in combination with each other to leverage the incentives created by each individual method (Langenbrunner et al., 2009).

Line-item budget

The line-item budget is the transfer of a fixed amount of financial resources with predetermined fixed budget line items to a health care provider to cover identified inputs, such as salary, administration, operation, medicines, supplies and utilities for a certain period of time (Cashin, Ankhbayar, et al., 2015). Hence, line-item budgeting is set and made prospectively to pay the providers based on inputs. It is often valued in government-run systems due to its strong administrative control. Although, in theory, allocative efficiency of health care intervention can be maximized by shaping the government budget lines over time to prioritize the delivery of cost-

effective health care intervention, the reality is quite different from the theory due to the lack of good monitoring information and the governments cannot track and realize the correct combination well enough to achieve desired outcomes (Cashin, Ankhbayar, et al., 2015). The strict rules and rigid nature of line-item budget prevent the providers from transferring funds across line items, creating no incentives or mechanism for the providers to achieve the most efficient input mix. The level of payment is not linked with output and performance of the providers, creating limited incentives for the providers to provide quality health care services in an efficient and effective manner. The line-item budget method is still common and found in many public health systems around the world such as Egypt, the Philippines, Vietnam, and some African countries, regardless of the country's income (Cashin, Ankhbayar, et al., 2015; Langenbrunner et al., 2009).

Fee-for-service

The providers are paid for every service provided in fee-for-service method. It is the retrospective payment and can be either input based or output based, depending on whether the fees are fixed and services are bundled in advance or not. The fee-for-service is input-based if there is no fixed-fee schedule and if health care services are not grouped into a higher aggregated unit. In this case, the providers can bill the purchasers for all costs incurred to provider each services. The method can also be output-based if there is a fixed fee schedule and the services are bundled to certain extent as practiced in Canada, Germany and Japan. In this case, the providers are paid the fixed fee for the predefined services regardless of the costs incurred. With is output based fee-for-service payment, the providers has incentive to supply additional unit of services while reducing the inputs used per services (Cashin, Ankhbayar, et al., 2015). Efficient health care intervention can be expanded very quickly. Fees are set in advance to reduce the irrational surplus by the provider and to make the payment similar to the production cost. However, in reality, numerous services are provided, and so, it is hard and unnecessary to obtain actual cost of services provided. When services are bundled more and more, the range in production cost is wider and wider, and therefore, it is hard to expect that the prices of services

will match with the actual expenses of service production (Langenbrunner et al., 2009). Fee-for-services have certain advantages. Firstly, it can be designed easily and implemented with the requirement of few capacity. Secondly, as it is volume based payment, it can create incentives for the providers to provide more services and is suitable to use for under-provided services or provision of services in under-served areas. Thirdly, it can improve the access and utilization for under-served areas, for under-served population and for high priority services. Finally, if cost are understood well, fixed fee schedules can be set as a useful tool for the provision of cost-effectiveness services, by taking Japan as an example (Cashin, Ankhbayar, et al., 2015) (Langenbrunner et al., 2009; M. Park, Braun, Carrin, & Evans, 2007).

Capitation payment (Per capita)

Under capitation payment system, a fixed amount of payment is prospectively paid to the health care provider to deliver a predefined package of health care services for each enrolled individual covering a fixed period of time. Capitation payment system is output-based, and the coverage of all predetermined package of services for an enrolled individual covering a fixed period is usually regarded as the unit of output (Langenbrunner et al., 2009). The payment amount given to a provider is not linked to the inputs used or the quantity of services provided by the providers. Hence, financial risk is transferred to the provider from the purchaser. The provider is liable for the cost greater than per capita payment. On the other hand, the provider can keep the surplus and make reinvestment if there is efficiency gains. The providers tend to increase more output or attract more enrollees, resulting in increased volume of payment received. The provider has incentive to attract more patients to enroll by improved quality of care, value-added services, or other measures. The provider may tend to reduce the inputs uses as the financial risk is bear by the provider, not the patient or purchaser. Therefore, the providers will improve the input mix to contain the cost, in order to provide the same level of health care services with quality and then, then to focus more on less expensive health care promotion and prevention interventions to keep enrolled individuals healthy and reduce the need for expensive curative care. A certain form of risk adjustment measures are needed by the purchaser to compensate the

providers for variations in needs of different people depending on demography, geography, disease burden, etc. and to prevent the providers from risk selection which is attracting healthier individuals to enroll (Cashin, Ankhbayar, et al., 2015; Langenbrunner et al., 2009; M. Park et al., 2007).

3.4.2 Hospital payment methods

There are five main methods to pay hospitals, namely, line-item budget and fee-for-service (as discussed above), per diem, case-based and global budget. Each payment method create different types of incentives, and so, the methods may be used in mixing with each other to maximize the desired incentives or wipe away the undesirable ones that are produced by each payment method individually.

Per Diem

The providers are paid a fixed amount per day that an admitted patient stays in the hospital. Per Diem payment method can create the powerful economic signal to increase the number of hospital stay. It increases the bed occupancy and can shift outpatient and community-based services to the inpatient care setting (Cashin, Ankhbayar, et al., 2015). The providers may reduce the intensity of their services for each patient day in hospital and there is an incentive to lengthen the period of hospital stay. Boosting of hospital admission and average length of stay result in high occupancy rate. Per Diem payment can be used in inpatient care setting as an intermediate measure during the process of payment transformation to a case-based system, because it is administratively simple to implement and can collect the required information and data necessary to design the case-based payment system (Langenbrunner et al., 2009) (Cashin, Ankhbayar, et al., 2015; M. Park et al., 2007).

Case-based payment

The providers are paid a fixed amount of payment based on the patient and clinical characteristics, admission, and other factors. All of the cases are predetermined and categorized into a number of payment groups, defined by degree of average resource utilization (Langenbrunner et al., 2009). Different cases that fall under the

same category are paid with the same rate. The providers may tend to admit more inexpensive cases within a payment category and try to put diagnosis with high resource consumption within that payment category. So, diagnosis related groups (DRG) have been designed and refined continuously to differentiate between cases of different resource intensities, counteracting the adverse incentives. DRG is a classification system for acute inpatients which measures the hospital output and patient in the same DRG group is assumed to have the similar lengths of hospital stays and similar level of resource consumption. Case-based payment system can increase the number of cases, reduce the average length of hospital stay especially for chronic conditions and elective hospitalizations, and minimize the inputs used for each case resulting in efficiency. It is also used as a system cost containment and reduction in hospital resource consumption. However, it may increase admission as well as unnecessary re-admissions. Other disadvantages of case-based payment system include DRG creeping where the hospital codes the patients into the groups with high points to receive a larger reimbursement and pre-mature discharge of admissions (Cashin, Ankhbayar, et al., 2015) (Langenbrunner et al., 2009; M. Park et al., 2007).

Global budget

Providers are paid with a fixed and lump sum amount of money to cover the expenses of providing predefined package of services within a specified period of time. The payment is set in advance and the providers are paid prospectively. The incentives are similar to those in line-item budgets, but the global budget can be used flexibly and there is no restriction over line-items. Therefore, there is incentive for the provider to improve the efficiency of input mix and contain the cost (Cashin, Ankhbayar, et al., 2015; Langenbrunner et al., 2009).

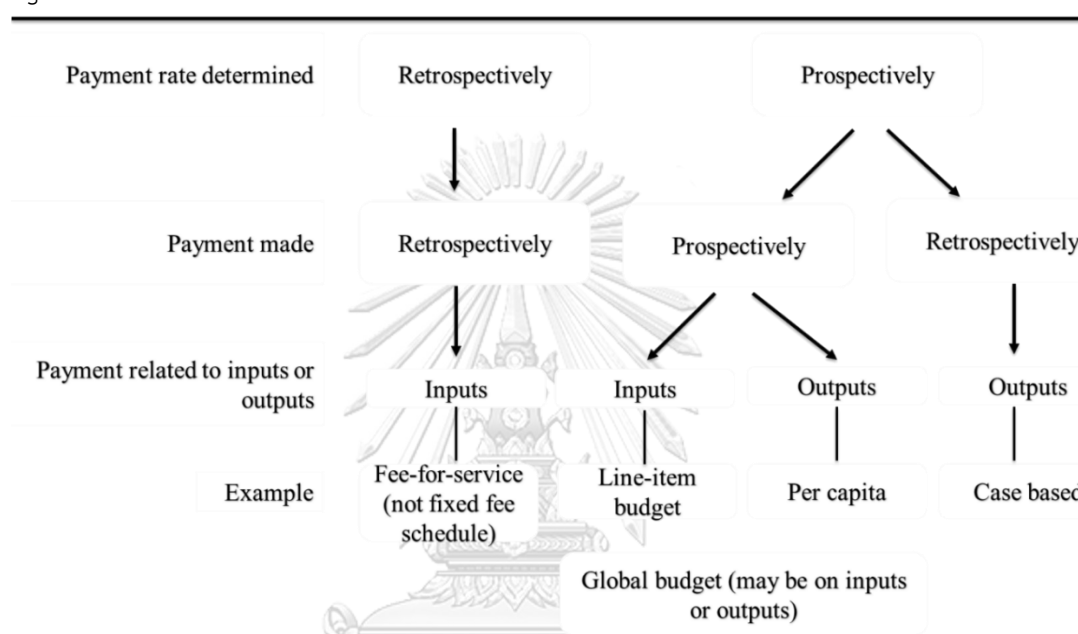
3.4.3 Main Characteristics of provider payment methods

The provider payment methods can be categorized based on the following three characteristics:

- Whether the fee or payment to be given to the provider is set in advance or after provision of services

- Whether the provider is paid in advance (prospective) or after service provision (retrospective)
- Whether the payment to providers is based on inputs used (such as personals, medicine, supplies) or outputs produced (services provided).

The interconnection between these three characteristics is shown in the following figure.



Source: *Designing and Implementing Health Care Provider Payment Systems*, (Langenbrunner et al., 2009)

Figure 11 The relationship between the three characteristics of provider payment methods

Table 6 Main provider payment methods and the incentives they created

Payment method	Definition	Incentives for providers	When the method may be used
Capitation (Per capita)	Providers are paid a fixed amount in advance to provide a defined package of services for each enrolled person	Attract enrollees, improve the output mix (focus on less expensive health promotion and prevention), increase efficiency of the	Management capacity of the purchaser and providers is moderate to advanced, choice and competition among providers are possible, strengthening

	for a certain period of time.	input mix, reduce input use, under-provision of services, raise referrals to other providers, attempt to select healthier (less costly) enrollees	primary health care and cost containment are top priorities, a broader strategy is in place to strengthen primary care and increase health promotion.
Case-based (e.g., diagnosis related groups)	Hospitals receive a fixed amount of payment per admission or discharge based on the clinical and patient characteristics.	Raise admissions; decrease input uses per case leading to efficiency or possibly reduce quality of care; decrease the length of hospital stays; shift rehabilitation care to the outpatient setting.	Moderate to advanced level of management capacity of the purchaser and providers are required, there is excess hospital capacity and/or use, promoting efficiency is a priority, cost containment is a moderate priority.
Fee-for-service (tariffs or fixed fee schedule)	Providers received the payment based on each individual service delivered. Fees or tariffs are fixed prospectively for each service or bundle of services.	Inflate the number of services; decrease use of inputs per service, resulting in efficiency of the input mix or possibly reduce quality.	Moderate management capacity of the providers and purchaser in minimum is required; uplifting productivity, service supply, and access are major priorities; there is a need to retain or attract more providers; cost containment is a low priority.
Global budget	Providers are paid a fixed amount of money covering a specified period of time to cover	If global budgets are formed based on inputs: under-provide services, raise referrals to other	Minimum moderate management capacity of the purchaser and providers are required, it is not possible for

	<p>aggregate expenditures for delivering a predetermined set of services. The budget can be used flexibly and is not linked with line items.</p>	<p>providers, increase inputs. If global budgets are made based on quantity: raise the number of services, uplift referrals to other providers, and reduce the inputs. Methods to increase efficiency exist however, may need to be bundled with other incentives.</p>	<p>competition among providers and cost containment is a top priority.</p>
Line item budget	<p>Providers are paid a fixed amount of payment for a specified period of time to cover specific input expenses (e.g., salary, utilities and medicines). The budget cannot be used flexible, and expenditure must be according to line items.</p>	<p>Under-provision of services, raise referrals to other providers, raise inputs and use all of the remaining budget by the end of the budget year. No incentive to increase efficiency</p>	<p>It is suitable for low management capacity of the purchaser and providers, cost containment is a top priority; financial management and monitoring are weak.</p>
Per diem	<p>Hospitals receive a fixed amount of payment per day for individual admitted patient. The per diem rate might be varied according to</p>	<p>Increase the number of bed-days, which may lead to excessive admissions and lengths of hospital stays; reduce inputs per bed-day, which may improve</p>	<p>Moderate management capacity of the providers and purchaser is needed, improving efficiency and raising bed occupancy rate are priorities, and cost</p>

	patient, department, clinical factors, or other factors.	the efficiency of the input mix or possibly reduce quality.	containment is a moderate priority.
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Source: Assessing health provider payment systems: A practical guide for countries working towards Universal Health Coverage, (Cashin, Ankhbayar, et al., 2015)

3.5 International Experiences on provider payment methods

Lessons learnt from the Organization for Economic Co-operation and Development (OECD) countries reveal that a system of optimal mix of provider payment methods with regulations can be used as an influential cost containment tool with minimum side effects, although there are some inevitable trade-offs. Undesirable effects of one payment method is wiped out by incentive created by another payment method in the optimal mix. Quality management and monitoring of the situation using indicators can minimize these undesirable side effects. The choice on the suitable mix of provider payment methods depends mainly on an individual country's context and framework. Another important point is that lobby groups can influence the continuous existence of the provider payment scheme. To contain cost and achieve a sustainable health care system, not only monetary provider incentives are mandatory, but also other important factors (non-monetary incentives) such as continued medical education, satisfactory professionalism and in-person relationship with patients, cannot be left over. These non-monetary factors such as medical education can incentivize the providers to deliver high quality care as well as services with cost effectiveness (M. Park et al., 2007).

The following table summarizes the findings on the advantages and disadvantages of alternative provider payment methods used in OECD countries.

Table 7 Summarized finding on advantages and disadvantages of different provider payment methods

Provider payment	Empirical evidence of a selected country
Salary	In Hungary, most physicians are public providers and paid by salaries. As the payment is low, the doctors took the informal payments. That's why the current government has increased the salary by an average of 50% to control this problem since 2002.
Line-item Budget	In Germany, hospitals are paid with flexible budgets to contain costs. Every hospital receives a budget. If the hospital's expenditure is over this budget, the facilities receive only the variable costs of the DRG remuneration inside the budget which corresponds to around 35% of the surplus. Hence, there is a strong incentives for the hospitals to use according to this budget.
DRG	Australian Diagnosis Related Groups payment system is regarded as efficient however, it is being criticized for 'quicker but sicker discharge'. Hence, measures are developing to control quality of care and better health outcomes.
Fee-for-service	In Belgium, the health system reforms were conducted in 1990s to eliminate inefficiency, abuse, over production and over consumption due to the nature of fee-for-service payment system.
Capitation (GP based care)	In Spain, the general practitioners are paid with a fixed amount of salary with a capitation component in addition. This can be based on the geography or demography.
Per Diem	In Luxembourg, the health facilities are paid mainly by uniform per diem payment until 1995. After a financial crisis, the government stopped practicing this system and changed to a prospective payment system.

Source: *Provider payments and cost containment: Lessons from OECD countries*, (M. Park, Braun, T., Carrin, G., and Evans, D., 2007)

Two studies in Thailand conducted in 2015 and 2018 use extensive reviews of the grey literatures to assess the results of using strategic purchasing methods. The first article is published in 2015 by Tangcharoensathien, et al. and the authors conducted document reviews of National Health Security Office (NHSO) achieves, most of which are grey documents related to Universal Coverage Scheme operation. It is found out that strategic purchasing of health care services from District Health System (DHS) with capitation and diagnostic related groups (DRG) support achievements of UHC goals which are improved and equitable access and financial risk protection. Annual aged adjusted capitation payment. Contracting with District Health System (DHS) to provide primary and secondary health services enables the extensive geographic coverage of health service delivery, translating policy intentions to equity outcomes. Effective referral system ensures access to tertiary care. Physical access is facilitated by a nationwide existence of good road and readiness of public transportation system. Female literacy rate, positive perception on public health services and work etiquette are other contributing factors (Tangcharoensathien et al., 2015). Secondly, Tangcharoensathien, et al., (2018) conducted an extensive review of evidence from grey and published literature (E.g. government reports) in the fields of health system strengthening and development, human resource for health, outcome of universal health coverage, protection of financial burdens, and challenges in health system of Thailand. The authors find that the efficiency, cost containment and equity outcomes can be achieved by well-designed provider payment methods and strategic purchasing organizations (Tangcharoensathien et al., 2018). Therefore, the findings in two studies of extensive grey literature reviews show the similarity that the well-designed provider payment methods can improve efficiency, equity, access and financial risk protection.

Another two studies conducted in Vietnam also assess the all payment methods in use in the country by different methodologies. Cashin, et al., (2015) conducted a study to analyze the potential outcomes of reform scenarios on different provider payment regarding resource allocation across health care providers as well as on the total expenditure of the provincial branches of the public health insurance agency in three provinces in Vietnam which are Ha Nam, Nghe An and Dong Thap. The researchers use a simple spread sheet based, micro-simulation model to analyze the

potential impacts of various payment reform scenarios on allocation of resource to health care providers in three provinces in Vietnam, as well as on the total health expenditure of provincial branches of the public health insurance agency (Provincial Social Security (PSS)). The micro-simulation model includes three groups of variables; outcome, input and policy parameters. The outcome variables are total health expenditure by province and surpluses and deficits. The input variables include insured individuals registered with the faculty, volume of services provided and referral. The policy parameters are payment rates, capitated rates and withhold. The model is established on a series of inter-correlated equations, connecting input and policy variables to outcome variables. The payment methods currently used in Vietnam include line item, fee-for-service, global budgets, a form of capitation, and a small pilot of Diagnosis Related Groups. The study reveals that more than half of the current spending of Provincial Social Security (PSS) is concentrated at the province level, with less than 50% at the district level. The district hospitals bear a high degree of financial risk due to the current fund holding arrangements. However, it is found out that the several alternative scenarios for provider payment reforms, simulated in the study, results in reduction of the high financial risk currently borne by the district hospitals without remarkably changing the current level and distribution of PSS expenditure (Cashin, Phuong, Shain, Oanh, & Thuy, 2015).

Another study is conducted in Vietnam by Phuong, et al., (2015) to explore the strengths, weaknesses and challenges of the current payment systems used in Vietnam. It is a cross-sectional qualitative study to understand the stakeholders' perceptions, combined with quantitative analysis of policy documents and quantitative data. The key stakeholders for provider payment in Vietnam are identified as providers, purchasers and policymakers which include: representatives from the Ministry of Health (MoH), regional and provincial health departments (PHD); Ministry of Finance (MoF), Vietnam Social Security (VSS) and their regional counterparts, Provincial Finance Departments and PSS offices, as well as senior clinical and financial staff of hospitals, district health centers and commune health stations. This study was conducted using the Provider Payment Diagnostic and Assessment Guide which is developed by the Joint Learning Network for Universal Health Coverage (JLN), together with the World

Bank, World Health Organization (WHO), and other partners (Cashin, Ankhbayar, et al., 2015). This guide is structured to collect qualitative information on different provider payment methods used for a wide range of health facilities, design features and implementation arrangements of provider payment systems, including consequences. Open-ended questions are used to explore strengths and weakness of each payment system. Close-ended questions are used to determine whether or not each payment system supports 16 pre-identified health system results. Qualitative data are coded and analyzed manually using the analysis protocol. The results of the study of stakeholders' perspective on provider payment methods currently used in Vietnam show that line-item budget can bring equity, but cannot improve quality. Fee-for-service (FFS) is regarded as incentive way for quality improvement, however, the deep concern of the stakeholders about unnecessary services and cost containment are found out. Capitation payment to district hospital is calculated based on average geography-specific per capita historical expenditure, multiply by number of individual registered with the hospitals. As the capitation payment practiced in Vietnam does not include most of the features of capitation payment practiced internationally, it is found out that there is very little difference between FFS and capitation in practice, however, per capita payment method is intended as a step towards more effective purchasing (Phuong, Oanh, Phuong, Tien, & Cashin, 2015).

Tan & Melendez-Torres, (2018) perform a study to understand the effects of provider payment reforms using capitation and Diagnostic Related Groups (known as prospective payment system (PPS)) in developing countries. A systematic search of 14 databases and a hand search of health policy journals, and grey literature from October to November 2016 are carried out, guided by a set of inclusion and exclusion criteria. Data are extracted based on the Consolidated Health Economics Evaluation Reporting Standards checklist. A total of 12 studies reported in Thailand, China and Vietnam are included in this review. The findings show that capitation and diagnostic related groups (DRG) can be used to reduce health expenditures on both the demand as well as supply sides, re-admission rates and length of stay. Moreover, these payment methods usually boosts the service quality outcomes by improving physicians' rational use of medicines and reducing the number of unnecessary diagnostic procedures. Capitation

and DRG are used as promising policy tool for middle-income countries to meet with reasonable health policy objectives in terms of cost control without necessarily compromising the quality of care (Tan & Melendez-Torres, 2018).

The following three articles analyze the effects of capitation payment in different countries around the world. The authors use different analysis and evaluation models to know the impact. The first one is conducted by Andoh-Adjei, et al., in 2016. They analyze and synthesize the international experiences, which are available, regarding outcomes of capitation payment system related to motivation and effects. The reviews include lessons and implications of low and middle-income countries including three from Europe, two from Asia, and six from Americas. According to review and synthesis of the publications and literature on the effects of capitation payment on primary care, per capita payment can contain cost, improve efficiency, serve as the critical source of income for providers, and promote providers to adhere to guidelines and policies, and to work better and conduct health education to keep their patients healthy. However, it may reduce quantity and quality of care delivered, and adversely affect the relationship between patient and provider (Andoh-Adjei, Spaan, Asante, Mensah, & Velden, 2016).

Secondly, Nguyen, et al., (2013) evaluates the impact of district hospital capitation reform in Vietnam on efficiency, quality of care, and equity by conducting the analysis of the unique hospital panel data set covering the period of 2005 to 2011, combined with a panel of population level data from Vietnam Household Living Standards Surveys conducted in 2006, 2008, and 2010. The results of study, measuring the recurrent expenditure and drug expenditure per case show that per capita payment increases hospitals' efficiency. However, the linkage between capitation payment and surgery complication rates or in-hospital deaths was not found out; the effect on quality of care is not discovered. In response to the shift to capitation, the hospitals increase the service provision to the uninsured people who continue to pay out-of-pocket on a fee-for-service basis, rather than insured people (Nguyen, Bales, Wagstaff, & Dao, 2013).

Last, but not least, Gao, et al., (2014) assess the effects on utilization, cost and quality of care from payment system reforms of capitation and open-enrollment in

Changde city, Hunan Province of China. Based on the longitudinal Urban Resident Basic Medical Insurance (URBMI) Household Survey, authors made analysis on the URBMI data through a set of regression models. The original data consisted of more than 5,000 inpatient admissions during the period of study between 2008 and 2010. The study finds out that payment reforms with capitation payment can reduce the inpatient out-of-pocket payment and length of hospital stay by one-fifth. However, treatment effect, total inpatient cost, patient satisfaction and drug cost ratio show little difference between fee-for-service and capitation models. The reforms have no compromising effect on quality of care according to two studies reviewed (Gao, Xu, & Liu, 2014).

It can be summarized that per capita payment can contain cost, improve efficiency, reduce average length of stay at hospital and the impact on quality of care is not appeared.

The following three articles assess the case based payment, performance-based payment and fee-for-service method used in Croatia, Rwanda and Turkey respectively using three different research methods such as multivariate regression and Data Envelop Analysis (DEA).

Bogut, et al., (2012) examines the impacts of case based payment reforms on efficiency and quality, on the health system of Croatia. With time series approach, the authors analyze data from Croatian Institute for Health Insurance, on 5 procedures in acute health care for ten years, between January, 2000 and December, 2009. The five procedures include pneumonia, cataracts, appendectomy, coronary bypass, and hip replacement. Although there is little impact on number of cases, broad-based as well as detailed case-based payment systems show improvement in efficiency as measured by a reduction in average length of hospital stay and no adverse impact on quality as measured by readmissions. So, it appears that the introduction of case-based payment systems has increased efficiency in acute hospital care (Bogut, Voncina, & Yeh, 2012).

Basinga, et al., (2011) assess the effect of performance based provider payment systems on quality and utilization of maternal and child health care services in health-care facilities in Rwanda. It is an experimental study conducted in 166 facilities in 2006. The intervention facilities are paid in pay-for-performance method while the control facilities are paid in traditional input based funding. Facility and household survey is

conducted as baseline before and 23 months after the intervention. The sample size is 2,158 households. The main outcome measures used are pre-natal care visits, institutional deliveries and quality of prenatal care for mothers, and child preventive care visits and immunization for children. Multivariate regression method is used with specification of the difference-in-difference model. The study shows that number of institutional deliveries of mothers and preventive care visit of children can be increased by performance based payment system. However, the improvement in the number of women finishing four visits of ante-natal care or of children receiving full schedule of immunization are not seen. The quality of pre-natal care is increased as measured by compliance with Rwandan pre-natal care clinical practice guidelines (Basinga et al., 2011).

Erus & Hatipoglu, (2017) evaluate the changes in efficiency after the payment is reformed from a salary based provider payment system to one with dominance in fee-for-service component, in Turkey. The researchers conduct Data Envelop Analysis (DEA), using a Malmquist index to decompose the efficiency changes over the period of 2002 to 2006, into pure-efficiency changes and a residual scale component. Data is used from hospital surveys conducted by Turkish Ministry of Health from 2003 to 2006. The findings show that changing from salary based provider payment method to fee-for-service dominant payment system results in vivid rise of outpatient and inpatient services supplied by the providers. The results reveal the critical role of incentive schemes on the behavior of providers and full-time practice is preferred over dual-time practice once the salary based system is switched to a fee-for-service system. The new system is likely to have some negative consequences such that waiting time which is one aspect of quality, may have longer and worsened. A raise in unnecessary invasive practices with higher cost and a reduction in the spent time on health education are noted. The services not targeted by the incentive schemes, such as chronic disease management in primary care setting can be neglected. The new system's impact on quality is ambiguous due to lack of information (Erus & Hatipoglu, 2017).

3.6 In-country experiences on purchasing and provider payment methods

The study on purchasing and provider payment systems in Myanmar is limited and scarce. With supports from Asia Pacific Observatory on Public Health Systems and Policies, and World Health Organization, Sein, et al., (2014) conducted an extensive review of health system of Myanmar and wrote a report which was one of the series of Health Systems in Transition (HiT). The group of authors collected the information using a cross country comparable template which includes detailed guidelines and specific questions, definitions and examples required to write a profile. The HiT profile provides relevant information for the policy makers to make evidence based decision making. According to this report, main public purchaser, MoHS, pays public health facilities with line-item budget where public health providers are paid with salary which is one of the line-items. However, there is no contractual agreement between purchaser and provider. According to revised social security law (2012), social security board is trying to purchase health care services from MoHS facilities as well as private pharmacies for the contributed beneficiaries. The primary source of health financing in Myanmar is out-of-pocket payment. User charges are applied at all public health facilities for services, medicines, supplies and diagnostic services which are not financed by the government. However, consultation fee is free of charge. In contrast, private sector charges full fee-for-service and as there is no risk pooling mechanism, many people who are payment out-of-pocket encounter catastrophic health expenditure and impoverishment (Sein et al., 2014).

Phyu (2013) conducted a qualitative study to explore the contracting of health care services to expand service coverage and provide better services by social security scheme in Myanmar. Focus group discussions and key informant interviews were conducted with social security office staffs, health care providers under Ministry of Labor, and selected employers and employees. The study showed that although social security law was amended in 2012, social security board had difficulties to contract public health facilities. Poor capacity and weak organization of social security board were the challenges for purchasing services from private providers with contractual agreement. According to the study, standard procedure and guidelines were needed to develop for the providers. Capacity and autonomy of SSB would be needed to set

ceiling prices for services and make costing of treatments. The study found out that contracting with private sector including non-government organization were possible for pharmacy and service delivery in Myanmar (Phyu, 2013).

3.7 Summary

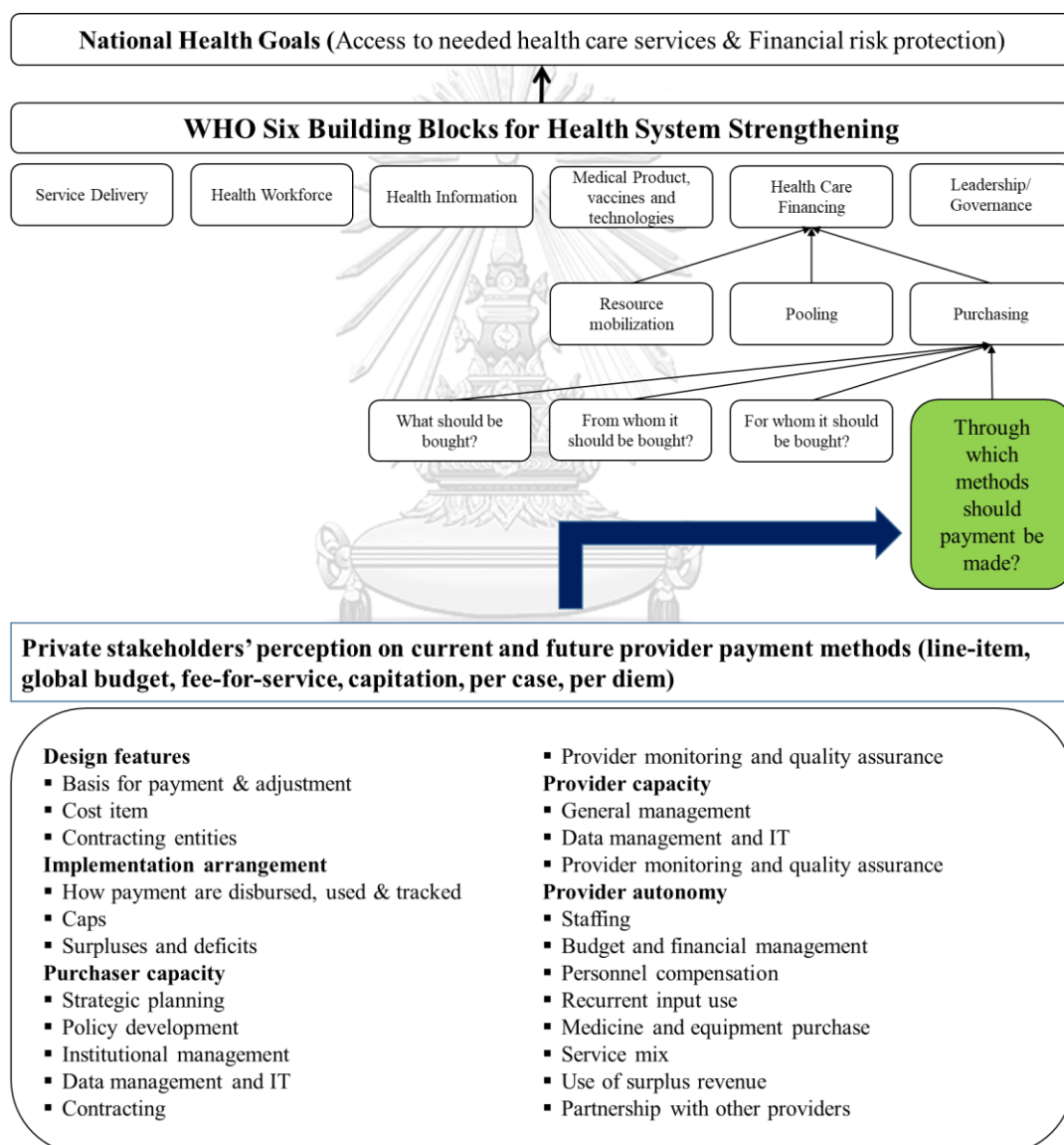
Different provider payment methods create a large variety of different incentives to the providers in positive as well as negative ways. In other words, each payment method has pros and cons. The decision on the usage of a mix of different provider payment mechanisms depends largely on the wisdoms of a particular country which is evidence based decision making, after reviewing the country actual contexts carefully. The government should be in a leadership and stewardship role to provide a clear regulatory framework and appropriate guidance, making sure that resource allocation and purchasing decisions link to public health priorities (Munge et al., 2016). How providers are paid is the key policy lever impacting health system performance and to attain objectives related to improving quality, efficiency, responsiveness, and equity. Provider payment mechanisms affect provider behavior not only by creating incentives but also by changing who bears financial risk for provision of care. The job satisfaction and motivation of the health care providers are critical to the retention, performance and the outcomes of patients (Robyn et al., 2014). Provider payment methods can influence the satisfaction and retention of providers; the quantity and quality of services provided to the patients; risk pooling and financial sustainability (Robyn et al., 2013). Studies in many countries as stated above, show that strategic mix of provider payment methods can contain cost and increase access, equity, efficiency, service availability and supports achievements of UHC goals (Liu et al., 2008; Loevinsohn & Harding, 2005; Tangcharoensathien et al., 2015; Tangcharoensathien et al., 2018). However, in-country experience and study on purchasing as well as provider payment systems are limited and scarce. Purchasing of health care service from private sector by public purchasers is rare except social security board. The dominant provider payment methods used in the country are line-item budget and fee-for-service.

CHAPTER IV

RESEARCH METHODOLOGY

In this chapter, conceptual framework will be explained followed by research design, methods, analysis and ethical consideration.

4.1 Conceptual framework



Source: Adapted from (Cashin, Ankhbayar, et al., 2015)

Figure 12 Conceptual framework

With the aspiration to improve the health status and prolong the lives of the people, Myanmar is trying to achieve the national health goals of access to needed health care services and financial risk protection. For achieving this, Myanmar is strengthening its health system through WHO six building blocks for health system strengthening framework. Health care financing is one of the important building block according to World Health Organization. Health care financing is comprised of resource mobilization, risk pooling and purchasing. Strategic purchasing includes the questions of what should be bought, from whom it should be bought, for whom it should be bought and through which methods should payment be made (DEHNAVIEH, SIRIZI, MEHROLHASSANI, & KALANTARI, 2016; WHO, 2018). Myanmar National Health Plan (2017-2021) explicitly answers the above three questions, that identified essential package of health services (EPHS) package will be bought from four identified groups of providers (public, private, ethnic health organizations and non-government organizations) for the entire population (MoHS, 2016). However, it still needs to answer the question on through which methods should payment be made.

Stakeholders are defined as actors who could be either person or organization, with a vested interest in the policy or action being promoted (Kammi, 2000). In Myanmar, stakeholders can be grouped into eight, namely; national politicians (i.e. Members of Parliament); public agencies (Ministry of Health and Sports (MoHS), Social Security Board); professional association (i.e. Myanmar Medical Association); private-for-profit (general practitioners (GP) and private hospitals), ethnic health organizations (EHOs), international donors and non-government organization/ civil society organizations (NGO/CSO). These groups of stakeholders are believed to be the important actors and influential to Myanmar health care delivery system.

Although key stakeholders from both public and private sectors were identified earlier, this study couldn't include public stakeholders due to administrative requirements, e.g. permission letter from head of organization where the key informant is working with, for recruiting the respondents. Yet, despite understanding the importance of public sectors, the scope of this study focused mainly on private sector. As an operational definition, the private stakeholders are those involved in the health care sector as non-state actors which include corporations, non-government

organizations, private institutions including charity and non-profit organizations, and private individuals such as general practitioners and consultants (Wolf & Toebe, 2016). In this study, private stakeholders included private-for-profit (private hospitals, general practitioners (GP)), selected ethnic health organizations (EHOs), civic society organizations, non-government organizations (CSO/NGO), professional associations and freelance public health professionals in Myanmar, because these key players played increasing roles in private sector with the evolving political and administrative circumstances, e.g. practicing open market, democratization, etc. Additionally, as the country's economy is still poor with scarce resources, the government alone cannot achieve Universal Health Coverage without the collaboration of private health sector. According to National Health Plan, a certain portion of population seeks health care from private sector and engaging health providers outside of MoHS is important for the country's moving towards UHC (MoHS, 2016).

Private sector is an important sector in Myanmar. Private health care provider is one of the four major health care providers in Myanmar. The commercial private health care is regulated in conformity with the provisions of the law on Private Health Care Services. According to the available information, there are 193 private hospitals, 201 private specialist clinics, 3,911 private general clinics, and 776 private dental clinics (Latt et al., 2016). As written in the Myanmar health system review (Sein et al., 2014), the majority of households, particularly the poor, have to rely on private health care providers due to physical proximity, shorter waiting times, timely availability of staff, and drugs, and perceived quality of care. According to cross sectional survey conducted in two townships in Myanmar 2011, 47% of the respondents utilize health care services from private clinics and hospitals (Aye et al., 2013). According to annual hospital statistics report (2013), the distribution of registered private hospitals are varied among state and regions ranging from 43 and 29 in Yangon and Mandalay to only 1 and 3 in Rakhine State and Kayin State respectively (MoHS, 2013). Therefore, the role of private sector is quite important for Myanmar health system.

The term ethnic health organizations is commonly used to refer ethnic health departments, and ethnic and community based health organizations which are in affiliation with ethnic armed organizations, in Myanmar. Ethnic health departments

which are the health wings of ethnic armed organizations (EAO), and ethnic and community based health organizations deliver essential health care services and interventions to the rural community residing in hard to reach and conflict affected areas where public health care services are scarce and not reachable (MoHS, 2016). These ethnic health organizations had established their own primary health care services delivery system through a network of stationary clinics and mobile medical teams which were outside of the government health system. These establishments have initiated and developed for more than five decades to fill in the gap of health care needs by the rural community residing in conflict affected areas in eastern Myanmar (Naing, 2015). Now, EAOs are on the process of political dialogue with the Myanmar government, parliament and Tatmadaw (Myanmar Armed Force) since 2011-2012 and many people in Myanmar believe that health can be regarded a bridge for peace as well as an important instrument to establish trust building between the government/ respective health departments and EAOs/ EHOs. Some EAOs signed nationwide cease fire agreement (NCA) with Myanmar government, but some haven't yet (Tang & Zhao, 2017). So, engaging with ethnic health organizations is quite crucial not only from a health perspective but also from a political point of view to achieve desired health goals in Myanmar. According to the Mae Tao Clinic, there are 240 ethnic health organizations' clinics and mobile teams under the network of ethnic health system strengthening initiatives, situated along the Thai-Myanmar border (MTC, 2017). With about 3,000 health care providers ranging from village health volunteers to medics and health assistants, ethnic health organizations are delivering services to a target population of about 600,000 people (Davis & Jolliffe, 2016).

International donors (development partners) play a certain role in the support of the health care system in Myanmar. They provide technical and financial assistance to promote the health status and strengthen the health system in Myanmar. 2.93% of the total health expenditure in 2015 is from external assistance (MoHS, 2017b). External assistance flows especially to public health, such as control of communicable diseases and strengthening delivery of maternal, newborn, and child health services, representing around 60 percent of total financing for public health. The largest providers of development assistance are Global Fund for AIDS, Tuberculosis, and

Malaria (GFATM), pooled funds of bilateral aid from seven countries managed by UNOPS (3MDG Fund), Global Alliance for Vaccines Initiative, the World Bank Group, and JICA (MoHS, 2016).

The last stakeholder is non-government organizations (NGO) and civil society organizations in Myanmar, which are one of the four main types of health care providers in Myanmar according to National Health Plan (2017-2021). They are increasingly active in Myanmar, working in humanitarian response and longer-term development in health as well as health related sectors such as environment, health, education, livelihoods, gender and peace. According to Health in Myanmar 2014, there are 57 international NGOs and 14 national NGOs working in Myanmar (MoHS, 2014).

The mix of provider payment methods should be selected based on how the incentives as well as unintended consequences created by the individual or the mix of provider payment method may affect health system goals given the current context; how provider payment systems work together within the country's overall payment system architecture; the purchaser's capacity on designing and managing payment systems; the autonomy, flexibility, and capacity of providers to respond to incentives created by the individual or mix of provider payment methods; how the payment systems align with and strengthen other health financing functions such as pooling of funds and defining benefits or essential services packages; other factors that influence institutional relationships and provider behavior, including political, legal, and public financing factors (Cashin, Ankhbayar, et al., 2015). Designed features such as basic rate for payment and adjustment, cost item and the contracting entities, of a payment system are quite important and the payment system should be designed strategically to be appropriate for the goals and context of the country and the current capacity of the purchaser and providers and create consistent incentives that maximize beneficial incentives as well as minimize unintended consequences to advance health system goals. The implementation arrangement such as institutional relationship between provider, purchaser and population, how payment are disbursed, used and track, arrangement for cap, surplus and deficits, supporting system and complimentary policy, public financial management and financial flows, are also important in shaping the health system to meet national health goals. It is needed to ensure that the

implementation arrangements support the conditions essential to operate and manage the payment system, create flexibility of providers to respond to incentives, include systems for monitoring, evaluation and improving quality, ensure that stakeholders on all sides are accountable and adverse consequences can be managed (Cashin, Ankhbayar, et al., 2015).

The autonomy of the provider plays an important role in responding to the incentives created by the different mix of provider payment mechanism. The level of autonomy could be assessed by provider's decision making authority on budget and financial management, internal allocation of funds, staffing, personnel compensation, recurrent input use, service mix, use of surplus revenue, partnership with other providers and assets and investment management (Cashin, Ankhbayar, et al., 2015).

The capacities of purchaser as well as provider are critical in achieving the desired outcomes and goals. This can be assessed by looking deep into strategic planning, policy development, and institutional management, general as well as data management and IT, contracting, provider monitoring and quality assurance. The choice and private stakeholders' perception on the mix of provider payment methods will also depend on the country's national health goals and guided principles (Cashin, Ankhbayar, et al., 2015).

4.2 Study Design

It is a cross-sectional descriptive qualitative study. Qualitative methods is chosen to be most appropriate for this study based on its aim to determine an in-depth understanding of and perception on the provider payment methods currently practicing and the institutional arrangements to meet national health goals in Myanmar.

4.3 Methodology

4.3.1 Target Population

All key stakeholders from private sector of health care system in Myanmar

4.3.2 Sample Population

Key stakeholders from private sector are making into groups, identified as follow.

- Private-for-profit (private hospital, general practitioners (GP)),
- Selected ethnic health organizations (EHOs),
- Civil society organizations (CSO)
- Non-government organizations (NGO)
- Freelance public health professionals

4.3.3 Sample size

Determining the adequate sample size in qualitative research is ultimately a matter of judgement and experiences. A saturated number of samples are required to explore individual behavior and elaborate the deeper understanding on a particular interested area with qualitative analysis approach (Supakankunti, Adhikari, & Khan, 2015). Therefore, in this study, 23 key informant interviews were conducted mainly in June 2018 in Yangon Region, Myanmar as well as Mae Sot, Tak Province, Thailand where stakeholders were located. Although it is planned to conduct key informant interviews with 30 private stakeholders in Myanmar, only 23 participants could be recruited in this study due to administrative requirements for recruiting additional respondents, e.g. permission from head of organization where the key informant is working with. 25 potential respondents were contacted for the study and two candidates were refused indirectly to participate in the study. So, the response rate for this study is 92% which is above the average response rate expected for survey of minimum 80% (Fincham, 2008).

4.3.4 Sampling methods¹

A purposive sampling method was used in this study. Stakeholders from each private stakeholder group mentioned earlier were identified purposively based on respective recommendation, the researcher's belief of having technical expertise, well-experiences professionalism and being well-respected by people working in the health sector in Myanmar. To be exact, Myanmar Private Hospitals' Association (MPHA) was approached to get the recommended stakeholders from private hospital sector. Similarly, Myanmar General Practitioners' Society under Myanmar Medical Association was also approached to receive the list of recommended general practitioners to be interviewed in the study. The key stakeholders from private not-for-profit sector: non-government organizations and civil society organizations, were selected from a member list of nationally organized Health Financing Strategy (HFS) Sub-Technical Strategy Group (Sub-Group) which is under the Health System Strengthening Technical Strategy Group (HSS TSG), one of eight TSGs under Myanmar Health Sector Coordinating Committee (M-HSCC) which guides the MoHS in health system strengthening. Ethnic health organizations to be interviewed were selected based on the invitation list of National Health Plan Implementation Monitoring Unit (NIMU) to the workshop for organizing HFS Sub-Group. Director- and manager-level participants from INGO, CSO and ethnic health organizations, were included in the interview. Public health professionals and health economists, retired from Ministry of Health and Sports, who were working as freelance were included in the study.

The identified stakeholders from private sector (for profit and not-for-profit) to be interviewed are shown in the table.

¹ Although key stakeholders from both public and private sectors were identified in the research proposal, this study couldn't include public stakeholders to be interviewed, due to administrative requirements imposed by the ethics review committee, e.g. permission letter from head of organization where the key informant is working with, for recruiting the respondents.

Table 8 Identified stakeholders from private sector to be interviewed

Respondent Number	Stakeholder group	Organization Name
Respondent 1	Private Hospital	Myanmar Private Hospital Association
Respondent 2		Private Hospital 1
Respondent 3		Private Hospital 2
Respondent 4		Private Hospital 3
Respondent 5	General Practitioner	General Practitioners' Society – Myanmar Medical Association
Respondent 6		General Practitioner 1
Respondent 7		General Practitioner 2
Respondent 8		General Practitioner 3
Respondent 9		General Practitioner 4
Respondent 10	Ethnic Health Organization	Karen Department of Health and Welfare
Respondent 11		Burma Medical Association
Respondent 12		Burma Medical Association
Respondent 13		Back Pack Health Workers Team
Respondent 14		Back Pack Health Workers Team
Respondent 15	International Non-government Organization	Population Service International
Respondent 16		JHPIEGO
Respondent 17		Marie Stopes International
Respondent 18		Community Partners International
Respondent 19		Save the children
Respondent 20	Civil Society Organization	CSO Network
Respondent 21		CSO 1
Respondent 22		CSO 2
Respondent 23		CSO 3
Respondent 24		CSO 4
Respondent 25		Public Health Professional

Respondent 26	Freelance Public Health	Public Health Professional
Respondent 27	Professional	Public Health Professional
Respondent 28		Health Economist
Respondent 29		Health Economist
Respondent 30		Health Economist

4.4 Pre-structured guideline question

The key informant interviews with identified stakeholders from private sector were conducted using three sets of pre-structured guideline questions for three different categories of private stakeholders; private for profit (private hospital and general practitioners), private not-for-profit (INGO, CSO and freelance public health professionals) and ethnic health organizations. Both closed-ended and open-ended question types were used in the guideline question set. The guideline question was designed to cover six major question areas. Firstly, the interviewee was asked on the national health goals of Myanmar. Only after exploring the stakeholder's understanding of national health goals, the questions of whether current payment systems help meet the national health goals could be asked. Secondly, questions under design features and implementation arrangements of current provider payment methods used in Myanmar were asked. This included stakeholders' understanding of and perspectives about all payment methods in use, how budget/payment was calculated, design features such as basis for payment and adjustment; included services; cost items; adjustment coefficient; contracting entities, and implementation arrangement such as how payment were disbursed, used and tracked; caps; surpluses and deficits. Thirdly, consequences including strength, weakness and suggested improvement of the each payment method in use in the country were asked. Fourthly, stakeholder's opinion on current capacity of health purchasers and fifthly, the current autonomy and capacity of providers were asked. Lastly, private stakeholders' suggested mix of provider payment methods to help meet national health goals in Myanmar were asked. The guideline questions was tested and revised to ensure that the respondents could understand the questions, data could be collected and the research question was answered. As it is qualitative research, the questions were not

fixed and the understanding and perception of the interviewees on provider payment mechanisms was explored deeply based on their response during the interview. The stakeholders were discussed to share their opinion from the societal perspective for the sake of welfare of the nation. The respondents took part in the study and answered the questions as an individual participant, not representing the organizations where they are working with.

The key informant interviews were mainly conducted by one researcher, Dr. Nay Nyi Nyi Lwin, who graduated from the University of Medicine (2), Yangon, Myanmar in 2011, worked as house officers in public hospitals under MoHS. He also has experience in the management of public health related programs in rural areas especially hard to reach and conflict affected areas in partnership with community based organizations, civil society organizations and ethnic health organizations and in collaboration with respective government health departments, for more than five years. He is currently working with Community Partners International, an international non-governmental organization, based in Yangon.

4.5 Analysis

Quality of this study is maintained at all time by following the ethical guideline and research protocol. The interviews were conducted following the research protocol as written in the informed consent form. The inform consent form was attached as appendix 4 at the end of this research. Ethical clearance was conducted at Ethics Review Committee, Department of Medical Research, Myanmar and informed consent was obtained from the interviewee. The confidentiality of the respondents are strictly maintained by the researcher and the qualitative data analysis including data triangulation and interpretation was conducted using framework analysis under the guidance of well-experienced advisors for the study.

The respondents were contacted with email or Facebook messenger first, followed by phone call to explain the purpose of thesis and checked their willingness to participate in the research. A brief summary on strategic purchasing and provider payment method was shared with the respondents ahead before the key informant interview. The interviews were conducted at the place of preference chosen by the

respondents. The information regarding research and brief on strategic purchasing and provider payment methods were explained first before the interview. The informed consent as well as permission to record the discussion was taken from the interviewee. After taking permission from the interviewee, the interview was recorded using recorder application from mobile phone.

The language used to interview the respondents was Myanmar and the qualitative data were transcribed using Myanmar language. The study took a primarily inductive qualitative data analysis approach to addressing defined research questions through framework analysis. Framework analysis is an approach to qualitative analysis which was developed in the context of applied policy research. It provides systematic analysis stages which are clearly defined and easily accessible to others. It is particularly well suited to qualitative research where there are pre-set questions that need to be addressed (a priori issues) and where the timescale is short. It is flexible during the analysis process in that it allows the user to either collect all the data and then analyze it or do data analysis during the collection process. In the analysis stage, the gathered data is sifted, charted and sorted in accordance with key issues and themes (Srivastava & Thomson, 2009). The framework analysis includes five steps as described below.

1. Familiarization – data transcription, organization, familiarization
2. Identifying of the themes
3. Coding
4. Charting
5. Interpretation (Lacey & Luff, 2009; Srivastava & Thomson, 2009).

Firstly, the transcripts of the data collected were familiarized to get an overview of the collected data by listening to recorded audio files and reading the transcripts. Throughout this process, key ideas and recurrent themes were aware of and a note of them were made.

The second stage, identifying themes, followed the familiarization and recognition of emerging themes or issues in the data set. Pre-determined themes were taken from the conceptual framework and guideline questions, e.g. national health goals, strengths, weakness and consequences of each payment methods, etc. for

analysis and in cooperated them with the emerging themes. The notes taken during the interview and familiarization stage was used to recognize the emerging themes and issues. The key issues, concepts and themes that had been expressed by the interviewees were be taken as basis of a thematic framework that could be used to filter and classify the data. The themes used in this study include national health goals, purchaser, provider, services given by each provider, provider payment systems between purchaser and provider, who made decision on payment amount, how to calculate the payment amount, cost item, adjustment, contract, retrospective or prospective payment, supporting rules and regulation, frequency, flexibility, budget cap, deficit and surplus, strength, weakness and improvement for each payment system in practice, current government purchaser's capacity, autonomy and capacity of providers, suggested mix of payment methods for primary and outpatient care, and inpatient care, can national health goals be achieved with current payment systems, and what are additional factors to be considered to reach national health goals. The following figure visually organizes these predetermined themes (grey color), as well as the themes that emerged later on (light blue color). The second degree themes are highlighted in dark blue color. It also shows relationships and linkages with private stakeholders' suggested mix of provider payment systems.



Figure 13 Thematic map of private stakeholders' suggested mix of provider payment methods in Myanmar

Then, coding was conducted by identifying portions or sections of the data that corresponded to a particular theme, e.g. UHC, full life expectancy and free from disease, corresponds to the theme “National Health Goals”; MoHS, SSB, other ministries, MoD, etc. corresponds to the theme “Purchaser”. This process was applied to all of the transcripts of the interview that had been gathered. Microsoft excel 2013 was used for the indexing references and annotated in the margin beside the text. Although the researcher tried to use standard software for qualitative data analysis such as NVivo, Atlas.ti, these software couldn't handle Zawgyi font for Myanmar language. So, Microsoft excel 2013 was used to make coding.

Charting, the fourth stage, the specific pieces of data that were coded in the previous stage were now arranged in charts of the themes. This mean that the data

was lifted from its original textual context and placed in charts that consisted of the headings and subheadings that were drawn during theme selection, or from a priori research inquiries.

The analysis of the key characteristics as laid out in the charts was the final stage, interpretation. Data triangulation was conducted to compare the stakeholders understanding on health system as well as financing and payment arrangement with the Ministry's goals, objectives, rules, regulations and policies. Then, based on the findings, recommendation were made to echo the perception of interviewees on the suggested mix of provider payment mechanisms.

4.6 Ethical consideration

The ethical approval for this study was taken from Ethics Review Committee (ERC) at Department of Medical Research (DMR), Ministry of Health and Sports, located in Yangon, Myanmar. The ethical clearance certificate with ERC number 2018-60 and approval number Ethics/DMR/2018/086, was granted on July 2, 2018. Moreover, the purpose of this study and the procedures was explained to the stakeholders involved in this study. Written informed consent was taken from the interviewees.

4.6.1 Description of the process used to obtain and document informed consent

The informed consent form was provided to the interviewee, including a brief statements (study title, procedure, study purpose, risk and benefits, duration, etc.) about the research, followed by a statement taking informed consent from the interviewee and the signature of the interviewee was taken after he/she thoroughly read and understand the information given in the consent form.

4.6.2 Plans for publication of results while maintaining the privacy and confidentiality of the study subjects

The findings is used only for the research purposes in writing academic journals, paper and oral presentation in conferences. Interviewee's name and personal data are

not described. After thesis, the results will be submitted to Department of Medical Research by uploading into the system of Myanmar Health Research Registry through the website <http://www.mhrr-mohs.com/>. The findings will be shared with interviewees who contribute their time as well as perceptions in the study.

4.6.3 Procedure for maintaining confidentiality

The information of the interviewee are not shared to anyone outside of the research team. The information collected from this research project is kept private and confidential. Any information about the interviewee has a number on it instead of the name. Only the researcher knows the link between the information and the number and that information cannot be assessed without permission. Each respondents was assigned a random number using random function in Microsoft excel 2013, to protect the identity and confidentiality of the respondent when writing thesis. The quotes are cited in the results using random number of respondents. The data will be kept for one year after submission of thesis report and then, deleted.

CHAPTER V

RESULTS AND DISCUSSION

The results of qualitative research and the perception of different stakeholders from private sector on provider payment methods practiced in Myanmar will be discussed in this chapter.

5.1 Respondents' background

A total of 23 key informant interviews were conducted mainly in June 2016. As shown in Table 9, the study included 5 from ethnic health organizations, 5 from private-not-for-profit sector, 6 from private-for-profit sector, two from General Practitioners' Society, Myanmar Medical Association and Myanmar Private Hospital's Association, and 5 freelance public health professionals and health economists. Some of the freelance professionals are retired government staffs. The youngest interviewee is 28 years old while the oldest one is 67 years. The mean age of the participant is 46. The average women participation among the respondents is 13%. The service of the respondents are varied from 5 to 38 years. The education level of the respondents are ranging from high-school passed to adjunct professor. 70% of the respondents are graduated from medical schools in Myanmar. 14 out of 23 interviewees have higher level of education such as diploma or master degree. Each interview lasts approximately from 36 to 102 minutes.

Table 9 Key informant interviewees in the study

Type of Key Informant Interviewee	Number	Role of involved stakeholders
Ethnic health organization		
Ethnic health department	1	Ethnic health department is the health wing of one ethnic armed organization delivering essential health care services and interventions to the rural community resided in hard to reach and conflict affected area where public health care services do not reach, in Kayin & Mon

		States, Bago and Taninthayi Regions. Without the collaboration of this health department, UHC cannot be achieved.
Ethnic and community based health organization	4	They are organizations in affiliated with one or more ethnic armed organizations or health departments, delivering essential health care services and interventions to the rural community resided in hard to reach and conflict affected area in several states and regions. So, UHC cannot be achieved without the collaboration of these organizations.
Private not-for-profit		
Civil Society Organization	2	Civil Society Organizations take significant responsibility to deliver health care services in Myanmar and they are important for governance and social accountability of government health departments by advocating or exerting political pressure to the government. They are also working together with the government in health care sector. So, these organizations are important for social accountability and formation of legal framework to support the move towards UHC.
International Non-Government Organization (INGO)	3	INGO are increasingly active in Myanmar, working in humanitarian response and longer-term development in health as well as health related sectors such as environment, health, education, livelihoods, gender and peace in several states and regions in Myanmar. According to Health in Myanmar 2014, there are 57 international NGOs and 14 national NGOs working in Myanmar, in collaboration with the government health departments.
Private for profit		A certain portion of the population seeks health care from private sector, so, UHC cannot be achieved without the collaboration of these private for profit health care sector. There are

		nearly 19,000 medical doctors working in private sector in 2014.
General Practitioner	6	General practitioners are the first-line care giver to the people at the community level and most of the patients rely on them due to physical proximity, availability of providers, shorter waiting time and perceived satisfaction.
Association		
General Practitioners' Society, Myanmar Medical Association (MMA)	1	GP society is one of the 33 specialty societies under MMA. MMA is the professional association in Myanmar where more than 16,000 membered medical doctors and nearly 15,000 non-membered medical doctors are involved in academic and technical activities with the Association.
Myanmar Private Hospitals' Association (MPHA)	1	Around 60% of all private hospitals in Myanmar are members of MPHA.
Freelance professional		
Public Health Professional	3	Two out of five freelance professionals are retired from MoHS, so, they have experiences on working environment, rule and regulation of MoHS. Freelance health professionals are working with INGO or donors as consultants to provide technical support to the government.
Health Economist	2	
Total	23	

5.2 Results

The findings and results of the qualitative research study are discussed in this section.

5.2.1 National health goals in Myanmar

Firstly, the stakeholders' perceived national health goal was asked. Only after exploring this, the latter question of whether current provider payment systems support to meet this national health goals and respondents' opinion on this could be

asked and explored. According to Myanmar National Health Plan, Universal Health Coverage is a goal, supporting to a broader vision of enhancing or uplifting health, social cohesion, and sustainable human and economic development of Myanmar (MoHS, 2016).

According to the study, most of the respondents said that achieving Universal Health Coverage (UHC) by 2030 with improved access to essential health care services by the people living in Myanmar without suffering financial hardship is the national health goals. This includes principles like equity, quality service and affordability. The respondents believe this as national health goal as it is written in the Myanmar National Health Plan (2017-2021). Some participants didn't say Universal Health Coverage directly, but their answer covered the concept of UHC which were access to essential health care services without financial burden.

“...I think national health goal is everyone gets the quality health care without financial burden. It means access without catastrophic health expenditure...”

(Respondent 11)

A few respondents said that enabling every citizen to attain full life expectancy and enjoying longevity of life with free from diseases is the national health goal while UHC is a sub-goal for health sector. These respondents believed that health sector alone cannot achieve this goals without socio-economic development.

“...Health sector alone cannot ensure everyone enjoying full life expectancy with free from disease. There are many sectors influencing on health such as determinants of health. Achieving the goal will depend on to what extents UHC can tackle these determinants...”

(Respondent 13)

5.2.2 Linkage among purchasers, providers and payment systems

The purchasers, health care providers, purchased services, and provider payment methods currently practicing in Myanmar are explored in this section.

5.2.2.1 Definition of purchaser

As an operational definition, the purchasers can be referred as those who manage fund and allocate them to the providers for the purchased health care services for the population (RESYST, 2014). The understanding on the meaning of purchaser is different among the respondents. One respondent shared his understanding on the meaning of purchaser as follow.

“...health care provider will set a price for a given services. The one who purchases health care service from the provider with set or negotiated price is purchaser...”

(Respondent 1)

However, different opinions on whether clients or community were purchaser or not, were found out in the study. Most of the respondent classified client as purchaser but a few didn't want to categorize them as purchaser.

“...Pure purchaser acts as third party, who pay the providers on behalf of clients. So, although people have to pay direct out-of-pocket, it is difficult to recognize clients as purchaser...”

(Respondent 5)

“...according to national health account, around 70% of total health expenditure are out-of-pocket payment of community. So, they can be regarded as purchasers...”

(Respondent 7)

5.2.2.2 Type of purchasers

A clear statement or identification on who the purchasers are in Myanmar, is not found in Myanmar health system review as well as National Health Plan. Ministry of Health and Sports and Social Security Board could be regarded as principal purchasers in Myanmar (Sein et al., 2014). Only a plan to develop the functions of a purchaser was written in national health plan (MoHS, 2016).

According to the respondents, the purchasers in Myanmar can be differentiated into two groups, public and private. Public purchasers include Ministry of Health and Sports (MoHS), Social Security Board (SSB) under Ministry of Labor, Immigration and Population (MoLIP), Ministry of Defense (MoD), and other ministries like transport and communications, and home affairs. The first three ministries cover almost all of the

population while others purchase health services for their staffs by employing doctors or reimbursement. The private purchasers include bilateral and multilateral donors, international non-government organizations and clients (patients) whose contribution is the most.

According to the respondents, there are some private insurance (private purchasers) in Myanmar but the usage is low due to high rate of premium, unattractive benefit package, several criteria and requirements for reimbursement. In Myanmar during 2015, the government insurer “Myanma Insurance” and 12 private health insurers officially announced an identical voluntary private health insurance scheme where customers could buy from one to five units in maximum of premium with approximate cost of USD 50 per each unit of premium. The benefit package included reimbursement for hospital cost of approximately USD 15 per day up to 30 days and USD 1,000 as compensation for accidental death (GGI, 2016; MMTimes, 2015). The patients need to pay the cost in advance out-of-pocket before reimbursement with the insurers.

One respondent expressed his opinion that private health insurance in Myanmar is not a real one.

“...Insurance experts said health insurances in Myanmar are not genuine. The patient needs to reimburse the cost within the cap and insurer will give you only that amount even you cost a lot...”

(Respondent 7)

5.2.2.3 Type of providers

A range of health care providers as identified in Myanmar National Health Plan (2017-2021) are public providers (MoHS and other ministries), private providers such as private-for-profit GP clinics and private hospitals, ethnic health organizations and non-government organizations (MoHS, 2016). Additional providers are identified in Myanmar health system review such as professional associations and pharmacies (Sein et al., 2014).

According to the respondents, health care providers in Myanmar can be categorized into three groups; public, private-for-profit and private-not-for-profit. Public

providers include clinics and hospitals under MoHS, MoLIP, MoD and other ministries. Private-for-profit sector can be differentiated into formal and informal where formal providers include general practitioners, poly clinics which give out-patient care with specialists, and private hospitals which give not only outpatient care but also inpatient care. Informal private providers are those who are not legalized to practice, but they practice in the community like drug shop, quacks, traditional healers, and traditional birth attendants.

MoHS practices community cost sharing system and gives comprehensive health care ranging from promotive, preventive, and curative to rehabilitative care. Community cost sharing was intended for the people to take responsibility over a certain portion of health care costs if the patient was able to pay while poor people were protected from the cost burden through trust funds and revolving drug funds which were part of community cost sharing fund (Sein et al., 2014). However, there is no specific list of services given by different level of public facilities. MoHS facilities are delivering primary, secondary and tertiary care ranging from maternal and child health, immunization, school health, health education to specialist care like liver transplant, brain surgery, etc. Ministry of Defense managed one medical academy and their own hospitals delivering primary, secondary and tertiary care to the soldiers and their family members with free of charge.

Workers' hospitals under MoLIP deliver health care services (similar to MoHS) to the beneficiaries who contributed to SSB pooled fund. One respondent said that mostly, the beneficiaries take antenatal care, child delivery and accident related services from two Workers' Hospitals in Yangon and Mandalay. The clinics under MoLIP and contracted private clinics deliver primary health care services to the beneficiaries.

General practitioners deliver primary level health care including treatment of minor illness, minor surgery, communicable and non-communicable diseases, maternal and child health care, home visit, health education and investigation. Some general practitioners make partnership with some INGOs and deliver franchised services like malaria testing and treatment, directly observed treatment, short course (DOTS) for tuberculosis, family planning, etc. Poly clinics deliver outpatient care with specialists in respective areas like endocrine, gastro-intestinal, orthopedic, etc. Private

hospitals can give preventive, curative and rehabilitative services, however, they are well known for curative services. They mostly deliver secondary and tertiary health care with high-technology investigations and imaging services.

Health care services given by non-government organization, civil society organization and community based organization can be grouped into two. Some organizations open clinics and deliver general health care services with their hired or volunteer health care providers while others provide program and community based vertical services like prevention and control on malaria, tuberculosis and HIV/AIDS, maternal and child health, immunization, etc. based on their mandate with different donors. Ethnic health organizations which are affiliated with ethnic armed organizations deliver primary and few secondary health care services in the conflict affected area with community based and facility based approaches. They provide services to their community with their own trained providers which are not still yet accredited by the government.

5.2.2.4 Provider payment methods

A brief mapping of provider payment methods practiced in Myanmar is mentioned in this section and detailed information on each payment system will be provided in next section.

Table 10 Mapping purchasers, providers and payment methods in Myanmar

Provider type	Purchaser						
	MoHS	SSB	MoD	Other ministries	Bilateral and multi-lateral donors	INGO	Clients
Tertiary and specialist hospitals	LIB						FFS
State, Region, District, Township and Station hospitals	LIB						FFS
RHC, UHC, sub-RHC, MCH center	LIB						
Workers' Hospital and clinics		LIB					

Military Hospital			LIB				
Other ministry hospital and clinic				LIB			
Private hospital		FFS					FFS
Polyclinic							FFS
General practitioner		Capitation (Pilot)/ FFS		FFS		Capitation (Pilot)/ P4P	FFS
INGO, NGO, CSO					LIB	LIB	
Ethnic health organization					LIB/ GB	LIB/ Capitation (Pilot)	

Note: MoHS: Ministry of Health and Sports; SSB: Social Security Board; MoD: Ministry of Defense; INGO: International non-government organization; NGO: Non-government organization; CSO: Civil society organization; P4P: Pay for performance.

Table 10 maps the relationship between purchasers of health care services, providers and payment methods currently practiced in Myanmar. This mapping exercise revealed that there are four provider payment methods practiced in Myanmar, namely, line-item budget (LIB), fee-for-service (FFS), global budget (GB) and capitation. Mix of provider payment methods are mostly seen in private not-for-profit sector and general practitioner category. Overall, the public sector use line-item budget (LIB) and private sector use both fixed and unfixed fee-for-service methods. Tertiary hospitals, state, region, district, township and station hospitals, health centers from public sectors are paid in line-item budget. Services, medicines and supplies, provided by public sector, which are not financed by government, are paid by household direct out-of-pocket payment as fee-for-service. Services, medicine, supplies and investigation rendered in private sector (general practitioners, poly clinics and private hospitals) are paid totally by fixed or unfixed fee-for-service. Private not-for-profit providers such as non-government organizations, ethnic health organizations and civil society organizations are paid by bilateral and multilateral donors and non-government organizations, using line-item budget with a given flexibility, unlike that used in public sector. Global budget is seen only at ethnic health organizations. Capitation payment method is used as one of the payment methods in piloting strategic purchasing by three organizations; Social Security Board under MoLIP from some private clinics and hospitals, Population Services International (INGO) from some general practitioners in

Yangon region and Community Partners International (INGO) from some ethnic health organizations in Kayin State and Bago Region.

5.2.3 Design and implementation arrangement of current payment system in Myanmar

The respondents were asked to describe the design and implementation arrangement of currently practiced provider payment system in Myanmar that they are familiar with. According to their responses, the common trends and important areas of similarities, divergence and variation were identified. This section is written mainly based on the information provided by the respondents except information on strategic purchasing pilots using capitation payment where references are taken from the respective organization's website, published learning briefs and unpublished data sources.

5.2.3.1 Line-item budget

The line-item budget (LIB) is practiced by government agencies like Ministry of Health and Sports (MoHS), Ministry of Defense (MoD), Ministry of Labor, Immigration and Population (MoLIP), international non-government organizations, ethnic health organizations, civil society organizations and community based organizations. Before the beginning of a particular budget year, each ministry submits budget estimates (BE) to the Pyidaungsu Hluttaw (Assembly of the Union) according to section 100 (B) of the constitution of the Republic of the Union of Myanmar (2008). Once approved by the assembly, the Ministry of Planning and Finance (MoPF) transfers the consolidated government fund to each ministry according to the approval. Then, each ministry use line-item budget to purchase health care services from its health facilities and health care providers. MoHS and MoD purchase health services only from their own public providers while Social Security Board under MoLIP purchases health services from both public and private providers. One respondent said that ethnic arm organizations also used line item budget to purchase health services from its own ethnic health department.

“...some ethnic armed organizations give a specific amount of budget to their health departments to deliver health care services. The amount is not small. The user can use it flexibly with approval by responsible person...”

(Respondent 1)

The decision on total budget amount is done by Pyidaungsu Hluttaw for government ministries, international donors for INGO and INGO for CSO, CBO and EHO. According to the respondents, there are adjustments based on negotiation, budget availability, political influence and activity. The government ministries usually calculate the line-item budget with top-down approach based on historical budget and expenditure, adjusted by inflation, political influence, activity. Recently, some adjustment was seen in budget calculation process based on bottom-up costed work-plan submitted by township health departments.

For government ministries, the budget can be generally grouped into two, capital and current budget according to expenditure type. According to standard economic classification of the government (expenditure category), there are six budget line as follows.

01. Pay allowance and honoraria
02. Travelling allowance
03. Expenses on goods & services
04. Maintenance charges
05. Transfer payments and
06. Entertainment & meal expenses

Each budget line has sub categories. One respondent said that the budget lines 02 and 03 were mostly used by the providers. Budget line 01 covers salary and allowance. Budget line 02 covers international travel and deputation and delegation expenses. Budget line 03 includes labor charges, rent rates and tax, hiring and manufacturing charges, transport charges, office equipment, patrol, postage, communication, electricity, uniform, clothing and bedding, medical expenses, publication charges, advertising charges and expenses for blood bank and donors. Budget line 04 consists of machinery, building, road, motor vehicles, vessels and others. Budget line 05 comprises of education expenses, relief and resettlement, social

security payment, educative training, gratuity, gifts and donation, compensation, etc. The last budget line 06 includes entertainment and meal expenses. The line-item budget used by the government is rigid and changing line will need to pass through a complicated and lengthy process.

“...I have read in public financial expenditure review that government budget is very rigid and cannot use flexibly. Capital budget is very difficult to change. I have heard that current budget can only be changed with approval from Director-General...”

(Respondent 1)

“...the user at township level are trained medically, but not in finance. Some township medical officers don't know the procedure on changing budget lines or some know the procedure, but lengthy process make them demotivate to change the line...”

(Respondent 7)

The respondents said that there is no contract between ministry office and respective state and regional health departments for service delivery and budget. Each level of providers has job description.

“...There is no contractual agreement between purchaser and provider. Actually, there should be...this service contract should be linked with national health plan...from the provider side, they understand like they have to deliver these services as a routine, even though there is no contract...”

(Respondent 13)

The government line-item budget is prospectively paid and designed to give annually, however, there are usual payment delay in government, sometimes up to two months. The salary of the providers is on a monthly basis.

“...I don't know where the bottleneck for these delays is. I think most of the government record system rely on paper base and there is no online payment or notification system in use, in government. This makes that kind of delay or information gap...”

(Respondent 1)

In the middle of budget year, the ministries get a chance to revise their budget by submitting revised estimates of budget to the assembly. The providers need to follow the public financial management rules and policies strictly while utilizing the

government budget. The office of the Auditor General annually audits these expenses against public financial management rules and regulations.

“...there are many departmental financial rules with different level of authority. There are guidelines on how to keep and use these budget. After withdrawal of money from bank with approval of drawing officer, to implement activity, these money cannot be held in the hand of user for a long time. I think the limit is two months. The auditor also checks for the duration between cash withdrawal from bank and claiming back at finance officer...”

(Respondent 13)

There is no specific budget cap identified in government sector, however, the approved budget is mostly based on historic budget or it should be reasonable amount. The underspent budget needs to pay back to the MoPF through MoHS. The approved budget cannot be overspent and the overspent money cannot be claimed back from the government.

Although EHO, INGO, CSO and CBO use line-item budget similar to the government, the design and implementation arrangement is a little bit different. These organizations are mostly financed by bilateral (E.g. USAID, SDC, DFID) and multi-lateral donors (E.g. 3MDG Fund, Global Fund). The available budget (budget cap) was announced since the time of call for proposal and based on that amount, the interested organizations prepare the proposal expressing their project design and services, and calculate the budget for this. Budget is calculated mostly based on the demography of population, geography, case load or disease burden, project duration, required resources and activity. The cost items under line-item budget include salary and benefits, medicine and supplies, transportation, training cost, administrative and operation cost, and activity specific costs. There might be a certain adjustment on payment between purchaser and provider as needed, based on situation. There are usually contractual agreements signed by two parties; purchaser and provider. The contract mostly includes information on purchaser and provider, payment schedules and amount, frequency of payment as well as narrative and financial reports, and terms and conditions like flexibility. The payment schedule as written in the contract is linked with services written in the concept note and logical framework which are

attached as annexes. Unlike government line-item budget, the LIB used in these private not-for-profit organization has flexibility. Most purchasers allow flexibility up to 10% to move fund across budget-lines within the overall approved budget amount.

“...purchaser gives budget line flexibility up to 10%. Providers can manage the budget by themselves within this flexibility limit. Above 10% flexibility, the provider can move the fund across budget line with prior approval from the purchaser. The purchaser may look for implication on the overall budget and make decision case by case...”

(Respondent 6)

Payment is prospective in nature and frequency of payment varies among each and individual projects. Most of the payments are done on a quarterly basis which is linked with submission of narrative and financial reports. Some purchasers make biannual or yearly payment. The budget deficit cannot be claimed back from the purchaser. The decision on underspend money depends mainly on purchaser. In some projects, the provider can carry over the underspent money to next year. However, some purchaser may ask the providers for paying back the underspent money. The provider organizations need to use the budget according to purchaser’s financial rules and regulation or their organization’s own internal control policies and financial rules and regulation.

5.2.3.2 Fee-for-service

The fee-for-service method is mostly used in private for profit sector. However, it can be said that this method is also used in public sector because of patient’s out-of-pocket expenditure seen in public health facilities when government supported medicine and supplies run out. People can access public health care services e.g. immunization with free of charge. Private hospitals fix the fees for each service and item utilized by the clients. Some of the general practitioners fix the price of services, but some do not.

“...Some general practitioners fix the consultation fee in advance. So, the patients pay the consultation fee plus the cost of medicine and charges for additional services like blood sugar testing, minor surgery, etc....Other practitioners do not fix the fee, but

they ask for a specific amount of money as a sum from the patient. Patients don't know the cost in advance..."

(Respondent 21)

"...when we say fee-for-service in Myanmar, most of them are unregulated fee. So, the client needs to pay the amount asked by the provider...we don't have fixed fee. People face with financial burden due to this..."

(Respondent 2)

Almost all of the illegal private providers in Myanmar like quacks, traditional healers and drug shop practice unregulated fee-for-service. So, the fee schedule is decided by the provider in private sector. Many respondents from private sector who are familiar with fee-for-service method responded that the fee was calculated and adjusted based on provider's education level, experience and dignity, investment in the facility, geographic location where the provider delivers services, people's ability to pay, inflation and market price.

"...as GP clinic is community-based, the consultation fee is fixed depending on ability-to-pay of community where the clinic is situated. It also depends on market price. In downtown, the average consultation fee is 2000-3500 kyats, but we cannot charge like this in the peri-urban area..."

(Respondent 12)

The rate is adjusted based on inflation, market price and client's ability to pay. Some providers give service to the poor client with free of charge. Some providers make subsidized rate for religious person (e.g. Monk), elder people, children, poor clients, frequent visit, or follow-up visit. The payment is retrospective payment and the clients are charged per visit. Usually, there is no contractual agreement between client and the provider, but some private clinics or hospitals opened in industrial zones or the place where companies or factories are situated, are contracted by the companies or factories directly, or by Social Security Board (SSB) under MoLIP, for the beneficiaries. The companies or factories purchase services for their employee and SSB purchases services for the contributed beneficiaries. Sometimes, if the purchaser is small, e.g. small company or factory with few workers, there is only verbal agreement between purchaser and provider. As the service coverage of SSB is low in Myanmar,

some companies or factories need to contract directly with the service provider for health care, sick leave letter, etc. The frequency of payment is varied among agreements. Most of the payment is done per visit as a retrospective payment. Some companies make prospective payment as a deposit to the provider, e.g. 3 million kyats at the beginning of each month and at the end of the month, the finance or other responsible staff from the companies come to the provider and make financial clearance on surplus and deficit and give deposit for next month. However, all of these payment are based on fee-for-service, of which some are fixed but some are not. Some purchasers make negotiation with provider to limit the cost per visit for their workers. *“...some factories requested, in advance, to treat the worker with cost (consultation cost plus medicine) within 5,000 kyats per visit. So, we have to treat the workers within this limit...”*

(Respondent 4)

5.2.3.3 Global budget

The global budget is seen only at ethnic health organizations in Myanmar. According to the respondents, the ethnic health organizations receive a sum amount of money without line-item, from their mother organizations (i.e. ethnic armed organizations) or from a few donors, which they can use flexibly and freely according to the needs. Generally, the fund covers one year period. The provider can use the fund flexibly within line-item (the line-items which are used at the time of budget calculation) and there is no geographic or service scope limitation. The calculation method is similar to what is done in line-item budget. There is contractual agreement for this and the donors ask for yearly reports and make assessment or evaluation. The provider organizations do not need to pay back the underspent money to the purchasers.

“...we prepared a budget proposal (budget estimate) for the whole organization and some purchasers (donors) put a lump sum amount of money that they can contribute, into the core fund (pooled fund of provider organization). We can use it flexibly based on the need...”

(Respondent 14)

“...we received funds from mother organization (ethnic armed organization) with global budget. Similarly, we also gave an aggregated amount of money to the clinics as global budget. Most of the international donors do not give us like this...”

(Respondent 3)

5.2.3.4 Capitation

Capitation payment method is only used in pilot projects in Myanmar. According to the respondents, SSB under MoLIP, Population Services International (PSI) and Community Partners International (CPI) are currently piloting on strategic purchasing of health care services using capitation payment method, blended with or without other performance based incentives. According to one respondent, social security board is piloting on contracting private providers using capitation payment in three locations in Myanmar, however, the information on this pilot is not accessible to the public.

With targeting approach for capitation, PSI prospectively pays a fixed sum of money to four private providers under Sun Quality Health (SQH) network in two townships in Yangon region, to deliver an agreed package of health care services to all registered individuals over a specified period of time. The agreed package of services includes family planning, primary care for under-five children including nutrition interventions, ante-natal and post-natal care, malaria, tuberculosis detection and treatment, sexually transmitted infection and HIV testing and treatment, detection and treatment of pre-cancerous cervical lesions, and management of diabetes and hypertension. This capitation payment is blended with performance based incentives which is linked with indicators on quality service, to counter-balance the undesirable incentives that capitation may introduce, and copayment by clients to prevent over-consumption of services (moral hazard). The per capita payment rate is calculated by multiplying the number of visits expected per client insured (registered) with the client expenditure per visit. The number of visits expected per client insured is calculated in details using population’s socio-demographic data from 2014 Myanmar census and disease incidence/ prevalence and case load data from various reliable source like 2015-2016 Myanmar Demographic and Health Survey and other sources published by

UN agencies or the Government of the Union of Myanmar. After adjustment on data limitation, the average number of visit per person per year is 4.4. An estimate of the cost of consultation and the medications involved is calculated for each services included in the package. After adjustment for copayment and medicine used, a total of 10,500 Kyat (USD 8.08) per person per year is estimated for the services under the benefit package that all providers would deliver (PSI, 2017).

“...blended payment method which includes capitation, performance based incentives and copayment, is used in the strategic purchasing pilot. Capitation payment is made monthly, performance based incentive is given quarterly to the provider after quarterly performance assessment, and the clients give 500 Kyats as out-of-pocket copayment per visit to the provider. The copayment per visit is not only to prevent moral hazard, but also to give psychological satisfaction to the provider after receiving taste of money...”

(Respondent 2)

There is contractual agreement between PSI and the providers which includes role and responsibilities of each party, training and regular monitoring by PSI, services to be delivered by the provider, clinic operation hour and days per year, essential drug list, per capita payment rate, terms and conditions on performance based incentives and copayment, maximum number of registered clients per clinic, etc. The maximum payment for capitation is capped with maximum number of registered clients per clinic. The provider can keep the surplus money, however, PSI will not reimbursed for overspent money.

“...some medicine are given by PSI. E.g. short term family planning commodities like 3-month depo injection, drugs for tuberculosis treatment. Other medicines are needed to buy by the provider. There is no limitation over brand of medicine, however, these medicines should be approved by Myanmar Food and Drug Administration (FDA)...”

(Respondent 2)

Community Partners International (CPI) also uses capitation payment method in strategic purchasing pilot with ethnic health organizations (EHOs) in Kayin State and Bago Region. A steering committee is organized with representatives from CPI and Karen Ethnic Health Organization consortium. This steering committee, simulating a purchaser

role, purchases a pre-determined package of health services which includes public health and primary health interventions, from four identified EHO clinics. This pilot uses capitation payment with universalism approach (not based on registration) and services are purchased for approximately 10,000 beneficiaries resided in villages around these clinics (catchment population) (CPI, 2018). The per capita payment amount is estimated with a bottom up approach which is quite similar to the approach taken by PSI. The expected number of patients for each of the services included in the package is estimated based on a combination of current usage information and available demographic data. The variable cost is estimated based on the requirements for each interventions such as medicine, supplies, etc. On top of that, clinic maintenance, monitoring and evaluation, management and administration cost are added and made adjustment. There is also a signed contractual agreement between two parties. The payment is done prospectively to the providers.

“...CPI is doing an implementation research for piloting purchaser provider split where the package of health services is purchased from Karen EHO consortium using capitation payment...additional payment method might be integrated based on the findings...”

(Respondent 1)

Table 11 Design features of provider payment systems in Myanmar

Payment method	Basis for payment and adjustment	Included services	Cost items	Contracting entities
Line-item budget	<ul style="list-style-type: none"> ■ Varies by provider (public/private) ■ Historical budget, inflation adjustment, disease burden, specific program and activity 	<ul style="list-style-type: none"> ■ Varies by provider (public/private) ■ Preventive and promotive including 	<ul style="list-style-type: none"> ■ 01-06 budget lines for public ■ Pay allowance and honoraria ■ Travelling allowance 	<ul style="list-style-type: none"> ■ All public health facilities, INGO, CSO, EHO

	<ul style="list-style-type: none"> ■ Final budgets approved by line-item 	<p>public health services</p> <ul style="list-style-type: none"> ■ Primary to tertiary care ■ Outpatient and inpatient care ■ Diagnostic services ■ Medicine and supplies ■ Rehabilitative services ■ Traditional medicine 	<ul style="list-style-type: none"> ■ Expenses on goods & services ■ Maintenance charges ■ Transfer payments ■ Entertainment & meal expenses 	
Fee-for-service	<ul style="list-style-type: none"> ■ Fees are mostly unregulated ■ Some fix fee based on education, experience, market price, people's ability to pay ■ Lack of standardized fee for services 	<ul style="list-style-type: none"> ■ All services provided by private providers/facilities 	<ul style="list-style-type: none"> ■ Salaries ■ Medicines ■ Medical supplies and consumables ■ Operation and maintenance 	<ul style="list-style-type: none"> ■ All private providers/facilities

Global budget	<ul style="list-style-type: none"> ■ Historical budget, inflation adjustment, disease burden, specific program and activity ■ Also based on funding availability 	<ul style="list-style-type: none"> ■ All services provided by ethnic health organizations 	<ul style="list-style-type: none"> ■ No limitation over cost item 	<ul style="list-style-type: none"> ■ Some ethnic health organizations
Capitation	<ul style="list-style-type: none"> ■ Base rate is calculated by multiplying population coverage with estimated per capita health care expenditure, adjusted for demography, geography and disease burdens ■ Payment is made based on registered population (targeting) or all population within an identified geographic area (universalism) 	<ul style="list-style-type: none"> ■ Agreed package of health services including primary and preventive care 	<ul style="list-style-type: none"> ■ Salaries ■ Medicines ■ Medical supplies and consumables ■ Operation and maintenance ■ Training 	<ul style="list-style-type: none"> ■ Selected GPs ■ Selected EHOs

Table 12 Implementation arrangements of provider payment systems in Myanmar

Payment method	How payments are disbursed, used and tracked	Caps	Surpluses and deficits
Line-item budget	<ul style="list-style-type: none"> ■ Public - Salary is monthly, other funds are disbursed annually, used and tracked using standard economic classification of the government (01-06 budget lines) ■ Private - depending on approved budget lines ■ Payment frequency varies - biannually and quarterly 	<ul style="list-style-type: none"> ■ Hard budget cap 	<ul style="list-style-type: none"> ■ Surpluses are returned back to the purchaser ■ Deficits cannot be claimed back
Fee-for-service	<ul style="list-style-type: none"> ■ Fees are paid in cash, as retrospective payment after receiving services 	<ul style="list-style-type: none"> ■ No official caps, however, market price determines caps 	-
Global budget	<ul style="list-style-type: none"> ■ Mostly, annual disbursement ■ Monitoring with annual report, assessment and evaluation 	<ul style="list-style-type: none"> ■ Cap is applied based on funding availability 	<ul style="list-style-type: none"> ■ Providers can keep the surplus ■ Deficits cannot be claimed back
Capitation	<ul style="list-style-type: none"> ■ monthly or quarterly with cash or bank payment ■ Monitor with quality indicators 	<ul style="list-style-type: none"> ■ Cap is applied by maximum number of registered population for payment in 	<ul style="list-style-type: none"> ■ Providers can keep the surplus ■ Deficits cannot be

		targeting approach	claimed back
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5.2.4 Perceived strengths, weaknesses and consequences of current payment system in Myanmar

The respondents are asked on strengths, weaknesses and consequences of provider payment systems practiced in Myanmar, which they are familiar with.

5.2.4.1 Line-item budget

As strengths of line-item budget, the respondents said that it is simple, systematic and easy to use and track the expenditure. The nature of line-item budget makes the user to plan ahead with specific lines for the expenditure. It is good for expenditure control, preventing misuse. Activities can be tracked by regular review of budget versus actual (BvA) report and the user can make quick decision on how to manage over-spent and under-spent budget lines. It creates incentives for transparency and accountability. For the public providers, line-item budget secures the provider's concern on financial sustainability as the financing source is government. Providers can forecast or estimate the budget for next year easily if the budget is calculated based on historic budget and expenditure.

As drawbacks, the respondents pointed out that line-item budget is strict in nature with limited flexibility. The budget cannot be used for unplanned events or activities and so, the providers are not convenient for ad-hoc matters and emergency situations, e.g. disease outbreak, flooding. As the payment is not linked with outputs and outcomes, there is no incentives for innovation, motivation and good performance. Moreover, there is limited incentive on efficient use of inputs. Irrational spending is seen with line-item budget where some budget lines need to spend quickly to avoid underspending and some need to use carefully to prevent overspending.

To improve the line-item budget, many respondents advised to allow flexibility over budget line-items and give financial and administrative autonomy to the providers. Public financial management capacity of budget controllers and users

should be improved. There should be more collaboration between budget controllers at township level with finance officers. Bottom-up budgeting approach should be adopted and plans need to be in line with budget. It is needed to develop simple rules and guidelines on public financial management and delegation of authority over budget approval and usage should be in place.

5.2.4.2 Fee-for-service

Many respondents from private-for-profit said that fee-for-service method is flexible, free and there is no bureaucratic red-tape between provider and clients to receive the payment. Some respondents said that they can adjust the fees depending on ability-to-pay of the clients. As fee-for-service method is volume-based, the providers receive the money per visit and services given. As a negative consequence, the providers tend to provide more services to receive the more profit. Fee-for-service method can limit the access of poor people, those resided in hard-to-reach areas and uneducated people. A monitoring and regulatory system should be in place to control malpractice, misuse, overuse, and quality of care. Fee should be fixed in advance or there should be standardized fee schedules. An insurance system should be in place with a third party payer to reduce the financial burden of clients due to fee-for-service method. Arrangements should be done to maximize client satisfaction and reduce waiting time.



5.2.4.3 Global budget

The respondents answered that global budget is flexible and can be used for emergency situations and ad-hoc matters. There is no restriction over geography and services. Budget autonomy is granted to the providers. However, respondents see global budget easy to do frauds and corruptions. It will be difficult to make financial control if there is no transparency and accountability. It will be better if the user can estimate the expenditures with specific lines and activities to prevent wastage. A proper financial guidelines and monitoring system should be in place to ensure transparency and accountability and prevent frauds and corruptions.

5.2.4.4 Capitation

Capitation payment method is administratively simple to calculate the payment amount to providers; by multiplying per capita rate with number of beneficiaries. The capitation payment method creates incentive for the providers to focus more on prevention and promotion activities, keeping the beneficiaries healthy, than resource consuming curative care. As the payment is made prospectively, there is an incentive to reduce input use by the provider, e.g. reduction in prescription of unnecessary medicine or investigations. However, negative consequences of capitation payment can be suboptimal treatment and selection of healthier people to enroll with the provider (in capitation with targeting approach). Therefore, monitoring system to track the quality of services is important in capitation payment system.

Table 13 Perceived strengths, weaknesses and how-to-improve of payment systems in Myanmar

Payment method	Strengths	Weaknesses	How-to-improve
Line-item budget	<ul style="list-style-type: none"> ■ Systematic, good control, incentive to plan ahead ■ Easy to use and track the expenditure ■ Transparent and accountable ■ Financial sustainability for public provider 	<ul style="list-style-type: none"> ■ Strict in nature ■ Difficult to use for emergency or ad-hoc matters ■ Irrational spending ■ No incentive for innovation and good performance 	<ul style="list-style-type: none"> ■ Flexibility over line-items ■ Financial and administrative autonomy of providers ■ Proper delegation of authority ■ Bottom-up budgeting ■ Capacity building on public financial management

			<ul style="list-style-type: none"> ■ Collaboration between finance and user
Fee-for-service	<ul style="list-style-type: none"> ■ Flexible and free ■ No bureaucratic red-tape ■ Can adjust fees depending on ability-to-pay 	<ul style="list-style-type: none"> ■ Providers tend to produce more services ■ Limit the access of vulnerable population 	<ul style="list-style-type: none"> ■ A proper monitoring system to control malpractice, misuse, overuse and quality of care ■ Standardized fee schedules ■ Insurance system with a third party payer to reduce financial burden of clients
Global budget	<ul style="list-style-type: none"> ■ Flexible ■ Can be used for emergency situations and ad-hoc matters ■ No restriction over geography and services 	<ul style="list-style-type: none"> ■ Difficult to make financial control if there is no transparency and accountability ■ Easy to do frauds and corruptions 	<ul style="list-style-type: none"> ■ Estimation of expenditures with specific lines and activities to prevent wastage ■ A proper financial guidelines and monitoring system should be in place
Capitation	<ul style="list-style-type: none"> ■ Administratively simple to calculate the payment amount 	<ul style="list-style-type: none"> ■ Suboptimal treatment 	<ul style="list-style-type: none"> ■ Monitoring system should be in place track

	<ul style="list-style-type: none"> ■ Incentive for providers to focus more on preventive and promotive activities ■ Incentive to reduce input use by the provider 	<ul style="list-style-type: none"> ■ Selection of healthier people to enroll with the provider 	<p>quality of services</p>
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The respondents are asked to share their opinions on potential consequences of these payment methods (methods that they are familiar with) related to guiding principles such as access to health care service, financial risk protection, equity, efficiency, provider responsiveness, accountability, financial sustainability and quality of care. The number of respondents asked on each payment method was varied. Ten people were familiar with line-item budget, nine people were familiar with fee-for-service and only three people who were familiar with global budget shared their perceived consequences. The respondents were numbered with code “R” meaning “respondent” in front of their number. Positive consequences are coded as “1”, negative consequences are coded as “-1” while controversial not-sure on consequences are coded as “0”. Then, following stack bar charts are drawn for illustration and interpretation purposes.

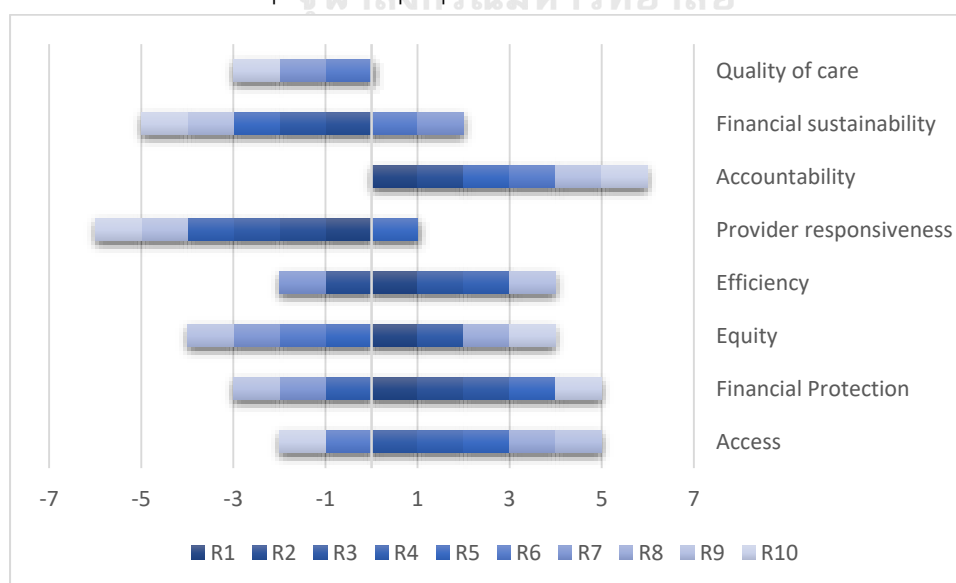


Figure 14 Stakeholders’ perceived consequences of line-item budget in Myanmar

The respondents have more positive perceptions on line-item budget in promoting access, financial protection, accountability and efficiency. However, most respondents think that line-item budget cannot create incentives for provider responsiveness, financial sustainability and quality of care.

“...Line-item budget is linked with access. If budget is sufficient, it can increase patient’s access and reduce out-of-pocket expenditure. However, sometimes, people have limited access to health care services if indirect or opportunity cost is high. E.g. losing daily wages for a labor while seeking health care at the facility, expensive transportation cost to the facility even though the facility deliver services with free of charge...”

(Respondent 7)

“...With line-item budget, there is a weakness in provider’s responsiveness to the community needs. If the provider receives line-item budget for malaria activities, he cannot do anything if there is influenza outbreak in that community...”

(Respondent 6)

“...as line-item budget is designed to ensure accountability, it is preventing the misuse of person with authority...”

(Respondent 7)

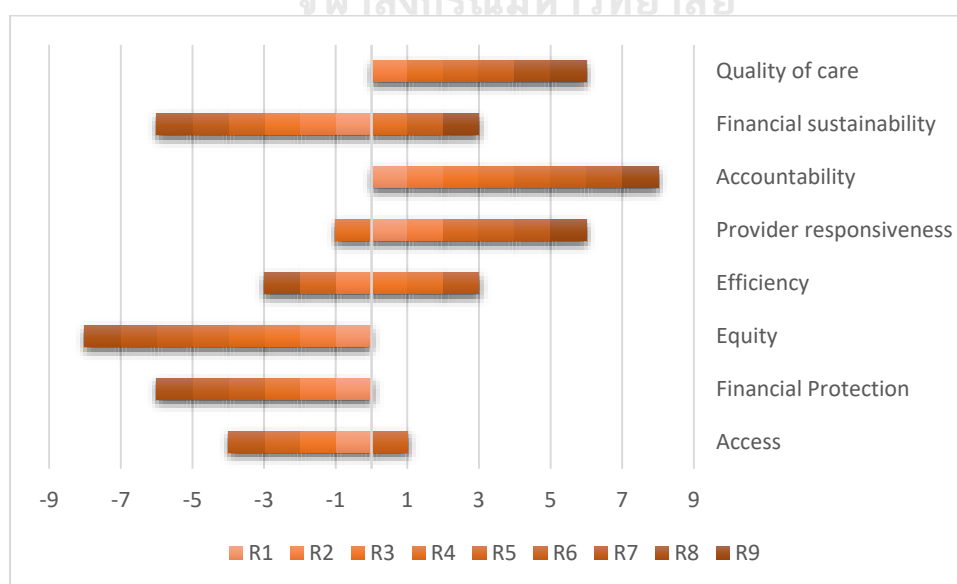


Figure 15 Stakeholders’ perceived consequences of fee-for-service in Myanmar

Most of the respondents believe that fee-for-service method can increase provider responsiveness, accountability and quality of care. However, fee-for-service method can prevent the access to health care services, financial protection, equity and financial sustainability.

“...poor people cannot access to health care services because they don’t have money to pay for services, leading to inequity...”

(Respondent 22)

“...as the providers take money from clients, they need to be accountable for consequences of services being provided...”

(Respondent 4)

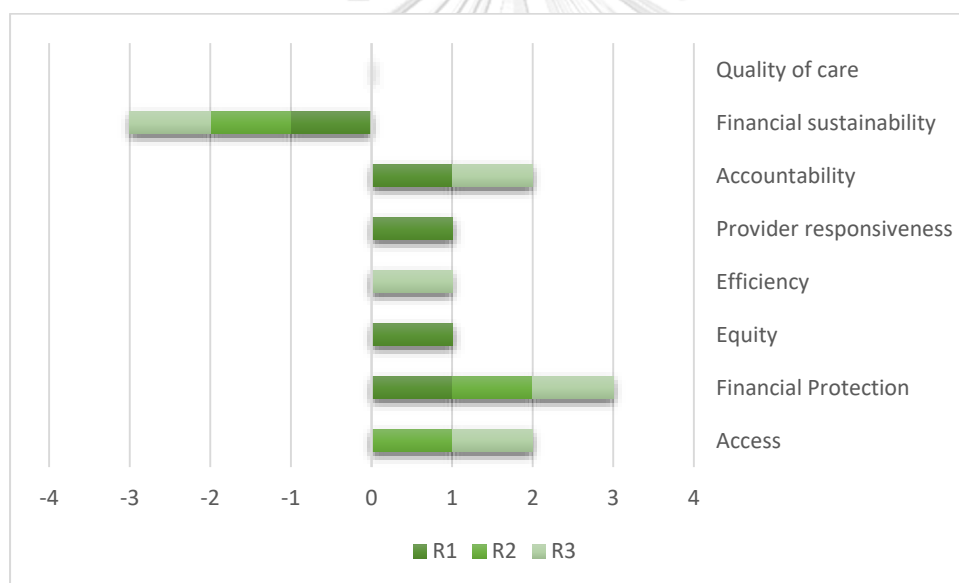


Figure 16 Stakeholders’ perceived consequences of global budget in Myanmar

The interviewees from ethnic health organizations who are familiar with global budget shared their opinion that global budget can promote financial protection of the community and accountability. However, global budget has negative consequence on financial sustainability of providers. The respondents think that as ethnic health organizations mainly receives funding from donors, financial sustainability is a great concern if there is no donors.

“...with global budget, we can allocate money flexibly depending on the needs of the community and disease burden. So, people out-of-pocket payment can be reduced...”

(Respondent 15)

5.2.5 Current capacity of the main government purchasers

Current capacity of the main government purchasers will continue to be discussed in this section.

5.2.5.1 Human resource for health

Most of the respondents pointed out that the government is facing with insufficient human resource for health in both quantitative and qualitative ways. As human resource are limited in all levels, there are gaps in planning, management and service delivery. Lack of database for human resource for health limits the ability to estimate the human resource needs and gaps. Unclear or un-updated job descriptions of each level of health providers make the management more complicated and role conflict was seen. Right person should be in right place for better planning and operation of health care system.

“...Ministry of Health in other countries have a lot of technical resource persons...everything is not needed to do by doctors...non-medical persons will be needed for the support team...management role should be taken by those who really know management...the government will need more public health professionals and health economists...”

(Respondent 13)

“...high-ranking person in MoHS are specialist, not management person...good physician or good surgeon is not a management person...people who work in management role like township medical officer, district or state health director should be placed in the management role...good management person can handle the health professionals well”

(Respondent 23)

One respondent advised that human resource gap in the health care sector could be solved to some extents by opening channels for providers from private sectors for professional development. Quality and volume of health care providers can be raised by giving equal chance to both public and private providers in access to professional development pathways. Good retention policy and implementation should be in place to attract more providers working in public sector and prevent providers quitting public service.

“...providers working in hard-to-reach areas should be incentivized with double salary and other allowance. Happy working environment should be created. Required infrastructures should be in place...”

(Respondent 5)

5.2.5.2 Health financing and financial management

The respondents said that the government budget on health is still low in compared with other countries in the regions. Top down budgeting is still using which doesn't match with actual needs. Control and management of budget by medically trained person became a problem in the ministry. Budget responsible person are weak in public financial management capacity.

5.2.5.3 Health policy and planning

Most respondents said that health policy and planning is weak in the ministry. The practice of policy review and policy mapping is also needed. Implementers are doing according to ad-hoc demand and instructions from the head-quarters leading to demotivation to make further planning. Evidence based data are also needed to make proper plan and correct decision. Some respondents advised to establish a professional body to conduct health system and policy research in a regular basis.

5.2.5.4 Health management information system

Health management information system is weak and incompetent in the public purchasers. Traditional paper base recording system makes the reporting flow slow and data cannot be transformed into information which are important for evidence based

decision making and planning. Good information system and digitalization of health related records will be needed. There is no proper channel to get and combine the data from private sector with public sector to see the whole picture of the country. Monitoring and quality assurance mechanism are weak in the government purchasers.

5.2.6 Current capacity and autonomy of providers

The respondents said that the general management and health information system is weak in public providers. Medical record system is poor and still hasn't digitalized yet. The providers have limited data and poor monitoring on inventory records of medicine and supplies leading to inefficiencies. Private provider's capacity will also need to be strengthened. Lack of a formal pathway for capacity development as well as quality control of private providers leads to poor quality of some private providers.

"...a proper learning channel for capacity building of general practitioners will be needed. Current learning points like continued medical education (CME) sessions are similar to buffets. Not all providers are attending this. Minimum quality standard for providers, clinic infrastructure and equipment should be developed. CME credit system should be practiced in linkage with licensing process. E.g. it is needed to get 50 CME points to extend the license..."

จุฬาลงกรณ์มหาวิทยาลัย (Respondent 12)

CHULALONGKORN UNIVERSITY

The autonomy of public providers is limited. Public providers at state, district or township level has no power to hire or fire a staff.

"...it is important to think on how to give financial autonomy to the hospitals. Is it still need to be a doctor to become a hospital in-charge? Doctors don't know financial management. In private sectors, there are a lot of non-medical person in the management role, managing hospitals..."

(Respondent 23)

"...There is no decentralization. In our health system, everything is 'top-down' and 'push'. Reforms is needed not only at financing, but also at procurement and supply chain management. Hiring and firing authority should be delegated to the states and

regions. So, states and regions can make their own decision on budgeting, planning and outsourcing. Then, gradually and gradually, there will be purchaser-provider split...”

(Respondent 5)

5.2.7 Suggested mix of provider payment methods to help meet national health goals in Myanmar

Many of the respondents said that the currently used line-item budget or fee-for-service alone cannot support to achieve national health goals and guiding principles. Line-item budget used in the public sector is rigid resulting in irrational spending and inefficiencies. It cannot produce enough incentive for the providers for innovation, motivation and provider responsiveness. Fee-for-service is mostly unfixed in private health care sector and as it is volume based, the providers tend to produce more services resulting in cost escalation and inefficiencies. Poor people has limited access to health care due to limited ability-to-pay. That’s why the respondents discussed to establish some forms of performance based incentives mechanism, as a supplement, to give economic signals to the providers, supporting to achieving national health goals.

“...To answer the question of can line-item budget support reaching the goal of UHC, there are many things to refine or reforms. Line-item budget has a lot of restrictions. According to theory, line-item budget cannot produce incentive for efficiency...”

(Respondent 1)

“...poor people has limited access to health care as they cannot pay. Financial risk protection is lacking as the client has to pay out-of-pocket. This payment method may give incentive to the providers to deliver unnecessary services...”

(Respondent 22)

5.2.7.1 Primary and outpatient care

The interviewees were asked to suggest and share their opinion on a mix of provider payment methods for both public and private sectors to help meet national

health goals in Myanmar. For primary and outpatient care, 70% of the respondents suggested a single payment method while the rest, 30%, suggested a combination of provider payment methods. The benefit of payment system mix is that the undesired negative consequences of one payment method can be wiped out with the strength of another payment method. The majority of the respondents chose capitation method, bundled with or without other payment methods, followed by flexible line-item budget, pay for performance, global budget and fixed fee-for-service for primary and outpatient care. The majority of the interviewees believe that capitation payment method is suitable for primary health care as it can create incentive for the providers to focus more on primary health care and prevention services and this can lead to reduction in the workload of hospitals. People can have equitable access to health care services. Moreover, as capitation payment method is community based, it is suitable for purchasing services from general practitioners who are community based health care providers.

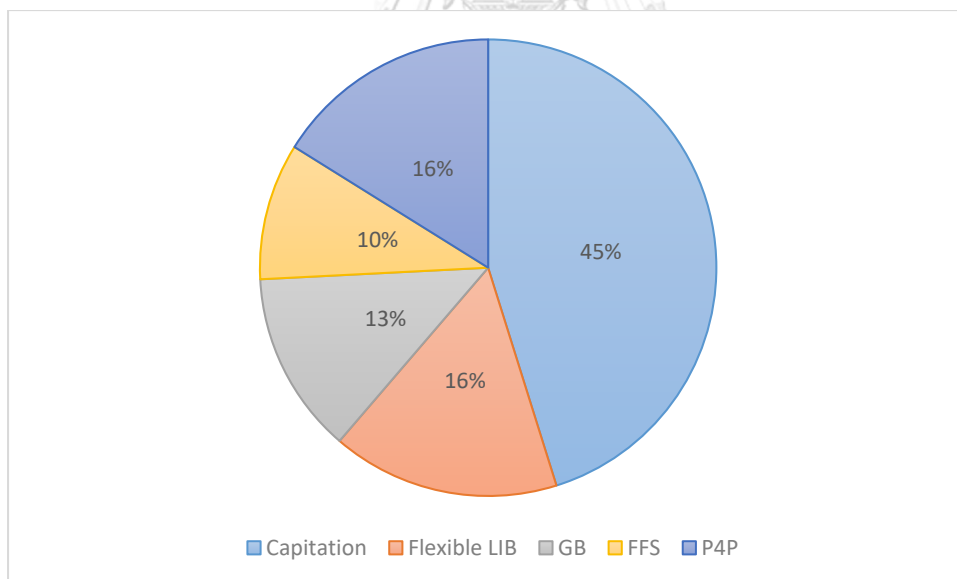


Figure 17 Suggested provider payment method for primary and outpatient care

“...I think capitation payment method is more suitable for primary health care. People who have limited ability-to-pay, can have more access to health care services. General practitioners can focus more on preventive and general care which can, in turns, reduce the workload of hospitals...”

(Respondent 4)

“...I prefer capitation payment method for primary health care. During this year, I am thinking that general practitioner clinic is community-based. Diagnosis can be wrong if a patient comes from different community...Instead of managing patients from different community, I think it is better for the provider to focus on one community. So, we can know epidemic diseases in its early stages as we are familiar with this community. So, I prefer capitation payment system for primary health care which is community based...”

(Respondent 12)

The supporters as well as oppositors point out the potential challenges of implementing capitation payment in Myanmar.

Selection of beneficiary – It is needed to decide on whether universalism or targeting approach will be adopted in the capitation payment system. For targeting approach, a digitalized system of identification will be needed to differentiate between beneficiaries and non-beneficiaries. The affordability of the cost for maintaining digitalization capacity will be another area for consideration. For universalism approach, a good system of recording vital statistics will be needed. A high concern is raised on how to know the statistics of people resided in conflict affected area or high-economic areas where population is mobile and unsteady.

Legal framework – A supportive legal framework (e.g. National health insurance law or UHC law) will be needed to implement capitation payment because the government ministries need to use line-item budget according to current laws. Role of civil society organizations will be important to explore the voice of community and advocate the policy makers for development and legislation of legal framework which can support financing and payment reforms.

Incentives for the providers – Some providers are eager to know what the incentives for them to work together with the government under capitation payment system are. If the capitation payment results in profit loss, they will not interest to be purchased by capitation payment system.

Mechanism to prevent frauds – There should be a mechanism to prevent frauds and corruption. Some beneficiaries may pretend like patients, expressing the symptoms of their relatives or friends, and take medicine and then sell them in the market.

Mechanism to control quality – As capitation payment can lead to suboptimal treatment, counter-measures should be in place to monitor and control the quality of care.

5.2.7.2 Secondary and tertiary care

The respondents' perception on how should secondary and tertiary care be paid is varied as the secondary and tertiary care are quite complicated with high resource consumption. Some respondents prefer to find evidence by implementing pilots on fixed fee-for-service, global budget and diagnosis related groups (DRG) in hospital setting. Based on the lessons learnt from other countries, and evidence based finding of in-country pilot studies, a specific or combination of methods should be used to roll out to the whole country. The respondents who prefer diagnosis related groups said that DRG payment system can improve quality of care, cost containment and efficiency as the providers need to follow standard treatment protocols and guidelines to reduce input use and maintain quality of care. Some respondents prefer to practice pay for performance (P4P), bundling with current line-item budget equipped with flexibility. Retired public health professionals prefer to practice line-item budget with flexibility, bundling with pay-for-performance. They believe that given constraints and weakness of line-item budget, it has a lot of strengths and it can support the achievements of national health goals by putting flexibility over rigid line-items and delegation of authority to states and regions.

“...we should start pilots for different provider payment methods. So, we can know which area is good for capitation, which hospital can be paid with DRG. After compare and contrast, we can know which method is suitable for our country...”

(Respondent 1)

“...now, providers are treating patients as they like. If we practice DRG, the providers need to follow treatment guideline and protocols and so, I hope there will be more efficiencies...”

(Respondent 9)

5.3 Discussion

Myanmar citizen has suffered from poor health as a result of decades of underinvestment in and neglect of the health system by military rules. Low investment in rural health services, high household out-of-pocket expenditure, disparities in health between urban and rural areas, poverty, inadequate funding for health care, inappropriate policies and high mortality rates continue to be the significant challenges (Sein et al., 2014). People especially poor, have limited access to health care services and inequity and inefficiencies are seen in the health care system of Myanmar (Myint et al., 2015a). Therefore, payment system reforms alone cannot solve all of these above problems and challenges, however, it can contribute to the better health system performance with desirable outcomes, helping to meet national health goals according to international experiences.

In this section, private stakeholders' perception, incentives created by each provider payment methods practiced in Myanmar in compared with international experiences as well as potential challenges for implementing a potential mix of provider payment methods to help meet national health goal of UHC in Myanmar will be discussed.

This study is a qualitative study of design, implementation and consequences of provider payment systems practiced in Myanmar. Using key informant interviews, stakeholders perception on strengths, weakness and how-to-improve of provider payment systems and suggested mix of provider payment methods were explored. The qualitative method rendered a chance to explore in depth on how provider payment systems are working in practice in the country.

Majority of stakeholders in private sector believe national health goal is achieving Universal Health Coverage by 2030. Nationwide rollout of events and activities on National Health Plan (2017-2021) and UHC are seemed to be the key

drivers behind this believe. The political commitment by State Counsellor during launching event on National Health Plan (2017-2021) (WHO, 2017a) and the former Myanmar President's speech at UHC Forum 2017 held in Japan (President-Office, 2017) confirmed and endorsed this believe. This can be a health related goal, which contributes to the overall ultimate goal of uplifting the health status of the entire population to attain full life expectancy and be free from diseases.

The main findings of the study showed that the two dominant provider payment methods practiced in the country; line-item budget and fee-for-service (mostly unregulated) couldn't produce desirable incentives to change the behavior of providers to help meet national health goals and guiding principles. It means that current provider payment methods cannot bring high benefits for the health system in Myanmar. This findings are indirectly supported by Myanmar health system review that effective provider payment methods, such as capitation or a diagnosis-related group, should be practiced in Myanmar to give incentives to the providers to contain costs and be efficient by prescribing inexpensive quality generic medicines (Sein et al., 2014).

5.3.1 Line-item budget

One assessment in Vietnam revealed that line-item budget could bring equity, however, it had no influence on quality (Phuong et al., 2015). According to international experiences, line-item budget brings incentives to the providers to underprovide services, increase inputs, spend all remaining funds by the end of the budget year and increase referrals to other providers. Additionally, there is limited incentive for the providers for efficiency (Cashin, Ankhbayar, et al., 2015; Langenbrunner et al., 2009).

The result of key informant interviews also showed that line-item budget practiced in Myanmar produced incentives which were similar to international experiences. It revealed that line-item budget created positive incentive on access, financial protection, accountability and efficiency as well as negative incentive on provider responsiveness, financial sustainability and quality of care. Effects on equity was controversial among the respondents. If the budget is calculated targeting the vulnerable population, the line-item budget can promote equity. However, the government spending on health is still low in Myanmar in compared with other

countries and so, insufficient budget impacts on equitable access and financial protection. The ability, capacity, autonomy and mindset of providers are important in response to these incentives created by line-item budget. There are many providers who use the budget efficiently and some, don't. The line-item budget creates negative incentive to provider responsiveness. The provider uses budget according to line item and so, the provider has limitation in response to the needs of the community. Most of the respondents replied that line-item budget could not guarantee for financial sustainability of provider. As line-item budget for public provider in Myanmar is financed mainly by the government from general revenue, the decision on budget amount depends critically on political preference, competing interests of different ministries and spending priorities (Myint et al., 2015a, 2015b). As line-item budget is input based, not linking with performance and service provided, it cannot create incentive for quality of care. Quality of care can also be dependent on providers mindset, professionalism, skills, availability of quality drugs and supplies, and provider's adherence to standard treatment guidelines and protocols.

Line-item budget used in public sector of Myanmar is rigid and all of government ministries and departments need to use this according to the standard economic classification ranging from major budget lines 01 to 06. As the corruption and fraud are common in a country like Myanmar, line-item budget provides a strong administrative control and makes the users accountable and transparent on that. In contrast, public-not-for-profit sector also uses line-item budget, however, it looks more flexible than that used in public sector. The line-items (cost items) are not that different between two sectors, but a certain level of flexibility is given in ahead to the private not-for-profit providers and providers can make their own decision based on the requirements within budget flexibility. Clear role and delegation of authority in each level of private not-for-profit providers for financial control make them utilize the budget in a timely manner effectively and efficiency.

Insufficient capacity of provider on financial management requests for a simple and non-sophisticated payment method. The management capacity of planner and provider are important to decide on how to allocate these scarce resources to improve efficiency and equity. Quality of care can be improved with line-item budget if there

is standard treatment protocols and guidelines, and a proper monitoring mechanism to check whether providers adhere to these guidelines and protocols, in place.

5.3.2 Fee-for-service

According to World Health Organization, fee-for-service payment method can lead to overprovision, inefficiency and uncontrollable health expenditures (WHO, 2010). One study in Thailand provided the similar findings that fee-for-service method, paying providers according to the quantity of services provided, stimulated providers to make overprovision of services, inefficient utilization of resources and cost inflation (Tangcharoensathien et al., 2015). The method gives incentive to the provider to increase the quantity of service per patient, cost inflation and quality of care may decline due to over treatment and over utilization of medicine and supplies. Long term financial sustainability would be a high concern for community based health insurances using fee-for-service method (Cashin, Ankhbayar, et al., 2015; Langenbrunner et al., 2009; M. Park et al., 2007; Robyn et al., 2013). On the other hand, one study in Vietnam found out that fee-for-service method can give incentives for quality of care, but unnecessary services and cost containment will be deeply concerned (Phuong et al., 2015). Myanmar health system review document revealed that poor people who cannot afford to pay, face with catastrophic health expenditure or impoverishment, limiting them access to health care services and resulting in mortality and morbidity which are generally preventable (Sein et al., 2014).

Most of the incentives created by fee-for-service method in Myanmar are similar to the international experiences. The respondents in this study believed that fee-for-service method can increase provider responsiveness, accountability and quality of care. The respondents said that as the provider received money from the clients, they need to be responsive, accountable and give good quality service to attract the clients for further visits. However, fee-for-service method can prevent the access to health care services, financial protection, equity and financial sustainability. Poor people are hard to get equitable access to health care services due to financial burden. Due to the lack of insurance system, patients have to pay out of pocket when receiving health care services leading to catastrophic health expenditure, further

poverty and impoverishment. Financial protection is a huge concern in regards with out-of-pocket payment with fee-for-service method in Myanmar (Myint et al., 2015a, 2015b; Sein et al., 2014). The respondents shared the same opinion unanimously that fee-for-service method used in Myanmar cannot bring equity as only those who can afford to pay have access to services. Due to unregulated fee-for-service method in private sector, the providers tend to increase the input use to get more profit. However, according to the respondents from private sector, the invisible hand or market effect control the providers not to escalate the service fees too much. For private providers with competition in the market, they cannot ask for fees more than the market price and so, they need to respond to the payment incentive and reduce the input use to enjoy efficiency gains. This effect is not seen with public providers because they are paid by salary as one of the line item budget which is not linked with service output and performance. Financial sustainability of the providers is uncertain because the payment is not linked with insurance system and it is volume based payment depending on number of services delivered. So, if number of services utilized or number of patients reduced, there will definitely an impact on financial sustainability of providers.

5.3.3 Global Budget

According to literatures and international experiences, global budget can improve efficiency by reducing input mix, be effective in controlling inflationary health care cost and increase the quantity of services. However, global budget may decrease quality (Cashin, Ankhbayar, et al., 2015; Langenbrunner et al., 2009). National Health Security Office (NHSO) in Thailand purchased inpatient services from district health system network with diagnosis related groups (DRG) payment within a global budget ceiling. This resulted in containment of cost effectively, however, other payment method was bundled with this global budget payment to prevent potential under provisions of services (Tangcharoensathien et al., 2015).

The interviewees from ethnic health organizations who are familiar with global budget shared their opinion that global budget can promote financial risk protection of the community and accountability of the providers. The providers can use global

budget flexibly and so, they can make adjustment based on the needs of the community and disease burden. So, this can reduce the out-of-pocket payment of the community, resulting in financial risk protection. However, global budget has negative consequence on financial sustainability of providers. The respondents think that as ethnic health organizations mainly receive funding from donors, financial sustainability is a great concern if there is no donors. EHOs rely mainly on funding of international donors and a sustainable long-term source of financing mechanism is needed (Davis & Jolliffe, 2016). Due to the in-placed check and balance system, the users of global budget need to be accountable and transparent. Global budget is seen only at ethnic health organizations.

5.3.4 Capitation

The countries which practice capitation payment system shared their experiences that capitation payment created incentive to the providers for attraction of more enrollees, output mix improvement by focusing on less-expensive health prevention and promotion, efficiency improvement in input mix and reduction in inputs. Providers tend to underprovide services and increase referrals to other facilities (Cashin, Ankhbayar, et al., 2015; Langenbrunner et al., 2009). Lessons from OECD countries showed that capitation method could lead to under provision of services, increase the number of referrals to health facilities and low quality of care (M. Park et al., 2007). One study in Vietnam showed that capitation method could provide incentives to the providers to deliver high quality care, be responsive to patients, contain cost and be efficient (Phuong et al., 2015).

As capitation payment method in Myanmar is still in its pilot stage, the incentives provided by this methods are not seen clearly. One pilot is known to design preventing suboptimal treatment of providers by using performance based incentives based on quality indicators (PSI, 2017). Provider's preference on selecting healthier person for registration is seen in one pilot project (PSI, 2017).

5.3.5 Potential challenges of provider payment reforms

According to the respondents, the design feature and implementation arrangement of two dominant payment methods practiced in Myanmar cannot support the achievement of UHC goals in Myanmar. For primary health care and outpatient care, majority of respondents suggested to use capitation method. For secondary and tertiary care, the preferences are varied according to respondents experience and complexity of inpatient care. Preference for inpatient care are practicing flexibility over budget-lines proposed to practice as a refinement of current rigid line-item budget and pay-for-performance system and additionally, pilots on fixed fee-for-service, cased based payment and global budget are suggested to conduct as implementation research to know with evidence that which payment method is more suitable for hospitals and health facilities for both public and private sectors in Myanmar.

The respondents discussed on potential challenges as well as enabling environments for implementation of provider payment reforms in Myanmar. The discussions cover consideration on other functions of health financing which are resource mobilization and pooling, political commitment, the legal framework, capacity of government, capacity and autonomy of providers and other enabling factors like opportunity cost.

Firstly, the respondents said that, for refinement or reform of payment method or health financing, consideration only on provider payment method or purchasing is not enough and this cannot ensure achieving national health goals. Other health financing functions like resource mobilization and pooling should be considered ahead together which are interconnected and complex. Thailand's approach structure called "Triangle that Moves the Mountain" can be a good example to learn to identify the needs and overcome the challenges. The Mountain indicates a huge problem which is usually unmovable. The Triangle typically consists of three angles: generation of relevant knowledge and evidence through research, social movement or social learning and political involvement. Thailand adopted this approach to make financing and payment reforms and achieve Universal Health Coverage (Wasi, 2000).

The respondents said that creation of relevant knowledge for financing reforms through research will be a critical part to obtain evidence for decision making and

political advocacy. This view is supported by national health plan that implementation research on possible provider payment methods are needed to generate evidence for payment reforms which can ensure technical readiness (MoHS, 2016). One study conducted to determine how Universal Coverage Policy came about in Thailand and how likely it was to achieve its goals, also revealed that research solutions and evidence were required to draw the attention of policy makers by taking every possible opportunity (Pitayarangsarit, 2004).

Social movement or social learning is important to explore the voice of community and deliver them to the ears of policy makers. Myanmar is a country with strong network of civil society organizations and community based organizations. Their strength can be utilized to demand legal framework for health system reforms to achieve UHC goals in reality. Myanmar national health plan also acknowledged and recognized the role of civil society organization in social accountability through community mobilization and advocacy, and in check and balance with regards to health service planning, implementation and evaluation (MoHS, 2016). Social movement can foster the development and legislation of legal framework for Universal Health Coverage which in turns support the financing or purchasing reforms in Myanmar.

Political commitment and involvement plays an important role in country's move towards national health goals (MoHS, 2016). The respondents said that political commitment on UHC is already seen (President-Office, 2017; WHO, 2017a), however, more political involvement will be needed to achieve UHC in reality. Health in all policy is needed to practice. In Myanmar, national health policy or strategy is kept long-time un-updated (MoHS, 2016). Legislators and policy makers have authority over utilization of the country's resources and in law legislation and promulgation. The respondents said that according to current laws, rule and regulations in Myanmar, it is not possible for MoHS to practice alternative health financing arrangements to mobilize resources, pool financial risk and purchase essential health care services not only from public providers but also from private providers. Although social security law amended in 2012 allows to do so for social security board under MoLIP, social security board had difficulties to contract enough health facilities from both public and private

sectors. Poor capacity and weak organization of social security board were the challenges for purchasing services from private providers with contractual agreement (Phyu, 2013). The capacity of government purchasers is critically important to monitor the contractual agreements with both public and private providers (Loevinsohn & Harding, 2005; Mills et al., 1997). The respondents said that the public providers are mainly financed by general revenue and there is no other earmarked financing for health, e.g. sin tax. Myint et al also suggested to generate more money for health from other earmarked source, e.g. sin tax (Myint et al., 2015a). Moreover, there is no national health insurance system to pool the financial risk in Myanmar leading to high out-of-pocket payment, catastrophic health care expenditure and impoverishment (MoHS, 2016; Sein et al., 2014). The respondents suggested that national health insurance law or act which included a proper resource mobilization, pooling and purchasing arrangement suitable for Myanmar would be needed to develop and legislate. This law can support the formation of a national purchasing body practicing purchaser-provider split model to ensure transparency and accountability.

Secondly, supply side strengthening will also be another important thing to do critically to achieve national health goals. According to the interview findings, insufficient human resource in term of both quantity and quality, financial management capacity, poor infrastructures and health management information system are seen in Myanmar. National health plan stated that health information as well as financial management systems are fully paper-based and heavy administratively (MoHS, 2016). Regular review and revision of public financial management system is poor. Restrictions on international procurement, rigidity over financial rules and regulation, and ponderous manual information system slow down the ability of providers to effective delivery and enjoying value for money with efficiency gains (Myint et al., 2015a). A specific list of benefit package or services rendered by providers (mostly public) is not seen and community are not accessible to that information. A proper referral system across different level of providers is not seen in Myanmar, with a lot of by-pass in seeking health care, leading to patient overload at secondary and tertiary hospitals (Sein et al., 2014). The respondents from private sector said that providers in private sector are not accessible to a common

platform of continued medical education or further professional development. A mechanism to recognize, license and accredit health care providers and facilities from private sector, in linkage with skill, quality and minimum standard of infrastructure and equipment is lacking (MoHS, 2016). Accreditation and proper licensing system will be needed to maintain the high quality of providers.

Thirdly, decentralization is vitally important to let the providers respond to incentive created by different provider payment systems. Currently, the respondents said that there is no decentralization in the health system of Myanmar. Most of the planning and decision are conducted with 'top-down' and 'push' approach and bottom-up approach is not visible conspicuously. National Health Plan stated that the government is switching from top-down planning approach to a more inclusive bottom-up approach (MoHS, 2016). The autonomy is not seen distinctly at financing and human resource management. There are also restrictions over international procurement and supply chain management (Myint et al., 2015a). The respondents said that state and regional health departments have limited authority over hiring and firing of human resources. So, states and regions cannot make own decision on budgeting, planning and outsourcing. Myanmar health system review also discussed on the concern over decentralization as a challenge for future health sector reforms due to the requirement of massive capacity development at local level (Sein et al., 2014).

Last, but not least, the respondents suggested that purchasing system is not only the function that contributes to the achievement of national health goals, but also other enabling factors worth mentioning to consider carefully. Even though the government gives free health care services, vulnerable people can have limited access to essential health care due to other determinants of health. Indirect cost or opportunity cost for receiving health care, e.g. losing daily wage for a labor, high transportation cost to health facility, etc., can prevent the people in seeking needed essential health care in time. A study in Thailand revealed that an extensive network of roads and a good nationwide public transportation system in place had promoted the physical access of the people to the health care services. Level of female literacy and trust in the government facilities will be additional benefits to achieving UHC

(Tangcharoensathien et al., 2015). Country's economy and ability of government to collect general revenue will also greatly contribute to a larger fiscal space for health.



CHAPTER VI

CONCLUSION AND RECOMMENDATION

As an overarching objective to achieve the ultimate goal of the country of uplifting the health status of the entire population, Myanmar has committed to achieving Universal Health Coverage (UHC) by 2030, ensuring everyone in Myanmar can access to the needed health services they need with financial risk protection (MoHS, 2016). Supporting achievements of UHC goals, a strategic mix of provider payment methods can be used as a policy lever to contain cost and increase access, equity, efficiency, service availability (Liu et al., 2008; Loevinsohn & Harding, 2005; Mathauer et al., 2017; Tangcharoensathien et al., 2015; Tangcharoensathien et al., 2018). However, Myanmar is still using traditional passive purchasing methods, i.e. line-item budget and unfixed fee for service, which cannot produce explicit incentives for desired provider behavior towards aspired national health goals. Myanmar health system review has suggested to use effective provider payment systems such as capitation or case based payment to contain cost and improve efficiency (Sein et al., 2014). Myanmar needs to prepare for health financing transition, dealing with current fragmentation of different financing pools which leads to considerable inefficiencies and implement strategic purchasing creating explicit incentives through a given provider payment mechanisms to ensure the desired provider behavior (MoHS, 2016; Myint et al., 2015a, 2015b; Sein et al., 2014). However, the in-country experience of and study on provider payment methods in Myanmar is limited and scarce. That's why this study was designed and 23 key informant interviews with stakeholders from private sectors including private hospital, general practitioners (GP), selected ethnic health organizations (EHOs), civic society organizations, non-government organizations (CSO/NGO) and freelance public health professionals in Myanmar were conducted to explore the private stakeholders' perception on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar. It is needed to note that although payment system reforms alone cannot solve all of the challenges facing in Myanmar's health system to achieve UHC, it can tackle these

challenges up to some extents. The recommendations based on the findings of the study are stated as below.

6.1 Suggested provider payment systems for Myanmar

The results showed that there are four provider payment methods practiced in Myanmar, namely, line-item budget (LIB), fee-for-service (FFS), global budget (GB) and capitation. Global budget is only seen practiced in ethnic health organizations and capitation payment method is in its pilot stage. Most of the respondents said that currently used two major payment methods; rigid line-item budget or unfixed fee-for-service methods alone cannot support to achieve national health goals and guiding principles. Line-item budget is perceived as supporting access, financial protection and accountability, however, not contributed to provider responsiveness and financial sustainability. On one hand, fee-for-service is perceived as supporting accountability, provider responsiveness and quality, on the other hand, it has negative impact on access, financial protection, equity, and financial sustainability. Some forms of performance based incentives mechanism are needed to direct the behavior of providers to towards desired national health goals and guiding principles.

Table 14 Summary table of suggested provider payment methods

Provider payment methods	Primary and outpatient care	Secondary and tertiary care
Capitation	45%	
Flexible line-item budget	16%	21%
Global budget	13%	7%
Fixed fee-for-service	10%	7%
Pay for performance	16%	22%
Diagnosis related groups		21%
Pilot to find evidence (Fixed FFS, case base, DRG)		22%
Total	100%	100%

For primary and outpatient care, the majority of the respondents (45%) suggested to use capitation method, bundled with or without other payment methods. Preferences for inpatient care are varied. So, it can be summarized that as a quick wins in short term, flexibility over budget-lines is suggested to practice as a refinement of currently practiced rigid line-item budget and pilots on fixed fee-for-service, case based payment and global budget are proposed to conduct as implementation research to know with evidence that which payment method is more suitable for hospitals and health facilities for both public and private sectors in Myanmar. This findings support the initiatives outlined in Myanmar National Health Plan (2017-2021) of defining most appropriate provider payment mechanisms by conducting experiments to find out critically important lessons on strategic purchasing of health care and contracting of government as well as non-governmental health providers (MoHS, 2016).

6.2 Legal framework for health financing arrangements

When purchasing and provider payment systems are discussed, resource mobilization and pooling cannot be left over. Myint et al (2015) suggested for mobilizing more public money for health and more money for health from other sources (Myint et al., 2015a). The findings of this study suggests for development of alternative health financing mechanism for health such as earmarked tax and sin tax. The respondents suggested for the development of legal framework to support the initiatives towards UHC. Myanmar national health plan also endorsed for the development of legal framework for health financing reforms and UHC (MoHS, 2016). Myanmar national health insurance law or UHC law which includes a proper resource mobilization, pooling and purchasing arrangement suitable for Myanmar will be needed to develop and legislate. This law can support the formation of a national purchasing body practicing purchaser-provider split model to ensure transparency and accountability.

6.3 Role of civil society organizations

Myanmar is a country with strong civil society organizations (CSOs) and community based organizations (CBOs). The respondents said that these CSOs and CBOs can be in an important supportive role to demand legal framework for health system reforms to achieve UHC goals in reality. Myanmar national health plan also acknowledged and recognized the role of civil society organization in social accountability through community mobilization and advocacy, and in check and balance with regards to health service planning, implementation and evaluation. With these organizations' supports and collaboration, social movements are encouraged which in turns foster the development and legislation of legal framework for Universal Health Coverage which in turns support the financing or purchasing reforms in Myanmar.

6.4 Supply side strengthening

Supply side investments are needed to strengthen to support service availability and readiness. As the respondents in this study pointed out the quantitative as well as qualitative gaps in human resource for health, the capacity of providers in terms of both quantity and quality should be strengthened. According to the interviewees, there is no formal pathway for the capacity development of the private providers. Therefore, a proper channel for professional development of providers from public as well as private sectors including those working in private hospitals and general practitioners should be developed to fill in human resource needs in all levels. Moreover, according to the respondents, the investment in infrastructures and health management information system are required in Myanmar. Digitalization of medical records and database for human resource for health are suggested to be initiated and maintained. A good system of recording vital statistics and digital identification system will be needed to support the financing or payment reforms. As per findings based on the respondents' suggestion, a proper and systematic mechanism to recognize, license and accredit health care providers and facilities from private sector, in linkage with skill, quality and minimum standard of infrastructure and equipment will be needed to guarantee quality assurance.

6.5 Decentralization

The respondents said that the states and regions have limited autonomy over financial management and administration. Hence, financial and administrative authorities have to be delegated to the providers gradually and properly. Mechanisms to prevent fraud and corruption should be in place. Bottom-up budgeting approach should be practiced as top-down budgeting is hard to meet with the actual needs of the ground situations. The interviewees said that there is a weakness on communication and coordination between finance person and budget users. Therefore, collaboration between finance and user should be strengthened and providers are required to build capacity on public financial management.

6.6 Consideration on other determinants of health and indirect cost

Last but not least, the respondents believe that other factors like determinants of health and indirect cost or opportunity cost for receiving health care, e.g. losing daily wage for a labor while seeking health care at the provider or facility, high transportation cost to health facility, etc., can prevent the people in seeking needed essential health care in time, even though the government gives free health care services. These factors cannot be ignored and neglected. Measures to reduce that kind of indirect or opportunity cost should be considered and national referral system should be established to reduce unnecessary uptake of services at distant places.

CHAPTER VII

LIMITATION

This study has faced some limitations.

Stakeholder participation – The process of ethical clearance for this study took longer than expected and complicated. The study conducted ethical clearance at Ethics Review Committee (ERC), Department of Medical Research situated in Yangon. ERC reviewed the research proposal ethically, technically and administratively. As administrative requirements, permission letter from each organization where the interviewee was working with, if the interviewee was not the head of that organization, was asked. Recommendation letter to include the selected interviewees in the study was also asked. So, some of the potential interviewees were reluctant to involve in the study due to the requirement of permission letter even though they gave written consent to involve in the study. This made the researcher unable to recruit enough interviewee in time according to proposed number of 30.

Manual Analysis – The audio files recorded with permission from the interviewees were transcribed using Myanmar language as the interview used this language. The researcher used Alpha Zawgyi font (A common Myanmar font widely used in Myanmar) to type the transcripts using Microsoft Word 2013. However, this Alpha Zawgyi font is not an internationally recognized Unicode and so, the Atlas.ti software couldn't read this and fonts were changed to default English font and made the analysis difficult. Due to this technical issue, although the researcher was intended to make qualitative analysis using Atlas.ti software, it ended up with manual coding, charting and analysis using Microsoft Excel 2013.

Potential bias – The interview with key stakeholders, transcription and manual analysis were conducted by a single researcher. Therefore, there may be potential unintended bias by the researcher in this study.

Possible extension of the study – Due to the administrative requirements and limitations to recruit respondents, the study focused mainly on perception of stakeholders from private sectors. Health system in Myanmar is a pluralistic mix of public and private sectors. So, it is critically important to explore the perception of

stakeholders including policy makers, planners and service providers from public sector which acts as a main regulator as well as key player for comprehensive health care in the country. As a conclusion, further studies are recommended to explore the public stakeholders' perception on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar.



REFERENCES

- Andoh-Adjei, F.-X., Spaan, E., Asante, F. A., Mensah, S. A., & Velden, K. V. (2016). A narrative synthesis of illustrative evidence on effects of capitation payment for primary care: lessons for Ghana and other low/middle-income countries. *Ghana Medical Journal*, 50(4), 207-219.
- Aye, S. S., Nashino, Y., Soe, K., Zaw, K. K., Oo, Y. T. N., Han, W. W., . . . Ahmed, S. (2013). *Role of private sector in Myanmar's health care system: Implication for health sector reforms*. Retrieved from
- Basinga, P., Gertler, P. J., Binagwaho, A., Soucat, A. L. B., Sturdy, J., & Vermeersch, C. M. J. (2011). Effect on maternal and child health services in Rwanda of payment to primary health care providers for performance: An Impact Evaluation. *The Lancet*, 377, 1421-1428.
- Bastani, P., Samadbeik, M., & Kazemifard, Y. (2016). Components that affect the Implementation of Health Services` Strategic Purchasing: A Comprehensive Review of the Literature. *Electronic Physician*, 8(5), 2333-2339.
- Blank, C. (Producer). (2017). Pocket sense. Retrieved from <https://pocketsense.com/prospective-payment-plan-vs-retrospective-1723.html>
- Bogut, M., Voncina, L., & Yeh, E. (2012). *Impact of Hospital Provider Payment Reforms in Croatia*. Retrieved from <https://openknowledge.worldbank.org/handle/10986/3280?show=full>
- Bredenkamp, C. (2015). *Presentation on risk pooling*. Paper presented at the Role of Civil Society in Move towards UHC training course, Yangon.
- Cashin, C., Ankhbayar, B., Phuong, H. T., Jamsran, G., Nanzad, O., Phuong, N. K., . . . Tsilaajav, T. (2015). *Assessing Health Provider Payment Systems: A Practical Guide for Countries Working Toward Universal Health Coverage: Joint Learning Network for Universal Health Coverage (JLN)*.

- Cashin, C., Phuong, N. K., Shain, R., Oanh, T. T. M., & Thuy, N. T. (2015). A simple simulation model as a tool to assess alternative health care provider payment reform options in Vietnam. *Global Public Health, 10*(S1), S104–S119.
- CPI. (2018). CPI Launches Innovative Health Financing Pilot Project in Southeastern Myanmar. Retrieved from <https://www.cpintl.org/field-notes--updates/cpi-launches-innovative-health-financing-pilot-project-in-southeastern-myanmar>
- Davis, B., & Jolliffe, K. (2016). *Achieving health equity in contested areas of southeast Myanmar*. Retrieved from Yangon: https://asiafoundation.org/wp-content/uploads/2016/07/Achieving-health-equity-in-contested-corner-of-southeast-myanmar_ENG.pdf
- DEHNAVIEH, R., SIRIZI, M. J., MEHROUHASSANI, M. H., & KALANTARI, A. (2016). Strategic Purchasing of Healthcare Services in Developing Countries: A New Approach Is Required. *Iran Journal of Public Health, 45*(9), 1241-1242.
- DHSProgram, T. (2018). The Demographic Health Surveys, Country Quickstats. Retrieved from https://dhsprogram.com/Where-We-Work/Country-Main.cfm?ctry_id=1&c=Bangladesh&Country=Bangladesh&cn=&r=4
- Erus, B., & Hatipoglu, O. (2017). Physician payment schemes and physician productivity: Analysis of Turkish healthcare reforms. *Health Policy, 121*, 553-557.
- Figueras, J., Robinson, R., & Jakubowski, E. (2005). *Purchasing to improve health systems performance*. Berkshire: Open University Press.
- Fincham, J. E. (2008). Response Rates and Responsiveness for Surveys, Standards, and the Journal, *72*(2), 43. *American Journal of Pharmaceutical Education, 72*(2), 43.
- Gao, C., Xu, F., & Liu, G. G. (2014). Payment reform and changes in health care in China. *Social Science & Medicine, 111*, 10-16.
- GGI. (2016). Health Insurance. Retrieved from <http://www.ggipinsurance.com/products/health-insurance>
- IHME. (2018). Myanmar' Top 10 causes of years of life lost (YLLs) in 2016 and percent change, 2005-2016, all ages, number. Retrieved from <http://www.healthdata.org/myanmar>

- Kammi, S. K. (2000). *Stakeholder Analysis Guidelines: Policy Toolkit for strengthening Health Sector Reform*.
- Kutzin, J. (2001). A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy*(56), 171–204.
- Lacey, A., & Luff, D. (2009). *Qualitative Research Analysis: The NIHR RDS for the East*.
- Langenbrunner, J. C., Cashin, C., & O’Dougherty, S. (2009). *Designing and implementing health care provider payment systems : how-to manuals*. Washington, D.C.: The World Bank.
- Latt, N. N., Cho, S. M., Htun, N. M. M., Saw, Y. M., Aung Myint, M. N. H., Aoki, F., . . . Hamajima, N. (2016). Healthcare in Myanmar. *Nagoya Journal of Medical Science*, 78(2), 123-134.
- Liu, X., Hotchkiss, D. R., & Bose, S. (2008). The effectiveness of contracting-out primary health care services in developing countries: a review of the evidence. *Health Policy and Planning*(23), 1-13.
- Loevinsohn, B., & Harding, A. (2005). Buying results? Contracting for health service delivery in developing countries. *Lancet*, 366, 676–681.
- M-HSCC. (2016). WHAT IS THE M-HSCC? Retrieved from <http://www.myanmarhsc.org/what-is-the-m-hsc/>
- Mathauer, I., Dale, E., & Meessen, B. (2017). Strategic purchasing for universal health coverage: key policy issues and questions: A summary from expert and practitioners’ discussions. (WHO/HIS/HGF/Health Financing Working Paper/17.8), 23.
- Mills, A., Brugha, R., Hanson, K., & McPake, B. (2002). What can be done about the private health sector in low-income countries? *Bulletin of the World Health Organization*, 80(4), 325-330.
- Mills, A., Hongoro, C., & Broomberg, J. (1997). Improving the efficiency of district hospitals: is contracting an option? *Tropical Medicine and International Health*, 2(2), 116-126.
- MMTimes (Producer). (2015, 6 July, 2018). Health insurance coming. Retrieved from <https://www.mmtimes.com/special-features/204-insurance-2015/13169-health-insurance-coming.html>

- MoHS. (2013). *Annual Hospital Statistics Report*. Retrieved from Nay Pyi Taw:
[http://mohs.gov.mm/ckfinder/connector?command=Proxy&lang=en&type=Main¤tFolder=%2FPublications%2FHealth%20Statistics%2FAnnual%20Hospital%20Statistics%2F&hash=a6a1c319429b7abc0a8e21dc137ab33930842cf5&fileName=Annual%20Hospital%20Statistics%20Report%20\(2013\).pdf](http://mohs.gov.mm/ckfinder/connector?command=Proxy&lang=en&type=Main¤tFolder=%2FPublications%2FHealth%20Statistics%2FAnnual%20Hospital%20Statistics%2F&hash=a6a1c319429b7abc0a8e21dc137ab33930842cf5&fileName=Annual%20Hospital%20Statistics%20Report%20(2013).pdf)
- MoHS. (2014). *Health in Myanmar 2014*. Retrieved from Nay Pyi Taw:
<http://www.mohs.gov.mm/search?question=health+in+myanmar>
- MoHS. (2016). *Myanmar National Health Plan 2017-2021*. Nay Pyi Taw: Ministry of Health and Sports Retrieved from
<http://mohs.gov.mm/Main/content/publication/national-health-plan-2017-2021-eng>.
- MoHS (Producer). (2017a). Ministry of Health and Sports, Myanmar. Retrieved from
<http://www.mohs.gov.mm/Main/content/page/objectives-and-strategies>
- MoHS. (2017b). *Myanmar National Health Accounts (2014-2015)*. Retrieved from Nay Pyi Taw:
<http://www.mohs.gov.mm/search?question=national+health+account>
- MoIP. (2015). *The 2014 Myanmar Population and Housing Census The Union Report*. Retrieved from Nay Pyi Taw: <http://themimu.info/census-data>
- MTC (Producer). (2017). Mae Tao Clinic. Retrieved from
<http://maetaoclinic.org/health-systems-strengthening-plan/hss-1-service-delivery/>
- Munge, K., Mulupi, S., & Chuma, J. (2016). *STRATEGIC PURCHASING FOR UNIVERSAL HEALTH COVERAGE: A CRITICAL ASSESSMENT PRIVATE HEALTH INSURANCE FIRMS IN KENYA*. Retrieved from <http://resyst.lshtm.ac.uk/research-projects/multi-country-purchasing-study>
- Myint, P., Sein, T. T., & Cassels, A. (2015a). *How can financial risk protection be expanded in Myanmar?: Myanmar Health Systems in Transition Policy Note Series: Policy Note 4*. Retrieved from
http://apps.who.int/iris/bitstream/handle/10665/208250/WPR_2015_DHS_004_eng.pdf?sequence=1

- Myint, P., Sein, T. T., & Cassels, A. (2015b). *What are the challenges facing Myanmar in progressing towards Universal Health Coverage?: Myanmar Health Systems in Transition Policy Notes Series*. Retrieved from http://apps.who.int/iris/bitstream/handle/10665/208247/WPR_2015_DHS_001_eng.pdf;jsessionid=655E3D0223737E9DC0E4A980062B66B0?sequence=1
- Naing, S. Y. (2015). *Ethnic NGOs Key to Addressing East Burma's Large Health Care Issue*. Retrieved from Yangon: <https://www.irrawaddy.com/news/burma/ethnic-ngos-key-addressing-east-burmas-large-health-care-issues-report.html>
- Nationsonline. (2018). The map showing Myanmar with its neighboring countries. Retrieved from http://www.nationsonline.org/oneworld/map/myanmar_map2.htm
- Nguyen, H. T. H., Bales, S., Wagstaff, A., & Dao, H. (2013). Getting Incentives Right: An Impact Evaluation of District Hospital Capitation Payment in Vietnam.
- Nigenda, G. H., & González, L. M. (2009). Contracting private sector providers for public sector health services in Jalisco, Mexico: perspectives of system actors. *Human Resources for Health*, 7(1), 79. doi:10.1186/1478-4491-7-79
- Palmer, N. (2000). The use of private-sector contracts for primary health care: theory, evidence and lessons for low-income and middle-income countries. *Bulletin of the World Health Organization*, 78(6), 821-829.
- Park, M., Braun, T., Carrin, G., & Evans, D. (2007). Provider payments and cost containment: Lessons from OECD countries.
- Park, M., Braun, T., Carrin, G., and Evans, D. (2007). *Provider Payments and Cost-Containment Lessons from OECD Countries, Technical Brief for Policy-Makers*. Retrieved from http://www.who.int/health_financing/documents/pb_e_07_2-provider_payments.pdf
- Paylab. (2018). Myanmar - salaries by positions. Retrieved from <https://www.paylab.com/MM/salaryinfo>
- Phuong, N. K., Oanh, T. T. M., Phuong, H. T., Tien, T. V., & Cashin, C. (2015). Assessment of systems for paying health care providers in Vietnam:

Implications for equity, efficiency and expanding effective health coverage.
Global Public Health, 10(S1), S80-S94.

- Phyu, A. M. H. (2013). *CONTRACTING HEALTH CARE SERVICES FOR COVERAGE EXPANSION OF THE SOCIAL SECURITY SCHEME IN MYANMAR: POTENTIAL AND PROBLEMS*. Chulalongkorn University, Bangkok.
- Pitayarangsarit, S. (2004). *The Introduction of the Universal Coverage of Health Care Policy in Thailand: Policy Responses*. (Ph.D.), University of London, London.
- President-Office. (2017). President to visit Japan for attending Universal Health Coverage Forum 2017. Retrieved from <http://www.president-office.gov.mm/en/?q=briefing-room/news/2017/12/08/id-8114>
- PSI. (2017). *Myanmar Strategic Purchasing Brief Series*. Retrieved from Yangon: <https://www.psi.org/publication/myanmar-uhc-brief-series-1/>
- RESYST. (2014) Strategic purchasing factsheet. Resilient and responsive health systems.
- Robyn, P. J., Bärnighausen, T., Souares, A., & Traoré, A. (2014). Provider payment methods and health worker motivation in community-based health insurance: A mixed-methods study. *Social science and medicine: Elsevier*, 108, 223-236.
- Robyn, P. J., Sauerborn, R., & Barnighausen, T. (2013). Provider payment in community-based health insurance schemes in developing countries: A systematic review. *Health Policy and Planning*, 28, 111–122.
- Schmeer, K. (2000). *Stakeholder Analysis Guideline*: World Health Organization.
- Sein, T. T. S., Myint, P., Tin, N., Win, H., Aye, S. S., & Sein, T. (2014). *The Republic of the Union of Myanmar Health System Review* (Vol. 4). Manila: World Health Organization, Regional Office for the Western Pacific.
- Srivastava, A., & Thomson, S. B. (2009). Framework Analysis: A Qualitative Methodology for Applied Policy Research. *JOAAG*, 4(2).
- StatCompiler. (2018). StatCompiler. Retrieved 7 July 2018, from TheWorldBank <https://www.statcompiler.com/en/>
- Supakankunti, S., Adhikari, S. R., & Khan, M. M. (2015). *Doing research in health economics: a practical approach*. Bangkok: Faculty of Economics, Chulalongkorn University.

- Tan, S. Y., & Melendez-Torres, G. J. (2018). Do prospective payment systems (PPSs) lead to desirable providers' incentives and patients' outcomes? A systematic review of evidence from developing countries. *Health Policy and Planning*, 33, 137–153.
- Tang, K., & Zhao, Y. (2017). Health as a bridge to peace and trust in Myanmar: The 21st Century Panglong Conference. *Globalization and Health*, 13(40). doi:<http://doi.org/10.1186/s12992-017-0271-3>
- Tangcharoensathien, V., Limwattananon, S., Patcharanarumol, W., Thammatacharee, J., Jongudomsuk, P., & Sirilak, S. (2015). Achieving universal health coverage goals in Thailand: The vital role of strategic purchasing. *Health Policy and Planning*(30), 1152-1161.
- Tangcharoensathien, V., Witthayapipopsakul, W., Panichkriangkrai, W., Patcharanarumol, W., & Mills, A. (2018). Health systems development in Thailand: a solid platform for successful implementation of universal health coverage. *The Lancet*.
- TheWorldBank. (2018a). Domestic general government health expenditure (% of general government expenditure). from The World Bank Group <https://data.worldbank.org/indicator/SH.XPD.GHED.GE.ZS?locations=XN>
- TheWorldBank. (2018b). Myanmar. Retrieved 6 July 2018, from The World Bank Group <https://data.worldbank.org/country/myanmar>
- Wasi, P. (2000). “Triangle That Moves The Mountain” and Health Systems Reform Movement in Thailand. *Human Resources for Health Development Journal*, 4(2), 106-110.
- WHO. (2000). *The World Health Report 2000: Health Systems: Improving Performance*. Retrieved from Geneva: <http://www.who.int/whr/2000/en/>
- WHO. (2008). *Health systems financing: Toolkit on monitoring health system strengthening*. Retrieved from Geneva:
- WHO. (2010). *Health Systems Financing: The path to universal coverage*. Retrieved from Geneva: <http://www.who.int/whr/2010/en/>

- WHO. (2017a). Launching of Myanmar National Health Plan 2017-2021 Implementation. *WHO newsletter*. Retrieved from http://www.searo.who.int/myanmar/mediacentre/newsletter_iss54_vol14.pdf
- WHO. (2017b). World Health Organization. Retrieved from <http://www.who.int/mediacentre/factsheets/fs395/en/>
- WHO (Producer). (2018). World Health Organization. Retrieved from http://www.who.int/health_financing/topics/purchasing/en
- Wolf, A. H. D., & Toebe, B. (2016). Assessing Private Sector Involvement in Health Care and Universal Health Coverage in Light of the Right to Health. *Health and Human Rights*, 18(2), 79-92.



APPENDIX

Appendix 1

Guideline Questions (For Private-for-profit organizations)

Private stakeholders' perception on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar

Type of interviewee			
Institution	Date of interview	Start time	Finish time
Interviewee's name	Interviewee's position		
Age	Sex	Highest education	Years of Service

Note: The respondents are not required to answer all questions.

A. What are the national health goals in Myanmar?

B. Design and implementation of the current provider payment system

B.1. Who pays or finances which health care providers for which health services in Myanmar?

B.2. What kind of payment methods are used by the various purchasers in the country?

B.3. How are the payment rates calculated for each type of payment methods in private sector?

Probe: (Who determines the payment rates, how are payment rates calculated, what risk adjustments or other adjustments are made, which services are paid under each method, which cost items are included)

B.4. Implementation arrangement for each payment methods

Institutional relationships among purchasers, providers, population and others

B.4.1 Are there written agreements or contracts specifying the terms of payment, services, etc? How are these negotiated?

Supporting systems and complementary policies

B.4.2. Are retrospective and prospective payment systems used? Are these payments based on claims submission? How are these monitored?

B.4.3. Is any part of the payment based on performance targets (P4P)?

B.4.4. Please describe any other important supporting systems and complementary policies for this payment method. E.g. Budget policy, laws, etc

Financial management rules and financial flows

B.4.5. How frequently are payment disbursed and are there any payment delays?

B.4.6. Can payments be used flexibly?

B.4.7. How frequently are payment rates updated and what is the process of doing this?

B.4.8. Are total payments in this payment system subject to a payment or volume cap?

B.4.9. What happens if a private health facility spends more than the agreed upon payment amount and there are overruns and deficits?

B.4.10. What happens if a private health facility spends less than the agreed upon payment amount and there is a surplus?

C. Consequences of the payment system (each payment method used in the country)

C.1. What are the main strengths and weaknesses/challenges of provider payment methods practiced in private sector of Myanmar? Do you have any suggestions for improvement?

C.2. Do you think that payment methods used in private sector of Myanmar can help meet national health goals and guided principles?

Probe: (Access to health care services, financial risk protection, equity, efficiency, provider responsiveness, accountability, financial sustainability, quality of care)

D. What is your opinion on the current capacity of health purchasers from private sector? Also suggest ways to improve it?

Probe: (Strategic planning, Policy development, Institutional arrangement, Data management and IT, Contracting, Provider monitoring and quality assurance)

E. Current capacity and autonomy of private providers

E.1. What is your opinion on the current capacity of private providers? Also suggest ways to improve it?

Probe: (General management, Data management and IT, Provider monitoring and quality assurance)

E.2. What is your opinion on the current autonomy of private providers to respond to incentives created by each payment method?

Probe: (Staffing, budget, compensation, recurrent input use, medicine & equipment purchase, service mix, use of surplus revenue, partnership with other providers)

F. Suggested mix of provider payment methods to help meet national health goals

F.1. What is your suggested mix of provider payment methods for primary and outpatient care in private sector to help meet national health goals in Myanmar? Why?

F.2. What is your suggested mix of provider payment methods for inpatient care (secondary and tertiary) in private sector to help meet national health goals in Myanmar? Why?

Appendix 2

Guideline Questions

(For Private not-for-profit organizations)

Private stakeholders' perception on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar

Type of interviewee			
Institution	Date of interview	Start time	Finish time
Interviewee's name		Interviewee's position	
Age	Sex	Highest education	Years of Service

Note: The respondents are not required to answer all questions.

A. What are the national health goals in Myanmar?

B. Design and implementation of the current provider payment system

B.1. Who pays or finances which health care providers for which health services in Myanmar?

B.2. What kind of payment methods are used by the various purchasers in the country?

B.3. How are the payment rates calculated for each type of payment methods in public sector?

Probe: (Who determines the payment rates, how are payment rates calculated, what risk adjustments or other adjustments are made, which services are paid under each method, which cost items are included)

B.4. Implementation arrangement for each payment methods in public sector

Institutional relationships among purchasers, providers, population and others

B.4.1 Are there written agreements or contracts specifying the terms of payment, services, etc? How are these negotiated?

Supporting systems and complementary policies

B.4.2. Are retrospective and prospective payment systems used? Are these payments based on claims submission? How are these monitored?

B.4.3. Is any part of the payment based on performance targets (P4P)? Are P4P targets aligned with national health goals?

B.4.4. Please describe any other important supporting systems and complementary policies for this payment method. E.g. Budget policy, laws, etc.

Financial management rules and financial flows

B.4.5. How frequently are payment disbursed and are there any payment delays?

B.4.6. Can payments be used flexibly?

B.4.7. How frequently are payment rates updated and what is the process of doing this?

B.4.8. Are total payments in this payment system subject to a payment or volume cap?

B.4.9. What happens if a health facility spends more than the agreed upon payment amount and there are overruns and deficits?

B.4.10. What happens if a health facility spends less than the agreed upon payment amount and there is a surplus?

C. Consequences of the payment system (each payment method used in the country)

C.1. What are the main strengths and weaknesses/challenges of provider payment methods practiced in Myanmar? Do you have any suggestions for improvement?

C.2. Do you think that payment methods used in Myanmar can help meet national health goals and guided principles?

Probe: (Access to health care services, financial risk protection, equity, efficiency, provider responsiveness, accountability, financial sustainability, quality of care)

D. What is your opinion on the current capacity of the main government health purchasers? Also suggest ways to improve it?

Probe: (Strategic planning, Policy development, Institutional arrangement, Data management and IT, Contracting, Provider monitoring and quality assurance)

E. Current capacity and autonomy of public providers

E.1. What is your opinion on the current capacity of public providers? Also suggest ways to improve it?

Probe: (General management, Data management and IT, Provider monitoring and quality assurance)

E.2. What is your opinion on the current autonomy of public providers to respond to incentives created by each payment method?

Probe: (Staffing, budget, compensation, recurrent input use, medicine & equipment purchase, service mix, use of surplus revenue, partnership with other providers)

F. Suggested mix of provider payment methods to help meet national health goals

F.1. What is your suggested mix of provider payment methods for primary and outpatient care in public sector to help meet national health goals in Myanmar? Why?

F.2. What is your suggested mix of provider payment methods for inpatient care (secondary and tertiary) in public sector to help meet national health goals in Myanmar? Why?

Appendix 3

Guideline Questions
(For Ethnic Health Organizations)

Private stakeholders' perception on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar

Type of interviewee			
Institution	Date of interview	Start time	Finish time
Interviewee's name		Interviewee's position	
Age	Sex	Highest education	Years of Service

Note: The respondents are not required to answer all questions.

A. What are the national health goals in Myanmar?

B. Design and implementation of the current provider payment system

B.1. Who pays or finances which health care providers for which health services in Myanmar?

B.2. What kind of payment methods are used by the various purchasers in the country?

B.3. How are the payment rates calculated for each type of payment methods in EHO setting?

Probe: (Who determines the payment rates, how are payment rates calculated, what risk adjustments or other adjustments are made, which services are paid under each method, which cost items are included)

B.4. Implementation arrangement for each payment methods in ethnic health organizations

Institutional relationships among purchasers, providers, population and others

B.4.1 Are there written agreements or contracts specifying the terms of payment, services, etc? How are these negotiated?

Supporting systems and complementary policies

B.4.2. Are retrospective and prospective payment systems used? Are these payments based on claims submission? How are these monitored?

B.4.3. Is any part of the payment based on performance targets (P4P)?

B.4.4. Please describe any other important supporting systems and complementary policies for this payment method. E.g. Budget policy, laws, etc

Financial management rules and financial flows

B.4.5. How frequently are payment disbursed and are there any payment delays?

B.4.6. Can payments be used flexibly?

B.4.7. How frequently are payment rates updated and what is the process of doing this?

B.4.8. Are total payments in this payment system subject to a payment or volume cap?

B.4.9. What happens if a health facility spends more than the agreed upon payment amount and there are overruns and deficits?

B.4.10. What happens if a health facility spends less than the agreed upon payment amount and there is a surplus?

C. Consequences of the payment system (each payment method used in the country)

C.1. What are the main strengths and weaknesses/challenges of provider payment methods practiced in EHO settings? Do you have any suggestions for improvement?

C.2. Do you think that payment methods used in EHO settings can help meet national health goals and guided principles?

Probe: (Access to health care services, financial risk protection, equity, efficiency, provider responsiveness, accountability, financial sustainability, quality of care)

D. What is your opinion on the current capacity of the health purchasers from ethnic health organizations? Also suggest ways to improve it?

Probe: (Strategic planning, Policy development, Institutional arrangement, Data management and IT, Contracting, Provider monitoring and quality assurance)

E. Current capacity and autonomy of providers from ethnic health organizations

E.1. What is your opinion on the current capacity of providers? Also suggest ways to improve it?

Probe: (General management, Data management and IT, Provider monitoring and quality assurance)

E.2. What is your opinion on the current autonomy of providers to respond to incentives created by each payment method?

Probe: (Staffing, budget, compensation, recurrent input use, medicine & equipment purchase, service mix, use of surplus revenue, partnership with other providers)

F. Suggested mix of provider payment methods to help meet national health goals

F. What is your suggested mix of provider payment methods to be used in EHO settings for primary and outpatient care to help meet national health goals in Myanmar? Why?

Appendix 4

Informed Consent for Qualitative Research

Ethics Review Committee
Department of Medical Research
Ministry of Health and Sports
Republic of the Union of Myanmar

Informed Consent Form for Qualitative Research

This informed consent form is for important stakeholder groups from private sector for health system in Myanmar; Commercial/Private-for-profit (i.e. Private Hospital and General Practitioners (GP)), selected Ethnic Health Organizations (EHOs), Civil Society Organizations and Non-government Organizations (CSO/NGO) and other freelance public health professionals, who we are inviting to participate in research, titled “Private Stakeholders’ Perception on Leveraging Provider Payment Methods for Both Public and Private Sectors to Help Meet National Health Goals in Myanmar”.

Name of Principal Investigator : Nay Nyi Nyi Lwin
Name of Organization : Student, M.Sc. in Health Economics and Health Care Management Program, Faculty of Economics, Chulalongkorn University, Thailand
Name of Funding Organization : -
Title of the Study : Private Stakeholders’ Perception on Leveraging Provider Payment Methods for Both Public and Private Sectors to Help Meet National Health Goals in Myanmar

PART I: Information Sheet

Introduction

I am Nay Nyi Nyi Lwin, a master student attending M.Sc. in Health Economics and Health Care Management at Faculty of Economics, Chulalongkorn University, Thailand. I am doing research regarding health care provider payment methods in Myanmar. I am going to give you information and invite you to be part of this research namely, “Private Stakeholders’ perception on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar”.

Please take some times to read the information present here, which will explain you the necessary information of my research project. Please ask me any question about

this project if you do not fully understand it. It is very important that you are fully satisfied and clearly understand what this research entails and how you could be involved. Moreover, your participation is entirely voluntary and you are free to decline to participate at any time. If you refuse to participate in the study, this will not affect you negatively in anyway whatsoever. You are free to withdraw from the study at any point, even if you do agree to take part. This study will be conducted according to the ethical guidelines and principles of Ethics Review Committee of Department of Medical Research, Ministry of Health and Sports, Myanmar.

Purpose of the research

This study aims to identify the strength, weakness as well as challenges of current provider payment methods practiced in Myanmar's health system for both public and private sectors, and explore the private stakeholder's opinion and perception on whether current payment methods for both public and private sectors meet with national health goals and guiding principles. Then, private stakeholders' perception and opinion on the potential mix of provider payment mechanisms for both public and private sectors to help meet national health goals which can incentivize the providers as well as potential challenges and difficulties for implementation, will be explored.

The mode of payment creates powerful incentives affecting provider behavior and the efficiency, equity and quality outcomes of health finance reforms. The way that health purchasers pay health care providers to deliver services is a critical element of strategic purchasing. Widely used provider payment methods are line-item budget, global budget, fee-for-service, capitation, per case (diagnosis related groups – DRG) and per diem.

Type of Research Intervention

This study will involve key informant interview which will last about one and half hours approximately. We would like to ask question about national health goals; design and implementation arrangement of provider payment system; strength, weakness as well as challenges of current provider payment methods practicing in Myanmar, stakeholders' perception and opinion on the potential mix of provider payment mechanisms to help meet national health goals which can incentivize the providers as well as potential challenges and difficulties for implementation. When it comes to answering questions, there are no right and no wrong answers.

Participant Selection

Key stakeholders from private sectors such as Private Hospital, General Practitioners (GP), selected Ethnic Health Organizations (EHOs), Civil Society Organizations, Non-government Organizations and freelance public health professionals will be involved in the study. You have been invited to take part in this study because of your experiences and technical expertise in health system of Myanmar and my belief that you can contribute your knowledge and experiences to my research questions.

Voluntary Participation

Your participation is entirely voluntary and you are free to decline to participate at any time. If you refuse to participate in the study, this will not affect you negatively in anyway whatsoever. You are free to withdraw from the study at any point, even if you do agree to take part.

Procedures

I am asking you to help me understand more on provider payment method used in Myanmar. I am inviting you to take part in this research study. If you decide to take part, I will ask you to give us your written permission to show you have agreed to join the study. I will ask you a set of guideline questions which is designed to cover six major question areas. Firstly, I will ask you the national goals of Myanmar. Secondly, questions under design features and implementation arrangements of current provider payment methods used in Myanmar will be asked. This will include your understanding of and perspectives about all payment methods in use, how budget/payment is calculated, design features such as basis for payment and adjustment; included services; cost items; adjustment coefficient; contracting entities, and implementation arrangement such as how payment are disbursed, used and tracked; caps; surpluses and deficits. Thirdly, consequences including strength, weakness and suggested improvement of the each payment method in use in the country will be asked. Fourthly, stakeholder's opinion on current capacity of health purchasers and fifthly, the current autonomy and capacity of providers will be asked. Lastly, your suggestion on the mix of provider payment methods to meet national health goals in Myanmar will be asked.

During the key informant interview, I will sit down together with you in a comfortable place as suggested by you. If you do not want to answer any of the questions during the interview, you may say so and I will move on to the next question. No one else but the interviewer will be present unless you would like someone else to be there.

The information recorded is confidential and no one else will access to the information documented during the interview. With your permission, the interview discussion will be recorded using an audio recorder.

Risks and Discomforts

There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics. However, we do not wish for this to happen. You do not have to answer any question or take part in the interview if you feel the questions are too personal or if talking about them makes you uncomfortable.

Benefits

Please be informed that there are no direct benefits in the forms of incentives or money attached to your participation in this study. However, your answers may benefit to an evidence based decision making by MOHS for provider payment reforms to meet national health goals according to the roadmap of National Health Plan (NHP). Moreover, the evidence from this study can be used on developing legal framework (Myanmar National Health Insurance Law) and legislation of the law to support health reforms to achieve UHC in Myanmar.

Incentives

Thank for you participation and you will not be provided any incentive to take part in the research.

Confidentiality

The participant's private information will be kept confidential and it will not be subject to an individual disclosure, but will be included in the research report as part of the overall results. The research undertakes that all information provided by you will be used only for the purpose of study. Everything that you say when answering the questions will be kept private and confidential. Your name will not be revealed in any written data or report resulting from this study.

Sharing the Results

The knowledge that we get from this research will be shared with you before it is made widely available to the public. Each interviewee will receive a summary of the results. After that, we will share the results with Ethics Review Committee, Department of

Medical Research where ethical clearance was conducted. We will publish the results in academic journals, paper and oral presentation in conferences, so that other interested people may learn from the research.

Who to Contact

If you have any questions about this research, please feel free to contact Mr. Nay Nyi Nyi Lwin at mobile number 09-78-550-3506. The address is No: 16, second floor, 148th Street, Tarmwe Township, Yangon, Myanmar.

This proposal has been reviewed and approved by the Ethics Review Committee, Department of Medical Research, which is a committee whose task is to make sure that research participants are protected from harm. If you wish to find out more about the Committee, contact the secretary of the committee at the Department of Medical Research, No. 5, Ziwaka Road, Dagon Township, Yangon, PO - 11191, phone 01-375447-ext: 118 during office hours.



Part II: Certificate of Consent

I hereby express my consent to participate as an interviewee in the research project entitled “Private stakeholders’ perception on leveraging provider payment methods for both public and private sectors to help meet national health goals in Myanmar”.

I have been invited to participate in the research about provider payment methods in Myanmar. I am informed on the research purpose, type, procedure, duration, benefits and risks. I thoroughly read the information details in the information sheet given to me. I was also given explanations and my questions were answered by the interviewer. I therefore gave consent to participate as an interviewee in this research project.

On the condition that I have any questions about the research, I can contact Mr. Nay Nyi Nyi Lwin at mobile number 09-78-550-3506. The address is No: 16, second floor, 148th Street, Tarmwe Township, Yangon, Myanmar.

I am aware of my right to further information concerning benefits and risks from the participation in the research project and my right to withdraw or refrain from the participation anytime without any consequence. I gave consent to the researcher’s use of my private information obtained in this research, but do not consent to an individual disclosure of private information. The information must be presented as part of the research results as a whole.

I thoroughly understand the statement in the information sheet for the research and in this consent form. I thereby give my signature.

Name of participant _____

Signature of participant _____

Date _____

Day/month/year

VITA

Name: Nay Nyi Nyi Lwin

Sex: Male

Date of Birth: 10 January 1988

Nationality: Mon/Bamar

Country: The Republic of the Union of Myanmar

Marital Status: Married

Education: Bachelor of Medicine, Bachelor of Surgery (M.B., B.S), University of Medicine (2), Yangon, Myanmar

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