# Healthcare Provider Payments: Acceptance and Preferences of Myanmar General Practitioners

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## Abstract

Progress towards universal health coverage (UHC) has been uneven globally due to weaknesses in health financing. Experiences in managing the COVID-19 pandemic and its need for increased healthcare resources have highlighted the frailties in health financing, particularly strategic purchasing. The pandemic has also provided an opportunity to critically reconsider current UHC approaches, which need to be more resilient and sustainable. These adjustments include applying robust payment methods in the private health sector to optimise health resources during a public health crisis or other emergencies.

Myanmar, a low-to-middle-income country in Southeast Asia, requires robust provider payment mechanisms to achieve UHC by 2030. This research sought to examine Myanmar general practitioners' (GPs) acceptance of and preferences for healthcare payment methods. Previous literature is biased to the Global North, with limited reference to Southeast Asia, and an absence of research focused on provider perceptions, attitudes, and beliefs prior to the introduction of nationwide strategic purchasing payment mechanisms. These research gaps created an opportunity to explore the relationships between GPs' socio-demographic characteristics and clinic services profile and their acceptance of, and preferences for, specific payment methods.

A cross-sectional study, recruiting 622 participants with a convenience sampling method was used. A Qualtrics online survey was disseminated to Myanmar GPs through Facebook Ads Manager, the primary investigator's networks, and other third-party organisations. The research showed that performance-based payment was the most acceptable and most preferred payment method, followed by fee-for-service. Salary payments were reported as the least acceptable and least preferred payment type, while findings on capitation were not definitive.

The study's findings also showed that gender, advanced postgraduate qualifications, and overseas experience of GPs predicted the acceptability of specific payment methods. In addition, the GPs whose clinics were in peri-urban or rural settings were less likely to accept performance-based payment. Of the attributes investigated for GP

clinic services, the number of health services offered, clinic opening hours, and daily consultation load were associated with the acceptability of and preferences for three payment options: capitation, salary, and performance-based payment.

Due to existing knowledge gaps and the bias of literature, the results of this research were not always comparable to findings from earlier studies. The rising burden of noncommunicable diseases and the skewness of age and gender distribution in the sample may be possible explanations for these unexpected findings. The results also signalled the critical role of third-party organisations in the delivery of primary health services when government-funded healthcare is disrupted due to multiple simultaneous shocks. Despite the potential for this research to inform strategic purchasing arrangements in Myanmar, the scope for applying these findings as initially intended is not realistic in the immediate future. In this context, the study's results provide valuable insights into the possible role of alternative provider payment architectures, especially during public health crises and emergencies.

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# **Abbreviations and Acronyms**

Abbreviations and Acronyms	Definitions	
CI	Confidence Interval	
COVID-19	Corona Virus Disease	
FAM	Facebook Ads Manager	
FFS	Fee-for-service	
GDP	Gross Domestic Product	
IQR	Inter-Quartile Range	
LMIC(s)	Low-to-Middle-Income Country(ies)	
MMA	Myanmar Medical Association	
MMK	Myanmar Kyats	
NGO(s)	Non-governmental Organisation(s)	
NZD	New Zealand Dollars	
OR	Odds Ratio	
PSI	Population Services International/Myanmar	
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2	
SDG	Sustainable Development Goal	
UHC	Universal Health Coverage	
UK	United Kingdom	
UNICEF	The United Nations International Children's Emergency Fund	
US	The United States of America	
USD	United States Dollars	
WHO	World Health Organization	

# **Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgments), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signature

Date 12<sup>th</sup> August 2021

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# 1 Chapter I: Introduction and Overview

## 1.1 Introducing Universal Health Coverage

In 2012, governments worldwide committed collectively to achieve the Sustainable Development Goals (SDGs) to reduce inequality and promote global peace and prosperity (UHC2030, 2021). Health was viewed as a leading priority, underlined by its status in the third goal (SDG-3), to "ensure healthy lives and promote wellbeing for all at all ages" (United Nations, 2020). Achieving the aspirations of SDG-3 requires a wideranging approach which is reflected in 13 sub-targets. Of these, target 3.8 highlights the importance of universal health coverage (UHC). UHC is the equitable provision of quality health services to an entire population, without financial hardship, regardless of social or economic background, to access health services (Guinness & Gruen, 2011).

Despite its significance for advancing global health, there has been uneven progress towards UHC (World Health Organization [WHO], 2019). This is partly due to the weaknesses in health financing, despite this being recognised as essential for achieving UHC (Jamison et al., 2006). Such shortcomings in health financing are more apparent in low-to-middle-income countries (LMICs). In 2020, global progress towards UHC was further disrupted by SARS-CoV-2. The pandemic exposed the fragilities of many national health systems and the difficulties they face in providing equitable health services.

In LMICs like Myanmar, the pandemic also highlighted a critical tension between a surge in patient need for primary healthcare and government-imposed stay-at-home rules that limited face-to-face consultations with general practitioners (GPs). These conditions prevented population access to primary healthcare providers during a time of acute need when public health services were over-stretched. In this context, the experience of COVID-19 provided a valuable opportunity to reconsider UHC approaches. It also offered scope for identifying strategies that might enable a more resilient health system to respond to public health, natural, or other threats. In resource-constrained nations like Myanmar, such approaches are necessary to optimise both public and private sectors in every aspect of UHC, including health financing and service provision. This study examined Myanmar GPs' acceptability and

preferences of healthcare payment methods. The study was conducted with the intention of informing future national UHC planning and policy.

This chapter introduces background concepts on UHC and health financing. First, it discusses Myanmar's geographical, political, and socioeconomic context, along with its UHC status and COVID-19 impacts. The chapter then presents the research rationale, the study aim, and objectives. Finally, it concludes by describing the dissertation's structure and organisation.

## 1.2 Key Concepts in UHC, its Financing and Strategic Purchasing

#### 1.2.1 Universal Health Coverage

Exploring the financial dimensions of UHC in Myanmar requires an understanding of the key concepts that underpin UHC as well as those of health financing, specifically strategic purchasing. WHO defines UHC as "ensuring all people have access to needed health services (including prevention, promotion, treatment, rehabilitation, and palliation) of sufficient quality. It also ensures the use of these services does not expose the user to financial hardship" (WHO, 2021c, para. 1). UHC was first formally recognised in the Rio+20 United Nations Conference on Sustainable Development in 2012 (Evans et al., 2012). Since 2015, UHC has been viewed as a crucial SDG commitment to be achieved by 2030. It incorporates three healthcare dimensions: (1) the expansion of health services, (2) the inclusion of more people, and (3) the reduction of direct payment by healthcare users (WHO, 2014). All three dimensions of UHC centrally depend on health financing.

# 1.2.2 Health Financing

Careful and sustainable health financing is at the core of the advancement of UHC. It is necessary for achieving population coverage with essential quality health services so that health service users avoid financial hardship and duress. Health financing is also a function of a health system which focuses on mobilising and pooling financial resources and allocating them to healthcare providers equitably and efficiently (WHO, 2021a). WHO's health financing approaches focus on three main functions: revenue-raising, fund pooling, and service purchasing (WHO, 2020a). Of these, service purchasing is particularly crucial as it allocates the national health budget to healthcare

providers for the services they deliver (Mathauer et al., 2019). Service purchasing encompasses the relationship between purchasing agencies and healthcare providers and includes provider payments to ensure health service delivery to a population (Kutzin, 2001).

# 1.2.3 Strategic Purchasing

Service purchasing may be "active" or "passive". Active or "strategic purchasing" involves linking payment methods to provider performance. In contrast, "passive" purchasing does not involve any performance monitoring (Feldhaus & Mathauer, 2018). In UHC, "active" or strategic purchasing plays a more substantial role as it enables a health system to better achieve its goals by improving provider performance. This usually involves government or third-party organisations purchasing health services from public and private providers. As private providers have the potential to expand health service coverage, their incorporation into a national health system speeds up progress towards UHC. In this way, strategic purchasing plays a vital role in the advancement of UHC.

Strategic purchasing involves three critical considerations: the types of health interventions to fund, the healthcare providers to engage, and the payment methods to use (Ergo et al., 2017). In the context of UHC, primary healthcare is viewed as the most critical health service (WHO, 2019). While it prioritises public and private healthcare providers, including general providers, the choice of payment method represents a challenging policy decision, especially as this applies to GPs. This is because payment methods can influence provider behaviours through incentives and disincentives (Gosden et al., 2001). Enabling incentives has the potential to influence provider behaviours in ways that benefit a national health system's goal of achieving UHC (Cashin et al., 2015). The choice of payment method is a crucial element of strategic purchasing for the country's achievement of UHC by 2030.

#### 1.3 Research Context – Myanmar

#### 1.3.1 Geographical and Political Profile of Myanmar

Myanmar, previously known as Burma, has a population of 54.9 million people, with 71% of this population living in rural areas and 29% residing in urban centres (Ministry

of Health and Sports, 2020b). It comprises one union territory, seven states and regions that reflect 330 townships (Figure 1). Myanmar is an ethnically diverse country comprising 135 different ethnicities. The Bamar ethnic group accounts for 68% of the population who reside in administrative jurisdictions known as "regions", while other ethnic minorities are dispersed across administrative areas known as "states" (Yamada & Matsushima, 2020). Apart from the ethnic profile of these areas, states and regions do not have any differences in administrative management. Although Myanmar's capital is Naypyidaw, Yangon is the country's largest and major economic centre. With a population of 8.48 million, Yangon is home to 15.5% of the total population, with an urban density of 825 people per square kilometre (Ministry of Health and Sports, 2020b).

Myanmar was colonised by the British for 124 years (1824–1948), followed with rule by a military junta for 49 years (1962–2011). In 2015, Myanmar elected its first civilian government to advance its process of democratisation. The ensuing decade (2010–2020) was characterised by an improvement in Gross Domestic Product, life expectancy, poverty, school enrolment, and other indices (Figure 2). Unfortunately, in February 2021, the Myanmar military staged a coup d'état, and the country is now on the brink of becoming a failed state (Bala, 2021; Faulder et al., 2021; "Myanmar Could Be Asia's Next Failed State," 2021).

Since its independence from British rule, Myanmar has experienced more than 70 years of ongoing internal conflict. It is reflected in continuing tensions between ethnic minorities within states and government forces. In 2021, the military coup transformed the existing ethnic clashes into armed conflicts between the civilian population and the military junta (Fishbein et al., 2021; Ratcliffe, 2021). The escalation of conflicts internally displaced thousands of civilians and increased the number of global refugees (Nyane, 2021; Regencia, 2021; United Nations, 2021). In addition, human rights violations and other forms of atrocities committed by the military have affected Myanmar's underprivileged ethnic minorities in its seven states, which persist to the present day.

Figure 1: Map of Myanmar



*Note*. The highlighted areas represent the seven states of Myanmar on the borderline between Myanmar and other neighbouring countries. Reprinted with permission from D-maps.com, 2021. (https://d-mapscom). Copyright D-maps.com (2021).

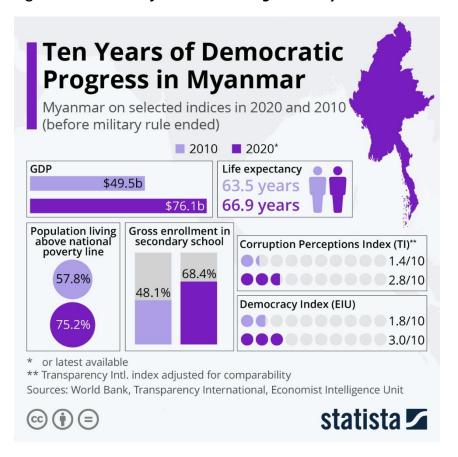


Figure 2: Ten Years of Democratic Progress in Myanmar

Note. Reprinted from At Risk: Ten Years of Democratic Progress in Myanmar, by K. Buchholz, 2021, Statista. (<a href="https://www.statista.com/chart/24182/progress-myanmar/">https://www.statista.com/chart/24182/progress-myanmar/</a>). Creative Commons License CC BY-ND 3.0.

#### 1.3.2 Socioeconomic Profile of Myanmar

Until February 2021, the socioeconomic status of Myanmar showed signs of improvement. The poverty rate declined from 48.2% in 2005 to 24.8% in 2017 (The World Bank, 2020). In 2017, primary school enrolment (Grade 1 to 4) was more than 89% across the country, although this dropped to 20% for high school enrolment (Grade 9 to 11), especially in the lowest quintile. This was attributed to the most significant financial constraints and more inadequate access to schools linked to poverty (The World Bank, 2020). Access to essential services, such as clean water and sanitation, were also associated with poverty. Across the lowest quintile, 20% did not have access to clean water during the dry season, and 14% still practised open defecation, increasing the risk of infectious diseases (The World Bank, 2020).

From a socioeconomic perspective, more than 50% of Myanmar's economic activity was attributed to informal trade (Vakulchuk et al., 2018). While this also included agriculture, the country's primary source of livelihood, this sector earned a relatively low income due to its highly seasonal nature and vulnerability to climate change (The World Bank, 2020). In 2019, Myanmar's economic growth was viewed as resilient compared to global data (Beck et al., 2019). However, as a result of COVID-19, 2020 Gross Domestic Product (GDP) growth projections fell from 6.4% to 0.5% (Brancati et al., 2020).

#### 1.3.3 Disease Burden and Health System of Myanmar

For more than a decade, Myanmar has been challenged by a double burden of diseases. In the period 2009–2019, non-communicable diseases were the leading cause of death, contributing 70% of mortality, while infectious diseases accounted for 30% (Figure 3) (University of Washington, 2020). Among non-communicable diseases, in 2016–2017, cerebrovascular accidents were responsible for 19.4% of reported deaths (Ministry of Health and Sports, 2020b). However, since 2009, malnutrition, especially stunting (low height for age) and underweight (low weight for age), have been significant risk factors for mortality and disability (University of Washington, 2020).

Life expectancy, however, increased from 64.7 years in 2014 to 67 years in 2020 (Ministry of Health and Sports, 2020b). Similarly, maternal mortality declined from 287 per 100,000 live births in 2007 to 250 in 2017. From 2009 to 2019, under-five, infant and neonatal mortality rates also dropped from 66, 50 and 29 per 1,000 live births to 45, 36 and 22, respectively (UNICEF, 2019; United Nations Inter-agency Group for Child Mortality Estimation, 2019).

-71.0%

What causes the most deaths? Communicable, maternal, neonatal, and nutritional diseases Non-communicable diseases Injuries 2009 2019 % change, 2009-2019 -11 Stroke Stroke 1 16.2% Ischemic heart disease 2 2 Ischemic heart disease 15.1% Lower respiratory infect 3 3 COPD 11.3% COPD 4 4 Diabetes 24.8% Neonatal disorders 5 5 Lower respiratory infect -30.8% Tuberculosis 6 6 Cirrhosis 9.6% Cirrhosis 7 Neonatal disorders -36.2% Diabetes 8 8 Tuberculosis -40.3% HIV/AIDS 9 Chronic kidney disease 11.4% Diarrheal diseases 10 Asthma -12.6% Asthma 11 Diarrheal diseases -47.0%

Figure 3: Top 10 Causes of Death in Myanmar

Chronic kidney disease 13

*Note*. Reprinted from Institute of Health Metrics and Evaluation. Copyright 2020 by University of Washington.

HIV/AIDS

Health system challenges, such as insufficient infrastructure and health workforce shortages, have exacerbated Myanmar's disease burden. There are 1,168 hospitals nationwide, equating to 10 beds per 10,000 (Ministry of Health and Sports, 2020a). In 2018, Myanmar had 6.77 medical doctors and 9.99 nursing and midwifery personnel per 10,000 population. This was lower than the WHO (2021b) recommendation of 10 and 40 personnel, respectively. Although private-sector data have not been recently updated, 3,911 GPs and 201 specialist GPs were reported practising during 2015 (Latt et al., 2016).

In Myanmar, GPs are considered professionals after completing their medical degrees. Thus, the term "GP" in Myanmar diverges from other countries with more formally defined postgraduate accreditation pathways. In addition, the scarce human resources are unevenly distributed among states and regions, favouring the country's regions. In contrast, ethnic minority areas remain disadvantaged by impoverishment, poor transportation, and lack of security due to ongoing conflicts (Saw et al., 2019).

## 1.3.4 Status of UHC in Myanmar

Myanmar has a national health plan with three primary healthcare packages to implement UHC. These are basic, intermediate, and comprehensive essential packages

of health services (Ministry of Health and Sports, 2016). In addition, the national health plan focuses on restructuring health financing to provide financially sustainable health services for the most extensive population coverage. Robust health financing is the cornerstone of planned UHC in Myanmar, recognising the need for urgent intervention, as the direct payment of individuals primarily finances the current health system.

In 2000, the general population was responsible for 86% of total health expenditure through direct payments to health service providers. By 2018, this had declined slightly to 76% (Ministry of Health and Sports, 2020c). These persisting healthcare payment burdens have been punishing, with approximately 1.7 million people reportedly falling below the national poverty line due to catastrophic healthcare expenses (Ergo et al., 2019). This underlines the urgent need for strategic purchasing, reducing the financial burden on more impoverished families and expanding health service coverage by healthcare providers, especially GPs. While the nationwide implementation of strategic purchasing has not occurred, two non-governmental organisations, Population Services International and Myanmar Medical Association, have executed it within their networks.

#### 1.3.5 UHC in the context of COVID-19 in Myanmar

While the primary focus of this study was on provider payment preferences to advance UHC in Myanmar, the timing of the research was situated in the context of the global COVID-19 pandemic. Not only did this have substantial impacts on mortality and morbidity within Myanmar and household livelihoods, but the pandemic also led to significant disruption in the delivery of primary healthcare services by GPs throughout the country.

By August 11, 2021, Myanmar had reported 341,300 cases and 12,452 deaths directly attributed to COVID-19 (Ministry of Health and Sports, 2021). In addition, the jobs of 6.9–7.3 million people were disrupted temporarily or permanently (International Labour Organization, 2020). The already fragile public health system became overburdened and unable to respond adequately to increased patient demand. Brancati et al. (2020) reported that the government response was uncoordinated and fragmented. They specifically foregrounded the government's ambiguous COVID-19

regulations, which led to a perplexed public health response. Myanmar's GPs also faced particular challenges as they worked without clear regulatory protection for their health and safety. As a result, GPs reportedly had little alternative but to discontinue their services. This resulted in severe consequences for the public's access to primary healthcare since 54.1% of all primary healthcare consultations in Myanmar are attributed to private practitioners (Ergo et al., 2019). These compounding factors resulted in the widespread withdrawal of GP services.

The "pull-back" of primary healthcare services at a time of enhanced public health need further eroded a national health system in which the public health workforce was already overstretched and unable to meet national demands. The pandemic's impact on lost livelihoods also worsened these conditions, limiting people's capacity to pay for scarce healthcare resources. These essential contextual elements had adverse effects on both health service coverage and affordability, two key dimensions of UHC. They also created a unique research context to probe GPs' perceptions of future provider payment by the government.

Myanmar's inability to deliver sustainable primary healthcare during a global pandemic, in part, reflected the lack of integration between UHC objectives and capabilities related to global health security (Lal et al., 2021). The global health security agenda is focused on preventing, detecting, and responding to public health threats, particularly those caused by infectious diseases (Heymann et al., 2015). However, while global health security efforts have historically informed essential public health capacities such as surveillance, they have seldom addressed primary healthcare concerns. The substantial disruptions in primary healthcare delivery in Myanmar illustrate these fragmentations in policy and practice. They also highlight the scope for restructuring national health systems, like Myanmar's, by converging these two important but historically parallel WHO agendas — UHC and global health security — to build more resilient national health systems in the future.

## 1.4 Research Rationale

The strategic purchasing of private health services in Myanmar represents a crucial element for achieving a more resilient UHC model. As seen during the COVID-19 pandemic, it is essential to integrate the private health sector into existing health

systems to expand coverage and sustain services. However, despite its central importance, the dimension of provider payments in UHC has not been previously examined in the Myanmar context. This is despite published evidence highlighting how incentives linked to provider payment methods influence their behaviour in delivering health services and therefore the quality of healthcare (Brosig-Koch et al., 2017; Robyn et al., 2014). As Myanmar has yet to formalise its national UHC strategy, building a clearer understanding of GPs' payment preferences offers scope for promoting favourable provider practices that will improve the quality of the health services provided. This study sought to be the first-ever research in Myanmar to support the health policymakers' evidence-based decision-making process in strategic purchasing.

# 1.5 Research Aim and Objectives

This study aims to support Myanmar's health policymakers in UHC planning and policy related to strategic purchasing. Its objective is to determine the association between the characteristics of GPs and their acceptance of and preferences for specific payment methods.

In this context, the study seeks to answer the following research question: "Are the socio-demographic characteristics of GPs in Myanmar and their clinic services profile associated with their acceptance of and preferences for specific payment methods?" This question is examined through three sub-questions:

- Do the socio-demographic characteristics of GPs influence their acceptance and preferences for payment type?
- 2. Do the clinics' geographical locations or practice settings influence GPs' acceptance and preferences for payment type?
- 3. Do the clinic health services and delivery influence GPs' acceptance and preferences for payment type?

#### 1.6 Dissertation Structure

This dissertation is structured into five chapters. In addition to the present *Introduction* and *Overview* chapter, there are the following four chapters:

Chapter 2: Literature Review presents the related literature on definitions and characteristics of different payment methods, their effects on health services, and provider payment acceptability and preferences.

Chapter 3: Methodology outlines the research methodology used. The chapter also introduces data-gathering instruments and describes participant recruitment, data collection, and analysis procedures. It also addresses the ethical and cultural considerations of this research.

Chapter 4: Findings presents the results of the data analysis. It provides a descriptive analysis of the participants, followed by the results from the statistical analyses.

Chapter 5: Discussion and Conclusion relate the findings of this research to the existing literature on strategic purchasing. It also explains the significance and implications of the study. Finally, it concludes by outlining the limitations of the study and future research opportunities in strategic purchasing.

# 1.7 Chapter Summary

This chapter introduced UHC and the crucial role played by strategic purchasing in sustainable health services. It described the research context, including Myanmar's socio-political environment and the disruptive impact of the 2020 COVID-19 pandemic. The chapter also presented the study rationale and the research questions and provided an overview of the dissertation structure.

# 2 Chapter II: Literature Review

# 2.1 Chapter Introduction

Robust healthcare financing represents a vital element of a sustainable health system (Jamison et al., 2006). It underpins the continuity and accessibility of the essential health services that are central to UHC. While healthcare financing has many dimensions, one crucial area focuses on introducing systems for paying health providers, including specialists and GPs. A central component of provider payment systems is the capacity to ensure financially sustainable, quality healthcare for all. This principle underscores the rationale for applying "strategic purchasing" of health services in many countries seeking to achieve UHC by 2030. Strategic purchasing is an approach to paying healthcare providers that links provider payments with their decision-making and practice to improve patient health outcomes.

This chapter draws on the current literature on provider payment methods. It begins by presenting definitions, and the benefits and drawbacks of provider payment methods, including the four primary payment mechanisms considered in this research. It continues by describing the payment methods in terms of their effects on provider behaviours, healthcare quality, and health outcomes. The chapter also reviews the acceptability of and preferences for different payment methods. Finally, it concludes by identifying a knowledge gap in the existing literature that informs the present study.

#### 2.2 Definitions and Characteristics of Payment Methods

#### 2.2.1 Overview

Since 2010, the WHO and Ministries of Health have increasingly acknowledged the critical role of health financing in UHC, leading to health system reforms in many LMICs (Honda et al., 2016). The growing recognition of health financing emphasises the application of its three primary functions. All revenue-raising, fund pooling, and strategic purchasing functions inform a country's decisions to restructure its health system (Guinness & Gruen, 2011). Strategic purchasing is significant among these functions due to its allocation of healthcare resources through well-defined provider payment methods (Mathauer et al., 2019).

Despite its central role in healthcare financing, there is limited documentation on the history and the evolution of strategic purchasing. For example, Langenbrunner et al. (2009) suggested a trajectory in which provider reimbursements shifted focus from a payment timing, that is paying before or after the service (Langwell & Hadley, 1986) to one based on payment unit, that is paying per capita or paying per consultation (Quinn, 2015). However, while this transition changed the approach to calculating payments, it did not reverse the commitment to strategic purchasing.

With respect to the typology of potential payment mechanisms, Cashin et al. (2015) and Mathauer et al. (2019) identified six main types of provider payment methods, namely capitation, fee-for-service (FFS), case-based, per diem, global budget, and line-item budget. Lagarde (2011) and Roland and Olesen (2016) suggested a classification comprising four basic payment types — capitation, FFS, salary, and performance-based remuneration.

The following sub-sections present the definitions, benefits, and drawbacks of the four main payment mechanisms suggested by Lagarde (2011) and Roland and Olesen (2016) and discuss how to combine different payment methods. A summary table is also provided in Table 1 to present the payment methods and their characteristics.

#### 2.2.2 Capitation

Capitation is the payment method in which a rate is set per beneficiary (per capita) before making the (prospective) payment (Langenbrunner et al., 2009). In healthcare, capitation refers to paying a fixed amount of money to providers over a specified period to deliver a defined service package for each enrolled member of a defined population (Lagarde, 2011). Capitation has both advantages and disadvantages. From a positive perspective, a capitation approach promotes equity and ensures health service coverage to the whole population (Roland & Olesen, 2016). These outcomes are valuable for achieving UHC, in which extensive service coverage is a vital element. Capitation also avoids health services over-supply since the providers offer just the necessary care to optimise costs (Lagarde, 2011). Hence, it guarantees excellent cost control in health service provision. Capitation is also a payment method of choice in conditions that require regular follow-up care (Lagarde, 2011). Thus, it establishes better continuity of care to promote sustainable health services.

Capitation payment also has several drawbacks. First, it favours "cream-skimming" behaviour in which providers prefer the enrolment of fewer sick people (Glazier et al., 2009; Lagarde, 2011). In Canada, Rudoler et al. (2015) found that providers paid through capitation preferred treating healthy, low-cost patients. As government disbursements are typically calculated per beneficiary, capitated providers did not favour costly, ill patients. Second, capitation induces frequent referral to expensive speciality care services (Allard et al., 2011; Iversen & Lurås, 2000). Although early referral can benefit the treatment of acute diseases, frequent referral decreases total healthcare revenue (Allard et al., 2014). Third, capitation may lead to an under-supply of health services as payment is not linked to the quantity of care (Lagarde, 2011). Crampton et al. (2000) found that capitated practices in New Zealand primary care centres utilised fewer health services than the FFS systems. This finding suggested that capitation payments sometimes do not deliver health services to their optimal levels, leading to inefficient healthcare.

#### 2.2.3 Fee-for-service

FFS represents the second approach. FFS defines a payment method in which the providers received a fixed amount of money for every service they provide, including consultation, investigation, and imaging services (Lagarde, 2011). In Myanmar, FFS is a popular payment method for private health service providers.

Similar to capitation, FFS has both positive and negative attributes. However, these are not as straightforward as in capitation. Past research on FFS indicated conflicting findings, creating complex decision-making for policymakers. Concerning benefits, FFS payments offer a direct incentive to increase provider effort linked to the number of health services provided (Lagarde, 2011). This suggests that FFS may be helpful in situations where there is low service utilisation. FFS is also valuable in treating conditions that require intensive investigation. Healthcare providers are more willing to perform complete diagnostic procedures when their payments tie-up with the volume of services (Lagarde, 2011). FFS also has the potential to increase physician efficiency. For instance, in Canada, Innes et al. (2018) discovered that FFS payments were associated with a 24% reduction in patient waiting time. In this example, FFS

represented an extrinsic financial incentive that motivated physicians to improve their clinical efficiency (Innes et al., 2018).

However, FFS can also encourage "supplier-induced demand" (Lagarde, 2011). Supplier-induced demand refers to the amount of service provided beyond what the customers have requested when fully informed about their health conditions (Lagarde, 2011). Supplier-induced demand, caused by FFS, has two consequences. First, services over-induced by the providers lead to unnecessary healthcare, causing over-treatment and harm to the patients. Adida et al. (2017), Brosig-Koch et al. (2016), Di Guida et al. (2019), Green (2014) and Wang et al. (2017) demonstrated this adverse attribute of FFS in their research conducted in the United States (US), Germany, Denmark, and China. Second, extra services provided through FFS payments potentially increase the cost of a health system (Lagarde, 2011).

As cost-escalation is an undesirable element of UHC, this drawback of the FFS payment method represents an essential consideration when designing a strategic purchasing policy. For example, while most published research on FFS has highlighted its role in increasing demand, Nadpara et al. (2012) reported that providers paid through FFS underutilised health resources in the US. Similarly, Lemak et al. (2015) also found that FFS payments reduced the total health expenditure in Michigan's adult and child health programmes in the US.

#### **2.2.4** Salary

In the strategic purchasing context, the mechanisms for paying salaries involve a government or an organisation paying a fixed monthly remuneration amount to healthcare practitioners. Salary, a third payment method in this research, is a standard payment in most LMICs (Lagarde, 2011). Similar to the former payment methods described, salary offers both benefits and drawbacks. On the one hand, salary provides a stable and predictable basic income and is beneficial in recruiting health service providers in hard-to-reach areas (Roland & Olesen, 2016; Wranik & Durier-Copp, 2010). Salary payments are not linked to the number of beneficiaries as in capitation or services as in FFS. Hence, there is no incentive to induce additional health services, which is advantageous for controlling costs (Lagarde, 2011).

On the other hand, salary also has disadvantages. Despite the benefits of secure income and reasonable cost control, salary payment is constrained by reduced healthcare quality. As the amounts are not linked to any incentive, providers paid through a salary mechanism potentially provide a lower level of health services in quality and quantity. In the United Kingdom (UK), Gosden et al. (1999, as cited in Lagarde, 2011) found that salary payments were more frequently associated with the under-provision of healthcare than other payment mechanisms such as capitation and FFS. These findings highlighted the importance of an appropriate performance monitoring system for salaried providers to maintain their productivity at optimum levels (Wranik & Durier-Copp, 2010).

## 2.2.5 Performance-based payment

Performance-based payment is the fourth mechanism widely used in strategic purchasing. However, performance-based payment offers an additional arrangement to other existing payment mechanisms. Performance-based payment defines a payment made to health service providers for achieving pre-specified performance measures (Kovacs et al., 2020). It mainly links to specific indicators, such as the number of people screened for tuberculosis or the time spent per patient (Petersen et al., 2006). Performance-based payment is valuable in strengthening specific health services delivered within a targeted population (Lagarde, 2011). Performance-based payment generally uses indicators to monitor provider achievements. Depending on the linked indicators, performance-based payment can improve provider performance, healthcare quality, and treatment outcomes (Kovacs et al., 2020).

However, performance-based payment's link with specific health programmes also creates the possibility of under-performance in other delivery areas, potentially reducing the overall performance of the healthcare system (Roland & Olesen, 2016). In addition, performance-based payment can lead to over-reporting, which encourages provider "gaming behaviours" (Lagarde, 2011). It occurs when providers exploit the connection between achievement targets and payments and attempt fraud. It is reflected in over-reporting achievements and "gaming the system" (Lagarde, 2011).

Performance-based payment also demands more administrative work than other payment mechanisms. Jan et al. (2020), Kirschner, Braspenning, Jacobs, et al. (2013),

and Merilind et al. (2014) explained this disadvantage of performance-based payment from research conducted in Taiwan, the Netherlands, and Estonia, respectively. They described how indicator monitoring and the associated calculation of payments based on achievements were more labour-intensive than those with more specific criteria. In this context, performance-based payment can increase the complexity of health system financing despite its benefits in improving service quality and quantity.

**Table 1:** Definitions and Characteristics of Provider Payment Methods

Payment Methods	Definitions	Advantages	Disadvantages
Capitation	A fixed amount of money to providers over a specified period to deliver a defined service package for each enrolled member of a defined population.	<ul> <li>Promotes equity</li> <li>Increases health services coverage</li> <li>No over-supply, no supplier-induced demand</li> <li>Ensures continuity of care</li> </ul>	<ul><li> "Cream-skimming" behaviour</li><li> Induces frequent referral</li><li> Under-supply of health services</li></ul>
Fee-for-Service (FFS)	A fixed amount of money for every service provided, including consultation, investigation, and imaging services.	<ul><li>Linked with the number of services</li><li>Increases providers' effort</li><li>Improves providers' efficiency</li></ul>	<ul> <li>Supplier-induced demand leads to over-provision of health services and costs escalation</li> </ul>
Salary	A government or an organisation pays a fixed monthly remuneration to healthcare practitioners	<ul> <li>Stable and predictable basic income</li> <li>Beneficial in recruiting providers in hard-to-reach areas</li> <li>Good cost-control</li> </ul>	- Lower level of health services provision
Performance-based payment	A payment made to health services providers for achieving pre-specified performance measures	<ul> <li>Strengthens targeted health services</li> <li>Better performance, healthcare quality, and treatment outcome (if the payment links with those indicators)</li> </ul>	<ul> <li>Performance in other services deteriorates</li> <li>Over-reporting and gaming behaviour</li> <li>Administrative burden</li> </ul>

Note. Adapted from Lagarde (2011).

## 2.2.6 Mixed Payment Methods

While each payment mechanism delivers specific benefits in terms of provider incentives, there is also scope for combining payment approaches. For example, Lagarde (2011) noted that although each payment method offered a particular set of incentives, there was no single "best" payment method. Sarikhani and Lankarani (2013) also added that a mixed payment approach helps counteract each payment method's drawbacks and promote its benefits.

A mixed method combines two or more payment methods. Feldhaus and Mathauer (2018) reported four main types of mixed payment methods — blended payment, bundled payment, cost containment rewards, and aligned cost-sharing (Table 2). These methods are elaborated in more detail by Adida et al. (2017), Feldhaus and Mathauer (2018), and Weeks et al. (2013).

**Table 2:** Mixed Payment Methods

Types	Definitions
Blended payment	<ul> <li>Layers individual payment methods (e.g., Capitation plus FFS) and/or adds another payment method (e.g., performance-based payment)</li> </ul>
Bundled payment	<ul> <li>Pays for all components of healthcare</li> <li>Pays providers based on the type of disease or episode of care</li> </ul>
Cost containment reward	<ul> <li>Rewards providers for increased use of lowest- cost services or decreased utilisation of high- cost services</li> </ul>
Aligned cost-sharing	<ul> <li>Patients pay for some parts of healthcare costs that are not covered by insurance or similar schemes</li> </ul>

*Note.* Adapted from the mixed-method categories mentioned in Feldhaus and Mathauer (2018).

# 2.3 Provider Payment Effects on Health Services

#### 2.3.1 Overview

Choices of provider payment mechanisms have wide-ranging implications for the quality and sustainability of health services. It is their influence on provider behaviours that impacts overall healthcare quality and health outcomes. "Principal-agent theory",

which is also called "agency theory", underpins this argument (Lagarde, 2011; Mathauer et al., 2019). With its original conceptualisation by Stephen Ross and Barry Mitnick in the 1970s, the principal-agent theory has been widely applied in economics and organisational theory (Mitnick, 2006). It links desired organisational outcomes to the desired behaviours of those within the organisation through financial incentives.

In the context of strategic purchasing, principal-agent theory explains how providers are motivated to maximise their benefits, which leads to the organisation's intended outcomes (Lagarde, 2011). The idea provides a framework for explaining undesirable consequences when the providers prioritise their benefits over those of the organisation. Several disciplines, including oncology, dentistry, paediatrics, and immunisation, broadly apply the principal-agent theory through provider payment mechanisms. The following sections explain the effects of provider payment methods on health services as an outcome of the principal-agent approach.

#### 2.3.2 Effects on Provider Behaviours

Specific application of the principal-agent theory in provider payment mechanisms has influenced changes in health service provision through mechanisms' effects on provider behaviours, healthcare quality, and health outcomes. Regarding provider behaviours, the impacts of payment methods reflect patterns of provider referral, consultation practices, treatment choices, and their performance.

First, on provider referral, Kassak et al. (2014) found that FFS had higher referral rates than salary payments in Lebanon. However, in Canada, Sarma et al. (2018) reported that capitation had higher rates of referral cases than FFS payments. This finding is consistent with the results of Allard et al. (2011) and Iversen and Lurås (2000) in France and Norway, who also found that capitation induces the highest specialist referral rates. These findings suggested that capitation payment methods are most likely to encourage referral behaviours by healthcare providers.

Second, payment mechanisms also influence providers' consultation practices by affecting the duration of consultations, range of health services offered, and continuity of care. For example, FFS providers in Germany spent more time with patients than capitated practitioners (Neumann et al., 2011). In the Netherlands, Van Dulmen (2000)

reported that salaried doctors provided more time for consultation visits than FFS providers.

With the range of health services offered, prevailing literature indicates that FFS provides more effective health services than capitation, reinforcing the supplier-induced demand argument presented in section 2.2.3. Hennig-Schmidt et al. (2011) and Van Dijk, Van Den Berg, et al. (2013) noted this in studies conducted in Germany and the Netherlands. However, FFS payments reportedly allow more follow-up visits in the continuity of care, as Gosden et al. (2001) described in their review of the literature in Denmark, Canada, and the US. There is no other comparative research on continuity of care in respect of payment mechanisms, except that comparing capitation and FFS.

Third, payment methods influence provider treatment choices. In Sweden and China, Ellegård et al. (2018) and Wang et al. (2011) found that performance-based payment improved healthcare provider behaviours by encouraging their compliance with treatment guidelines as well as discouraging unnecessary prescriptions. Shen et al. (2004) found that capitation and FFS payments significantly affected providers' clinical decision-making in the US. Appropriate decision-making also improves the treatment choices of providers. However, in the Netherlands, the provider remuneration system with the choice of capitation or FFS did not affect providers' adherence to treatment guidelines (Van Dijk, Verheij, et al., 2013).

Payment mechanisms also affect provider performance. As expected, performance-based payment improves provider achievements by linking their performance with specific indicators. In France, performance-based payment promoted cervical and breast cancer screening (Constantinou et al., 2017; Sicsic & Franc, 2017). However, Kirschner, Braspenning, Akkermans, et al. (2013) reported that, in the Netherlands, no significant improvement in cervical cancer screening was seen with performance-based payment. Immunisation programmes also showed uneven varied findings. In Burundi, Bonfrer et al. (2014) reported a significant increase in childhood vaccinations because of the performance-based payment effect. Conversely, Katz et al. (2015) and Kirschner, Braspenning, Akkermans, et al. (2013) found that performance-based payment did not improve immunisation programmes in Canada and the Netherlands.

These results are unclear as a basis for drawing conclusions on the impacts of payment mechanisms on provider performance.

# 2.3.3 Effects on Healthcare Quality

Another element of the principal-agent theory, healthcare quality, is also affected by the provider payment method. WHO (2020b, para. 9) has defined quality healthcare as "the extent to which health services increase the likelihood of desired health outcomes and are consistent with evidence-based knowledge". There are various ways to measure the quality of health services. WHO (2020b) recommended that effectiveness, safety, and patient-centredness are the three crucial dimensions to measure healthcare quality. In strategic purchasing, payment methods should ideally improve the quality of care by affecting all three elements.

First, the effectiveness of healthcare includes the provision of evidence-based health services (WHO, 2020b). Evidence-based medicine is also a cornerstone of treatment guidelines that require strict compliance by healthcare providers. Payment methods that encourage guideline adherence maximise the effectiveness of health services. Among the four payment mechanisms, performance-based payment is most beneficial in encouraging providers to follow treatment guidelines. Ellegård (2020) recently documented this benefit of performance-based payment in her research on hypertension management in Sweden. Similarly, Chen et al. (2016), Chiou et al. (2020), and Lai and Hou (2013) also suggested that performance-based payment improved treatment guideline adherence for chronic hepatitis and diabetes management in Taiwan.

The second dimension of health services quality, patient safety, seeks to avoid harming the people served by healthcare providers (WHO, 2020b). Similar to effectiveness, performance-based payment encourages patient safety, specifically appropriate prescription. In Sweden, Ellegård et al. (2018) found that performance-based payment promoted narrow-spectrum antibiotic usage in treating respiratory tract infections. In China, performance-based payment with a capitation payment reduced inappropriate prescriptions in township health centres (Sun et al., 2016; Yip et al., 2014).

As the third dimension of healthcare quality, patient-centeredness refers to protecting patient rights and ensuring patient satisfaction. Patient-centredness also promotes health service provision according to patient preferences and needs (Quentin et al., 2019). There is limited research that considers patient-centredness in measuring healthcare quality. However, Chiu et al. (2016) and Kirschner, Braspenning, Akkermans, et al. (2013) reported that performance-based payment brought positive patient experiences and improved the quality of health services in Taiwan and the Netherlands. While most studies underlined the benefits of performance-based payment on healthcare quality, Herbst et al. (2018) and Serumaga et al. (2011) found that performance-based payment had no long-term effect on chronic disease management.

#### 2.3.4 Effects on Health Outcomes

Another impact of payment methods is their influence on health outcomes. WHO defined health outcome as a change in an individual or population health due to an intervention (Serban, 2019). The measurement of health outcomes varies, depending on the intervention. For example, while clinicians may view morbidity and mortality as essential outcomes, some specialities also use disability and patient dissatisfaction as outcome measures (Roach, 2006).

This wide range of outcome measures used limits the comparability of studies examining health outcomes with payment methods. For instance, Vu et al. (2021) found that capitation payments reduced psychiatric hospitalisation by 6.2%. This occurred after government-funded provider payments switched from FFS to capitation. Bamimore et al. (2020), Somé et al. (2019) and Somé et al. (2020) also found that the capitation model in Canada improved after-hours care and diabetic care, resulting in lower estimated mortality risk. Moreover, in Estonia, adopting a new performance-based payment programme in primary care achieved good health outcomes in preventing and managing chronic diseases (Merilind et al., 2016). The same performance-based payment programme also encouraged family doctors to achieve 90% childhood immunisation coverage (Merilind et al., 2015).

Consistent with these findings, studies from other countries have highlighted the role of performance-based payment in enhancing health outcomes in chronic diseases. For

example, Bardach et al. (2013) reported improvements in cardiovascular care outcomes in New York, while Chou et al. (2019) found there were benefits arising from performance-based payment in advancing diabetic care in Taiwan. In addition, Kuo et al. (2011) also noted the positive impacts of performance-based payment on breast cancer care in Taiwan. Current research suggests that performance-based payment is the leading payment method for achieving health outcomes.

# 2.4 Provider Perspectives on Payment Options

#### 2.4.1 Overview

The characteristics of the different payment methods and their effects on health services determine provider perceptions, attitudes, and beliefs about each payment mechanism. As crucial stakeholders, healthcare providers play a vital role in strategic purchasing. Their opinions are essential in designing and implementing payment methods (Smith, 2021). The need for coherence between providers' payment expectations and the payment methods offered underscores the importance of engaging providers in developing payment options. Among the issues that arise in such consultations is the over-arching acceptability of the proposed payment methods and the degree to which specific mechanisms might be preferred over others. Despite their importance, there is only limited research on these two dimensions of service purchasing.

# 2.4.2 Payment Method Acceptability

Acceptability determines how well a target population views one specific intervention or the degree to which the intervention meets people's needs (Ayala & Elder, 2011). In this research, payment method acceptability refers to the extent to which healthcare providers generally agree with specific payment options. Published research on payment method acceptability has focused on two issues. These are the characteristics of payments and providers' opinions about payment acceptability. The acceptability attributes also vary by provider attributes, administrative attributes, and payment method attributes.

In Kenya, Obadha et al. (2019) examined the attributes that informed providers' acceptance of capitation payments. They identified four characteristics: the type of

health services covered, payment schedule, payment timeliness, and annual payment rate per individual. In Ghana, Sodzi-Tettey et al. (2012) focused on the administrative attributes that enhanced FFS acceptability. It highlighted the reporting burden, claims submission and processing system. In research on the acceptability of performance-based payment in Germany, Krauth et al. (2016) studied both the characteristics and the opinions of healthcare providers. This study indicated that providers' gender, age, medical discipline, number of patients seen, and percentage of private patients determined the acceptability of performance-based payment as a payment method.

In terms of providers' opinion, Krauth et al. (2016) also discovered that healthcare providers did not favour performance-based payment since the providers assumed it is biased in the health system. Due to the promotion of performance-based payment in one or a group of health services, providers in Germany perceived that it results in provider under-performance in other health programmes. Other studies have indicated the poor acceptability of performance-based payment in explorations of provider opinions. For instance, in France, Saint-Lary et al. (2013) noted that providers considered performance-based payment to introduce a potential conflict of interest and exclude the most deprived patients. Alqasim et al. (2016) also found that healthcare providers in the Netherlands were concerned about the financial pressure of performance-based payment. This was despite performance-based payment being beneficial for their agency. Such studies suggested performance-based payment is generally viewed as an unacceptable payment method, especially in the global north.

### 2.4.3 Payment Method Preferences

The Oxford Learner's Dictionary defines preference as a greater interest in something than others (Oxford University Press, n.d.). Preference is also understood as the relative acceptability of a specific alternative across various choices (van Overbeeke et al., 2019). In the strategic purchasing context, payment method preferences refer to the greater liking by healthcare providers of one method over another. Consistent with published literature on payment acceptability, previous studies on provider preferences have focused on characteristics that inform provider preferences and provider opinions. In contrast to studies on payment acceptability, published research on provider preference has prioritised salary payment.

Regarding the characteristics that inform provider preferences, in Canada, Ogundeji et al. (2021) found that payment preferences relate to three attributes: provider characteristics, payment method used, and professional interest. In addition, they noted that younger female physicians preferred salary payment to their male counterparts (Ogundeji et al., 2021). In Norway, Abelsen and Olsen (2015) also reported a similar finding on the gender difference in salary preference. In terms of the age difference, Karakolias et al. (2017) observed that younger doctors in Greece preferred salary payment because of dual employment and informal fees from patients.

Providers also preferred salary because of its benefits. Salary payment offers flexible work hours for providers to spend more time with their families or in other professional interests (Ogundeji et al., 2021). Kinouani et al. (2016) supported this finding that providers in France also preferred salary payment due to its implications for working conditions and career flexibility. However, despite these preferences for salary payment, Halvorsen et al. (2012) found that providers in Norway did not prefer the salary method. Instead, Norwegian providers chose capitation and FFS payment methods. Concerning payment methods, Andoh-Adjei et al. (2019) in Ghana found a difference in capitation preference depending upon the providers' region of residence. Apart from the above studies, the research on payment preferences is limited.

### 2.5 Research Gaps

The published research on provider payment mechanisms is diverse, despite limitations in the literature on some payment methods. It indicates two research gaps in strategic purchasing. First, current literature is biased to the Global North, which corresponds with high-income countries. It is due to most research originating from Europe, the US, Taiwan, and the UK. There are limited studies from Africa and the Middle East. The published research from Southeast Asia, which is also home to Myanmar, was not prominent in the existing literature. This gap is more pronounced in provider payment acceptability and preference research, in which Southeast Asia was often overlooked.

The second research gap in strategic purchasing is that none of the literature addressed provider views prior to implementing payment methods. Most research

examined payment methods, especially acceptability and preferences, during and after the introduction of payment mechanisms. Existing research did not include consultation with providers before developing the payment options. Therefore, the present research addressed these two knowledge gaps in strategic purchasing. This research investigated the opinions of GPs in Myanmar prior to introducing nationwide strategic purchasing. It also serves as the first-ever study in Southeast Asia that focuses on GPs' views on the acceptability of and preference for different strategic purchasing options. It represents one of the first studies to examine provider views before implementing strategic purchasing arrangements.

# 2.6 Chapter Summary

This chapter reviewed the literature on strategic purchasing, focusing on three areas of provider payment methods. It began by defining and describing the characteristics of the four main payment methods used in this research. It then presented the provider payment effects on health services, focusing mainly on provider behaviours, healthcare quality, and health outcomes. Finally, it continued by discussing the attributes of payment acceptability and provider preferences for different methods.

This review of prevailing literature revealed two knowledge gaps: a research bias to the Global North and a lack of studies on provider acceptance of and preferences for payment mechanisms before deployment. Therefore, the present research addresses these two knowledge gaps by investigating the acceptability of different payment methods to GPs and their preferences prior to introducing nationwide strategic purchasing arrangements in Myanmar.

# 3 Chapter III: Methodology and Methods

# 3.1 Chapter Introduction

This research aimed to explore the relationships between the demographic and other attributes of GPs in Myanmar and their acceptance of and preference for different payment methods for the health services they provided. Research to date has only examined GP payment acceptability and preferences after establishing nationwide strategic purchasing arrangements. This type of approach is limited as none of the studies investigated payment acceptability and preferences prior to their execution. Yé et al. (2016) showed that prior engagement and consultation with stakeholders was essential to improve the acceptance of a payment method. Therefore, this research sought to understand Myanmar GPs perceptions, attitudes, and beliefs about payment methods before introducing strategic purchasing arrangements. It addressed three research questions:

- 1. Do the socio-demographic characteristics of GPs influence their acceptance and preferences for payment type?
- 2. Do the clinics' geographical locations or practice settings influence GPs' acceptance and preferences for payment type?
- 3. Do the clinic health services and delivery influence GPs' acceptance and preferences for payment type?

This chapter presents the research methods used to answer the three questions. First, it describes the study design, including the research methodology and the development of the data gathering instrument. Then, it explains how participant recruitment, data collection and data analysis were undertaken, and, finally, the chapter presents the ethical and cultural considerations of the study.

# 3.2 Research Methodology and Methods

This research applied a quantitative methodology, specifically a cross-sectional study design. Cross-sectional studies are relatively quick and inexpensive since they collect data from a population at one specific point in time (Salazar, Crosby, et al., 2015). They also examine the prevailing characteristics of a single group of people selected based

on their particular variables of interest (Hackshaw, 2015). Cross-sectional studies are observational in nature and are also known as descriptive research. The results are helpful for drawing inferences from existing differences among the participants or gathering preliminary data to support further research and experimentation.

A cross-sectional study was an appropriate methodology for this research for several reasons. This study identified the main characteristics of GPs to describe their payment preferences at a specific point in time. Since it is the first study of this kind in Myanmar, a short study with a large number of participants is advantageous. Furthermore, one-time data collection is favourable with the limited timeline and budget when a follow-up study is unaffordable. The survey in this cross-sectional study did not necessitate face-to-face questioning, which was problematic due to the COVID-19 pandemic. Given these factors, a cross-sectional study was determined as the best method for this research.

## 3.3 Data Gathering Instruments

A self-completed, structured, anonymised questionnaire was administered through a Qualtrics online questionnaire (Qualtrics, Provo, UT). Online questionnaires are a cost-effective way to reach a targeted population within a short period of time (Wright, 2017). The questionnaire comprised closed questions with a limited range of possible responses (Hague, 2006). The questionnaire also provided additional response options, such as "choose all that apply" and "others, please specify" to allow supplemental answers (Check & Schutt, 2012).

The development of the questionnaire followed the key design principles of Hague (2006). These principles require the developer to:

- decide the required information,
- list and refine the questions,
- develop, sequence and layout the response format, and
- pre-test the questionnaire.

First, this research collected the information that influenced payment acceptability and preferences based on the findings from existing literature. For instance, Sackey and

Amponsah (2017) and Andoh-Adjei et al. (2016) identified regions of residence, while Halvorsen et al. (2012) and Holte et al. (2015) reported that the number of patients was associated with the providers' payment method acceptance and preferences. Hence, this research collected data on these variables to understand their relationships with payment type acceptance and preferences in Myanmar. In addition, local research such as that by Myint et al. (2019) guided this study in identifying the characteristics of Myanmar participants. The literature review also allowed this research to define the socio-demographic characteristics of GPs and their clinic services profile.

The information collated from those sources was used to develop and refine the survey questions. A codebook was also prepared to organise the data at a fundamental level (Salazar, Mijares, et al., 2015). A codebook helps identify how the variables were defined and measured (Appendix F: Researcher's Codebook). Once the questions were designed and sequenced, an independent translator translated the questionnaire from English into Burmese. They were then uploaded to the Qualtrics website (Appendix D: Qualtrics Online Survey).

Pre-testing of the questionnaire was conducted with eight Myanmar GPs who had at least six months' experience in clinical practice. Pre-testing assesses the feasibility of the research and validity of the measurement tool. It also reviews the participant recruitment and data gathering procedures (Hassan et al., 2006). This research performed pre-testing in two stages: 1) after developing the questions to check their comprehensibility, and 2) after uploading the questions onto the Qualtrics website to ensure 'good flow'. The GPs provided feedback on the issues of wording, question sequence, and questionnaire format. The questions were modified until the questionnaire met the needs of the research in an appropriate format for participants. The questionnaire was then locked, and the link to the website was made live.

## 3.4 Sample Population and Sampling Method

The sample population for the study was Myanmar GPs. This research applied convenience sampling to recruit participants. However, convenience sampling is a non-probability sampling method and therefore cannot determine representation of the population (Schonlau et al., 2002). Although probabilistic sampling methods are always

desirable to generalise the findings of any study, contextual circumstances are also critical in examining the research work. This research used Facebook Ads Manager (FAM) to target the GPs through a Facebook page linked to the online survey. The Facebook advertisements invited GPs to participate and asked them to refer the survey to other potential participants.

The aim was to recruit 10% of the available population. In 2015, Myanmar had a recorded population of 3,911 GPs (Latt et al., 2016). It was assumed that the GP population in 2020 was approximately 6,000, and therefore a sample size of approximately 600 participants would achieve 10% recruitment.

## 3.5 Participant Recruitment

Facebook was used to recruit participants. Facebook is the most popular social media platform in Myanmar, with 22 million active users out of the 54.23 million population (Kemp, 2020). Unfortunately, no data is available regarding the number of GP Facebook users. It is assumed that many GPs have Facebook accounts as Facebook has become a medium for continuing medical education in the Myanmar health sector. In addition, this research was unable to collect data through face-to-face methods due to a limited budget and COVID-19 travel restrictions. As a result, Facebook became the primary recruitment tool to reach the target population quickly and inexpensively.

A Facebook page (Figure 4) linked to an online survey was created and distributed to the potential participants using FAM. The page was also sent to non-governmental organisations (NGOs) collaborating with GPs, with a request that they disseminate it within their networks. The NGOs posted the Facebook advertisement in their private Facebook group. It was also shared via the primary investigator's personal Facebook account. FAM enables people to develop advertising campaigns to target specific user groups defined by their attributes (Perrotta et al., 2021). These attributes include the demographic characteristics (e.g., age and location) and a set of traits that Facebook identifies using algorithms from users' behaviours on the network (e.g., interests).

Figure 4: Facebook Page for Online Survey



FAM has several advantages and disadvantages. The benefits of using Facebook advertisements are efficiency (timesaving), cost-effectiveness and widespread coverage. It also enables researchers to recruit participants from diverse residential areas, which can be restrictive due to the cost when conducting a face-to-face survey (Grow et al., 2020). The disadvantages include self-selection bias and non-representativeness of the sample since Facebook does not cover the total population (Perrotta et al., 2021). However, there is growing evidence that population samples recruited from Facebook are not significantly different from traditional research recruitment strategies regarding demographic characteristics (Kalimeri et al., 2020). Therefore, it was assumed that the participants recruited into this study were not significantly different from the overall population.

The objective of the advertising campaign was to generate clicks on the online survey link. For this study, the targeted audience of the advertisement was defined by age, location, university, and interests (Table 3). The advertisements mainly consisted of advertising text and images, which made invitations to GPs across Facebook. In addition, the advertisements defined the inclusion criteria for participants to take part in the research. Individuals were recruited if they were able to meet the following inclusion criteria:

- 1. a graduate of one of the Medical Universities in Myanmar,
- 2. at least six months' experience working as a GP, and
- 3. currently working as a GP, including a specialist GP.

The research excluded some GPs due to potential conflict of interest issues. They were the GPs who currently work in the UHC projects for the Myanmar Ministry of Health and Sports or for the international NGOs (INGOs). As some UHC projects were piloting strategic purchasing methods simultaneous to this research, their experiences with provider payment methods may bias their survey responses.

The Facebook advertisement reached 50,316 people between 5<sup>th</sup> December 2020 and 17<sup>th</sup> January 2021 (Appendix B: Facebook Advertisement (English Version) and Appendix C: Facebook Advertisement (Burmese Version)). During this period, there were 1,071 clicks on the survey link.

**Table 3:** Targeted Audience of Facebook Advertisement

Characteristics	Targeted Facebook Users
Age	22 – 65+
Location	Myanmar
School/University	<ul> <li>University of Medicine, Magway</li> <li>University of Medicine, Mandalay</li> <li>University of Medicine 2, Yangon</li> </ul>
Interests	<ul> <li>Bachelor of Medicine</li> <li>Bachelor of Surgery</li> <li>Royal College of General Practitioners</li> <li>General Practitioner</li> </ul>

Six hundred and twenty-two participants who met the eligibility criteria and provided consent were recruited to the study.

## 3.6 Data Collection

The data was collected over three months, from mid-October 2020 to the end of January 2021. The Qualtrics online survey was disseminated to potential participants in three different ways:

- Facebook advertisements through FAM,
- the investigator's social and professional networks, and
- NGOs collaborating with GPs, such as Population Services International (PSI)
   and Myanmar Medical Association (MMA).

Despite the different distribution channels used, Facebook was the primary tool for recruiting participants. The Qualtrics online survey consisted of five sections, all in Burmese. Participants were required to complete the first four sections, with the final section optional. The sections were defined as follows:

- eligibility criteria,
- health services characteristics,
- provider payment mechanisms,
- participant's demographics, and
- lucky draw.

Depending on the participants' responses, the questionnaire required participants to answer a minimum of 22 questions. The time required to complete the questionnaire was expected to be approximately 10 –15 minutes. During the pre-testing stage, GPs took 10 –20 minutes. The data metrics showed that participants took an average of 24 minutes to complete the survey. However, it is challenging to determine the accurate time it took to complete. Online respondents often take their time to complete online questionnaires and sometimes leave the site, leaving the questionnaire unfinished. (Nayak & Narayan, 2019).

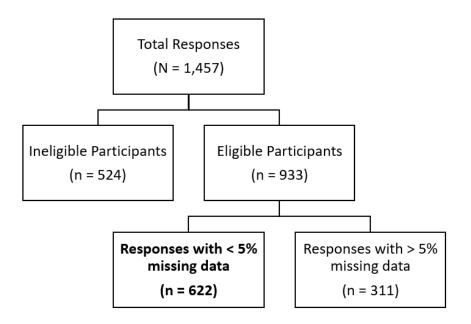
After completing the main survey (sections 1-4), the participants had the option to answer a final question in section five for entry into a 'lucky draw'. If the participants completed this section, which required them to enter their mobile phone number, they were entered into a draw to win a mobile top-up card (Appendix E: Lucky Draw Survey). The GPs mobile phones were directly topped up with 5,000 MMK (5 NZD) if they won one of the draws. The lucky draw section was optional and separate from the main questionnaire to minimise the possibility of identifying participants, as the questionnaire was anonymous.

Only the primary investigator was able to access the Facebook page and the data stored on the Qualtrics website for data security purposes. The Qualtrics website automatically saved the questionnaire responses on its website, which was encrypted and had credible data security (Qualtrics, 2021). Once the data collection was completed, the data were analysed using IBM SPSS version 27.

## 3.7 Data Analysis

One thousand four hundred and fifty-seven individuals clicked on the Qualtrics questionnaire website. Five hundred and twenty-four participants were not eligible for the study and left the survey after reading the participant information page or answering the eligibility criteria. This research accepted responses with less than 5% missing data, leaving 622 eligible participants after removing 311 questionnaires with more than 5% missing data (Figure 5). An independent translator translated the questionnaire responses from Burmese into English (Appendix I: Confidentiality Agreement with Translator).

**Figure 5:** Flowchart Showing Questionnaire Responses

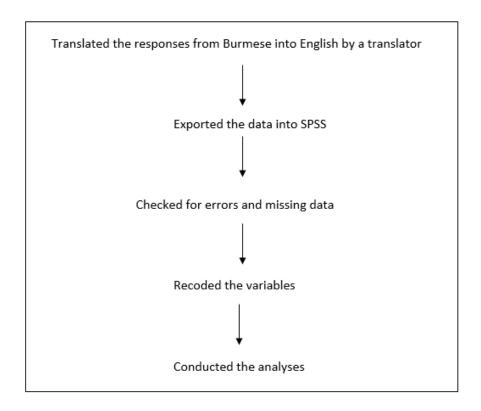


Then, the data were exported into SPSS and checked for errors and missing data (Figure 6). Error checking is essential in data analysis since even minor errors can result

in data distortion (Pallant, 2016). For the purposes of missing data, a pair-wise exclusion method was used. For any discrepancy between participants' multiple response choices and their free-text answers, the free-text response was used if it contradicted the multiple-choice response.

This study used the visual binning function of SPSS to categorise the continuous 'age' variable into three age groups. The outcomes variable, payment acceptability, was recoded from a 5-point scale into 'acceptable' and 'unacceptable'. The neutral responses were not used in the analysis as the respondents indicated no preference. A similar method was applied for payment preferences, collapsing the variables into 'preferred' and 'not preferred'.

Figure 6: Flowchart of the Data Analysis Process



### 3.8 Ethics and Cultural Considerations

The Auckland University of Technology Ethics Committee (AUTEC) approved the research on October 12, 2020, reference number 20/300 (Appendix H: Ethics Approval Letter). The study also underwent a cultural consultation process. A small number of GPs were invited to provide cultural consultation at the early stages of the research planning. Cultural consultation is good research practice and improves research

legitimacy and shared responsibility (Dickert & Sugarman, 2005). It was conducted to understand more about the working culture of Myanmar GPs in this research. Specifically, the example case scenario presented in Question 4.1 of Appendix D: Qualtrics Online Survey required an appropriate understanding of their culture to ensure GPs were able to relate to the scenario.

# 3.9 Chapter Summary

This chapter presented the methodology used for this study. A cross-sectional study design using a structured, anonymised questionnaire administered through a Qualtrics online survey was employed. The target population was Myanmar GPs. This research required a sample size of approximately 600 participants, and 622 participants were recruited using a convenience sampling method. Recruitment was conducted using three channels: Facebook advertisement, the investigator's networks, and NGOs. The data analysis involved translation from Burmese into English, error checking, and data recoding. Ethics approval was obtained, and cultural considerations were addressed prior to commencing the study.

# 4 Chapter IV: Findings

## 4.1 Chapter Introduction

The study aimed to identify associations between GP socio-demographic attributes, clinic location, clinic service provision, acceptance of, and preferences for specific strategic purchasing methods. The research objective was investigated using three research questions:

- 1. Do the socio-demographic characteristics of GPs influence their acceptance and preferences for payment type?
- 2. Do the clinics' geographical locations or practice settings influence GPs' acceptance and preferences for payment type?
- 3. Do the clinic health services and delivery influence GPs' acceptance and preferences for payment type?

The chapter begins by providing baseline descriptive information for the GPs surveyed, including frequencies (*n*), percentages (%), maximum and minimum values, median (*Med*) and interquartile range (*IQR*), as well as attributes of health service provision, and delivery. Next, it presents the GPs' third-party affiliations and their acceptance of and preferences for specific payment methods. Finally, the chapter presents the variables that predicted the specific payment method acceptance and preferences of GPs.

### 4.2 GP Socio-demographic Characteristics

Six hundred and twenty-two GPs' surveys were analysed. Survey respondents were primarily males (n = 456, 73.3%), 161 (25.9%) were females, and 5 (0.8%) GPs did not want to disclose their gender identity. Ages ranged from 23 to 75 years (Med = 33 years, IQR = 7 years). Age was non-normally distributed, skewness 1.51 (SE = .09), kurtosis 1.19 (SE = 1.97), indicating that the data was right-skewed, i.e., the sample had a greater proportion of younger GPs.

Although all respondents had completed their MB BS degree, a further 189 (30.4%) also had postgraduate qualifications, including diplomas, master's, and doctoral degrees (Table 4). The percentage of females (n = 35, 21.7%) reporting completing a

master's or PhD degree was almost twice that of males (n = 54, 11.8%). The results showed that the majority of survey participants had limited experience of working or studying abroad, with only 83 (13.3%) reporting that they had worked or studied in another country (Table 4). A chi-squared test of independence showed a significant relationship between GPs' age and international work/study experience,  $\chi^2$  (2, n = 622) = 11.3, p = < .05. Older GPs (55 years and above) reported more experience in overseas work/study experience (22.6%) than those aged 33 years and younger (9.4%). A significant association was also shown between GP education level and overseas work/study experience,  $\chi^2$  (2, n = 622) = 79.9, p = < .001. Thirty-three (37.1%) master's/PhD graduates had overseas work/study experience compared to just 24 (5.5%) GPs who only held an MB BS.

The average monthly income reported showed that 169 (27.2%) participants earned more than 2,000 NZD ( $\approx$  1,400 USD or 2,000,000 MMK) per month. A chi-squared test for independence showed a significant relationship between age and monthly income,  $\chi^2$  (4, n = 622) = 14.8, p = < .05. Thirty seven percent (36.9%) of GPs aged 55 years and older earned more than 2,000 NZD/month compared to 30.9% of those aged 34–54 years and 22% of those 33 years and younger. While only 57 (30.2%) of respondents with postgraduate qualifications reported a monthly income more than 2,000 NZD. A chi-squared test of independence showed that there was no significant association between postgraduate qualifications and reported monthly incomes,  $\chi^2$  (4, n = 622) = 1.55, p = .82.

**Table 4:** Demographic Characteristics of General Practitioners

Characteristics of GPs	Frequency (n)	Percentage (%)
Age		
≤ 33	318	51.1
34–54	220	35.4
55+	84	13.5
Gender		
Male	456	73.3
Female	161	25.9
Did not want to disclose	5	.8
Highest Education		
MB BS	433	69.6
Postgraduate Diploma	100	16.1
Master's, PhD/Doctorate	89	14.3
Foreign Experience		
No	539	86.7
Yes	83	13.3
Average Family Income		
<1,000 NZD	224	36.0
1,000 NZD to 2,000 NZD	229	36.8
2,000 NZD to 3,000 NZD	81	13.0
3,000 NZD to 4,000 NZD	34	5.5
>4,000 NZD	54	8.7

*Note*. 1 New Zealand Dollar ≈ 0.70 United States Dollars ≈ 1,000 Myanmar Kyats.

### 4.3 Clinic Services Profile

Survey participants responded to questions about the clinic services, the number of health services they provided, and service delivery characteristics (Appendix D: Qualtrics Online Survey, questions 3.1 to 3.11).

### 4.3.1 Profile of Health Services Provided

Nearly all the respondents surveyed stated that their clinic prioritised general medical care (n = 603, 97%), and only 19 (3%) of the clinics focused on specialist medical care. Approximately three-quarters of the clinics (n = 458, 73.6%,) offered more than one health service (Table 5). Compared to GP clinics in the states (n = 23, 3.69%,), the clinics in the regions offered more ( $\geq 4$ ) health services (n = 124, 19.9%). However, this

result was statistically insignificant,  $\chi^2$  (6, n = 622) = 12.6, p = .05. GP clinics in urban areas (n = 87, 13.9%) also provided more health services compared to peri-urban (n = 34, 5.47%) and rural clinics (n = 26, 4.18%). This was also statistically not significant,  $\chi^2$  (12, n = 622) = 12.5, p = .41.

In addition to general medical care, 60.6% (n = 377) of clinics offered health education and promotion, 41.6% (n = 259) performed minor operation procedures which have low infection risk, and 29.6% (n = 184) provided laboratory investigations (Figure 7). Only 1.93% (n = 12) of clinics performed major surgery which required extensive incisions, and 6.91% (n = 43) provided services other than the listed options in the survey. These included rapid diagnostic testing (n = 11, 1.77%) and electrocardiogram services (n = 7, 1.13%).

**Table 5:** Number of Health Services Provided by Clinics

Number of Health Services Provided by Clinics	Frequency (n)	Percentage (%)
1	164	26.4
2	156	25.1
3	155	24.9
4	86	13.8
5	37	5.9
6	14	2.3
7	10	1.6

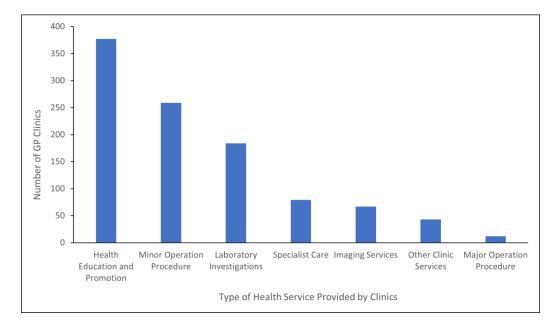


Figure 7: Type of Health Services Provided by Clinics

## 4.3.2 Characteristics of Clinic Service Delivery

The clinic service delivery characteristics — GP practice experience, clinic opening hours, patient waiting time, number of patients per day, consultation fees — were non-normally distributed (Appendix A, Table 13). Seven of the respondents (1.13%) worked for non-profit charity clinics providing free-of-charge healthcare. Therefore, there was no consultation fee for their services. These data have been excluded from the analyses. Only statistically significant correlations are reported among the clinic service delivery characteristics (p < .05). The results showed that the more experienced the GP, the higher the number of daily patient consultations, and, as expected, the longer the patient wait time. Similarly, the higher the number of patient consultations at the clinic, the longer the clinic opening hours. However, consultation fees did not correlate to any other variable (Table 6).

Table 6: Spearman Correlation among the Characteristics of Clinic Service Delivery

Characteristics of Clinic Service Delivery	1	2	3	4	5
1 Time practising as GP	-	-	.26*	.11*	-
2 Clinic Opening Hours	-	-	.4*	-	-
3 Average Consultation Load	.26*	.4*	-	.25*	-
4 Patient Waiting Time	.11*	-	.25*	-	-
5 Consultation Fees	-	-	-	-	-

Note: \*p< .05 (2-tailed).

## 4.3.3 Clinic Locations and Practice Settings

The survey collected geographical location data in the form of states and regions. It also collected the clinical practice setting, urban, peri-urban, or rural, where the GP clinics were situated. The majority of GP clinics (n = 507, 81.5%) were located in the regions where the predominant ethnicity, Bamar, resided. The Yangon region accounted for 200 (32.2%) of GP clinics, followed by the Mandalay region 154 (24.8%), Bago region 40 (6.4%), Ayeyarwady region 32 (5.1%), and the Sagaing region with 30 (4.8%). The remaining 115 GP clinics (18.5%) were in the states where Myanmar's ethnic minorities reside. Of these, 36 (5.8%) were in Shan, 31 (5%) in Mon, Kayin state had 21 (3.4%), and 18 (2.9%) were in Kachin state. GP clinics from Kayah, Chin, and Rakhine states represented only 3 (0.5%) of the total number of clinics (Figure 8). Just over half of the GP clinics, 338 (54.3%), were in urban areas. A quarter was classed as peri-urban, 162 (26%), and a fifth was rural, 122 (19.6%).

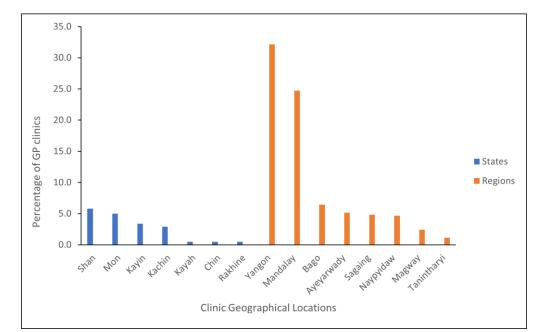


Figure 8: Clinic Locations by Regions and States

## 4.3.4 GP Affiliation with Third-party Organisations

Half of the GPs, 313 (50.3%), were affiliated with one or more non-governmental, third-party organisations. There were statistically significant associations between affiliation and GPs' age, education, income, clinical practice setting, and the number of health services provided (Table 7). The majority of younger GPs (≤33 years), 189 (61.2%), were not affiliated with any third-party organisation, while older GPs were affiliated with third-party organisations. Seventy-four GPs (23.9%) with master's or PhD degrees were not affiliated with third-party organisations, although 238 (76%) of GPs holding MB BS were affiliated. The affiliated GPs worked more in clinics in urban areas, 178 (56.9%), delivered more health services, 95 (30.3%), and had incomes over 2,000 NZD, 104 (33.2%).

**Table 7**: Pearson Chi-Squared Test Results with GP Affiliation

GP Characteristics	n	Pearson Chi-Squared Value	df
Age Groups	622	51.5**	2
Education	622	47.4**	2
Income	622	11.8*	2
Practice Setting	622	8.59*	2
Number of health services	622	33.3*	6

*Note.* \* = p < .05; \*\* = p < .001.

Of the affiliated GPs (n = 313), 235 (75%) joined only one third-party organisation, while 25% of GPs (n = 78) were affiliated with more than one organisation. The majority of GPs were affiliated with MMA and PSI. Only 11 GPs (3.51%) were not affiliated with either organisation. The third-party organisations for the remaining 11 GPs included Alliance Myanmar, Myanmar Liver Foundation, and Myanmar Social Security Board.

Each third-party organisation adopted a different GP payment mechanism. In addition, the organisations often used two or more payment methods at the same time (n = 61, 20.1%), depending on the types of healthcare programmes. The most popular payment method was performance-based payment (n = 164, 54.1%), followed by FFS (n = 38, 12.5%) (Table 8). Unconventionally, 7.3% (n = 22) of third-party organisations used subsidised drugs, free-of-charge test kits, and other payments in kind instead of monetary rewards.

**Table 8**: General Practitioners' Third-party Organisation Affiliation

Third-party Organisation Affiliation	Frequency (n)	Percentage (%)	
Affiliation			
No	309	49.7	
Yes	313	50.3	
Total	622	100	
Number of Affiliated Organisation			
Affiliated with one organisation	235	75	
Affiliated with two organisations	70	22.4	
Affiliated with three or more organisations	8	2.6	
Total	313	100	
Type of Third-party Organisation			
MMA only	101	32.3	
PSI only	123	39.3	
Others only	11	3.51	
MMA + PSI	57	18.2	
MMA + Others	9	2.88	
PSI + Others	4	1.28	
MMA + PSI + Others	8	2.56	
Total	313	100	
Third-party Organisation Payment Type			
Salary	18	5.9	
Performance-based payment	164	54.1	
FFS	38	12.5	
Two or more payment methods	61	20.1	
Other payment methods	22	7.3	
Total	303*	100	

*Note.* \* Only complete datasets were used.

# **4.4 GP** Acceptance of Payment Methods

The research inquired about the acceptability of four payment methods. These were capitation, FFS, salary, and performance-based payment. Payment acceptability data were collected using a 5-point Likert scale: very acceptable, acceptable, neutral, unacceptable, and very unacceptable (Likert, 1932).

Performance-based payment method was the most acceptable payment method with an acceptability response (very acceptable and acceptable) of 83.9% (n = 522) and a neutral response of 11.1% (n = 69). FFS was the second most acceptable payment method (n = 386, 62.1%) and had a neutral response of 21% (n = 131). It was followed by capitation (n = 320, 51.4%) with a neutral response of 28% (n = 172). After omitting the neutral responses, the differences between acceptability (very acceptable and acceptable) and unacceptability (very unacceptable and unacceptable) of these three payment methods were statistically significant (p < .001). However, the salary acceptability was 38.4% (n = 239) with a neutral response of 24% (n = 152), for which the difference was statistically insignificant (p = .75) (Figure 9).

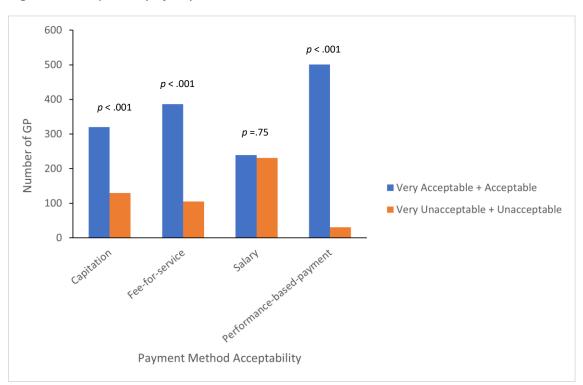


Figure 9: Acceptability of Payment Methods

## 4.5 GP Preferences for Payment Methods

The payment method preferences were collected on a 4-point Likert scale: most preferred, preferred, not preferred, and least preferred (Likert, 1932). The results showed that the GPs preferred performance-based payment, followed by FFS, capitation, and then salary (Table 9).

**Table 9:** Summary of Provider Payment Preferences

	Payment Method Order	Frequency (n)	Percentage (%)
1st Preferred			
	Performance-based payment	205	36.6%
	FFS	175	31.3%
	Capitation	122	21.8%
	Salary	58	10.4%
	Total	560*	100%
2nd Preferred			
	FFS	171	31.3%
	Performance-based payment	166	30.2%
	Capitation	119	21.6%
	Salary	94	17.1%
	Total	550*	100%
3rd Preferred			
	Capitation	152	28.5%
	Salary	150	28.1%
	Performance-based payment	122	22.8%
	FFS	110	20.6%
	Total	534*	100%
4th Preferred			
	Salary	247	45.9%
	Capitation	138	25.7%
	Performance-based payment	86	16.0%
	FFS	67	12.5%
	Total	538*	100%

*Note.* \*Only complete datasets were used.

When preference choices were collapsed into preferred (most preferred and preferred) and not preferred (least preferred and not preferred), performance-based payment was the most preferred payment method, with 33.4% (n = 371) of GPs choosing this payment method as their first preference. FFS was the second preferred payment method (n = 346, 31.2%). The least preferred payment method was salary, with 72% (n = 397) of GPs choosing this as their least preferred method, followed by capitation 55% (n = 290) (Figure 10). The reasons GPs gave as to why they most

preferred the performance-based payment method were that they were satisfied with clinical quality, continuity of care, and provision of health promotion and education services. Conversely, the salary was the least preferred method, with GPs reporting being concerned about income insecurity, financial risks, and their freedom in clinic management with this payment method.

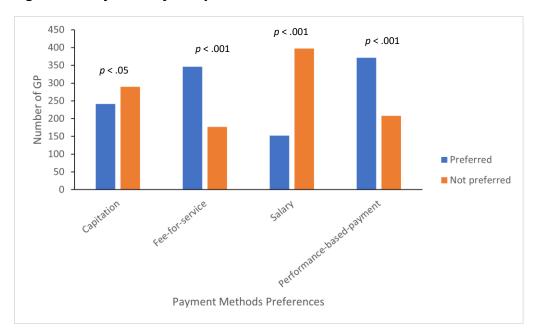


Figure 10: Preferences for Payment Methods

# 4.6 Predictions for Payment Acceptability and Preference

Binary logistic regression was used to identify if there were predictors for payment acceptability and preference. First, the assumptions of binary logistic regression, multicollinearity, and outliers were checked.

## 4.6.1 Multicollinearity

Multicollinearity was checked using collinearity diagnostics. All variables had tolerance values of more than .1, showing no intercorrelations among the predictors (Appendix A, Table 12).

## 4.6.2 Outliers

The binary logistic regression checked the outliers in the case-wise list table. Cases with Z residual values above 2.5 were classified as outliers and were removed for the purpose of analysis.

#### 4.6.3 Predictors

The GPs' age, gender, education, overseas experience, and monthly income were entered into the logistic regression model for each payment acceptability and preference. For the clinic services profile, the following variables were entered into the model:

- 1. service provision variables, i.e., the number of health services provided.
- 2. service delivery characteristics, i.e., time practising as a GP, clinic opening hours, average consultation load, patient waiting time, and consultation fees.
- clinic location (states and regions) and practice settings (urban, peri-urban, and rural); and
- 4. GP affiliation with third-party organisations and the number of affiliated organisations.

#### 4.6.3.1 Capitation

Only two variables, GP gender and clinic consultation load, predicted capitation payment acceptability (p < .05). The goodness of fit test showed the Omnibus Test was p < .05 and Hosmer-Lemeshow Test was p > .05, indicating the model was a fit for the variables. Both significant variables reported negative relationships with capitation acceptability. Compared to male GPs, the odds of capitation payment acceptability were decreased by 52.9% in female GPs (95% CI = 18.4 - 72.8) and for each additional patient visit, the odds of accepting the capitation payment decreased by 2% (95% CI = 0.5 - 3.5). No variable significantly predicted capitation as a payment preference.

## 4.6.3.2 Fee-for-service (FFS)

Both binary logistic regression models for FFS acceptability and preference, which included all variables, were not statistically significant, confirming that a binary logistic model did not fit the data. Further modelling was not able to identify a suitable fit for the data.

#### 4.6.3.3 Salary

Salary had the greatest number of predictor variables for acceptability and preference for payment. For acceptability, GPs' education level and clinic consultation load predicted salary acceptability (p < .05). The Omnibus Test was p < .05, and the Hosmer-

Lemeshow Test reported p > .05, demonstrating the model's fit with the data. GPs' education reported a positive relationship with salary acceptance. GPs with a master's or PhD degree had 2.2 times the odds of accepting the salary payment compared to the MB BS holders (95% CI = 1.11 - 4.45). However, the clinic consultation load showed a negative relationship. For a one patient increase in the daily number of patient consultations, the odds of GP salary acceptability decreased by 2.2% (95% CI = 0.8 - 3.7).

For GPs, whose preference was salary payment, there were three predictor variables, number of health services, clinic opening hours, and consultation load (p < .05). Both the Omnibus test (p < .05) and Hosmer-Lemeshow test (p > .05) showed that the model was a fit for the data. The number of health services provided and the clinic opening hours reported positive relationships with the salary preference. The GPs who provided five health services at their clinics showed 3.53 times greater odds of preferring the salary payment than the GPs with only one health service (95% CI = 1.36 - 9.16). For every hour the clinic opening hours increased, the odds of preferring the salary payment were 1.07 times greater (95% CI = 1.01 - 1.13). However, there was a negative relationship between clinic consultation load and salary preference. For every additional patient increase in the number of daily patient consultations, the odds of GPs preferring salaries were decreased by 2.5% (95% CI = 0.9 - 4.2).

#### 4.6.3.4 Performance-based payment

Three variables, namely foreign experience, practice settings and clinic consultation load, predicted the acceptability of performance-based payment. The model fit tests showed that both models were a good fit for the variables. GP foreign experience and practice settings had negative relationships with performance-based payment acceptability (p < .05). GPs with overseas experience showed an 83.9% decrease in the odds of accepting the performance-based payment method compared to GPs with no overseas experience (95% CI = 49 - 94.9). Compared to urban GPs, the odds of accepting the performance-based payments were decreased in peri-urban GPs by 66.2% (95% CI = 3.9 - 88.1) and rural GPs by 74.5% (95% CI = 16.4 - 92.2).

The clinic consultation load showed a positive relationship with the performance-based payment preference (p < .05). The odds of preferring performance-based

payment were 1.02 times greater for every additional patient in the number of daily patient consultations (95% CI = 1.01 - 1.04).

# 4.7 Chapter Summary

This chapter presented the findings of data analyses from 622 Myanmar GPs. First, it discussed the socio-demographic characteristics and clinic services profile of the GPs. Then, logistic regression was conducted to identify any predictive variables for payment acceptability and preferences. GPs' gender and clinic consultation load were able to predict the capitation acceptance, and education and consultation load predicted the salary acceptance. Foreign experience and clinic practice settings were predictors for performance-based payment acceptability. Finally, average consultation load, clinic opening hours, and the number of health services predicted salary and performance-based payment preferences.

# 5 Chapter V: Discussion and Conclusion

## **5.1** Chapter Introduction

This research sought to strengthen the understanding of GPs' acceptance of different strategic purchasing methods and their payment preferences to inform UHC planning in Myanmar. It examined the relationship between the socio-demographic characteristics of the participating GPs and their acceptance of and preference for payment methods, specifically, capitation, FFS, salary, and performance-based payments. The study also probed the role played by the GP clinic locations and practice settings and investigated how their clinic profiles and service delivery characteristics influenced payment preferences as well as the acceptability of different payment methods.

This chapter discusses the study findings in relation to the main research questions. It also examines other findings on payment acceptability and GP payment preferences. The chapter concludes by considering the study's strengths and limitations, as well as their implications for practice and research.

## 5.2 GP Acceptance of Different Payment Methods

This study examined how acceptable four different strategic purchasing methods were to Myanmar GPs. Consistent with existing studies, acceptability was defined as the degree to which the GPs agree with a specific payment method (Ayala & Elder, 2011). Findings indicated that performance-based payment was the most acceptable payment type, with 522 (83.9%) of all responses that express acceptability (very acceptable and acceptable). FFS was the second most acceptable method with 386 (62.1%) of all 'acceptability' responses, followed by salary payment with 239 (38.4%) of all 'acceptability' answers. It was not possible to determine the participants' views on the acceptability of capitation, given that 172 (28%) of all responses on this payment type were recorded as neutral (neither acceptable nor unacceptable).

These results are more comprehensive than those reviewed in the existing literature.

None of the published studies to date compared the acceptability of these four payment methods. However, in the case of capitation, Blecher et al. (1995) and Conrad

et al. (2009) respectively reported that 61.3% and 77.4% of healthcare providers in South Africa and the United States did not accept capitation as a provider payment method.

### 5.2.1 GP Socio-demographic Attributes and Payment Acceptability

Study results indicated that three out of the five socio-demographic factors examined, namely GPs' gender, advanced postgraduate qualifications, and overseas experience, predicted the acceptability of specific payment methods for the participating GPs (Table 10). Findings indicated that if the GP had achieved advanced postgraduate qualifications (Master's/PhD degree), the odds of accepting salary payment increased by 2.2 times (95% CI = 1.11 - 4.45), compared to responses by their colleagues with only MB BS degrees.

However, the other two socio-demographic variables, gender and overseas experience, were negatively associated with specific payment types. Female GPs were less likely to accept capitation payments than male colleagues, with decreased odds of 52.9% (OR = 0.47, 95% CI = 0.27 - 0.82). The odds of accepting performance-based payment decreased by 83.9% (OR = 0.16, 95% CI = 0.05 - 0.51) if GPs had overseas experience.

These findings are, in part, consistent with those of existing studies. For instance, Ogundeji et al. (2021) found that providers in Canada interested in academia, teaching, and research preferred salary payment methods since the payment method allowed them to explore these interests. However, as Ogundeji et al. studied payment preferences rather than payment acceptability, their results are not directly comparable with this study's findings. Yet, their results offer a plausible explanation for the greater acceptability of salary as a payment option for more highly educated GPs.

On gender and the acceptability of payment methods, this study's findings differed from those reported by Sackey and Amponsah (2017) in Ghana, who found no gender difference in the acceptability of capitation. This could be attributed to two differences between the studies. First, while the present research focused exclusively on GPs acceptance of specific payment types, the Ghana study extended beyond providers to include the general population, as well. Second, the Ghana study was conducted after

the establishment of the country's national health insurance programme, leading to participant familiarity with the payment method. The present research, however, was conducted prior to the introduction of nationwide strategic purchasing arrangements.

The research findings from Ghana were also in contrast with the results of lower levels of acceptability for performance-based payment among Myanmar GPs with overseas experience. This difference could be explained by the higher levels of awareness about provider payment methods among GPs with overseas experience. Sackey and Amponsah (2019), Obadha et al. (2020) and Yé et al. (2016) noted the role of awareness in shaping provider opinions on payment methods. However, contrary to the findings in the present research, these other studies reported that greater awareness of various payment methods increased their acceptability.

#### 5.2.2 GP Clinic Location, Practice Settings and Payment Acceptability

In this study, 622 participating GPs were distributed across all Myanmar states and regions, reflecting a diverse range of urban, peri-urban, and rural practice settings. Despite the expectation that GP acceptability of different payment options would vary by geographic locations, the results did not demonstrate this. Only one variable, clinical practice settings, was associated with a specific payment type. Findings showed that GPs with clinics in peri-urban and rural practice settings were less likely to accept performance-based payment than urban-based GPs (Table 10). For GPs in peri-urban and rural practice settings, the odds of accepting the Performance-based payment decreased by 66.2% (OR = 0.34, 95% CI = 0.12 - 0.96) and 74.5% (OR = 0.26, 95% CI = 0.08 - 0.84), respectively.

This result differs from those published by Andoh-Adjei et al. (2019), Halvorsen et al. (2012), Holte et al. (2015), and Sackey and Amponsah (2017). These previous studies in Norway and Ghana noted regional differences in the acceptability of capitation or capitation and FFS combined. In addition, Sackey and Amponsah's Ghana research reported that urban providers were 10% more likely to accept capitation than those in rural areas.

The different findings in the present research could partly be attributable to the low participation of Myanmar GPs from states compared with those from regions. Of the

622 participants, 507 (81.5%) GP clinics were in more urbanised regions, including 354 (56.9%) from Yangon and Mandalay, Myanmar's most populous cities. By comparison, only 115 (18.5%) clinics were in less urbanised states occupied primarily by Myanmar's ethnic minorities.

The higher acceptability of performance-based payment in urban settings could also be attributed to the uneven distribution of GPs affiliated with third-party organisations. In this research, GPs in urban practice settings were more likely to be affiliated with third-party organisations than their colleagues in peri-urban and rural areas (p < .05). Due to the widespread use of performance-based payment by third-party organisations, GPs in urban settings would have been more familiar with this method than other payment types.

## **5.2.3 GP Clinic Profile and Payment Acceptability**

This research examined eight variables related to GP clinic profile to test their association with GPs' acceptance of different payment methods. Of these, only the daily clinic consultation load was associated with specific payment types (Table 10). Results showed that the daily clinic consultation burden had a significant negative relationship with the acceptability of both capitation and salary payment methods. These indicated that, with each additional patient consultation, the odds of accepting capitation payment decreased by 2% (OR = 0.98, 95% CI = 0.97 - 0.99) and by 2.2% for salary payment (OR = 0.98, 95% CI = 0.96 - 0.99).

As anticipated, GPs with a higher daily consultation burden were less likely to accept a salary. As salary is a fixed payment method, it is neither linked to the number of consultations nor to the number of enrolled patients. This result differed from the findings published by Holte et al. (2015), whose research in Norway found that the GPs with more patients preferred salaried contracts.

In the context of Myanmar, however, salary payments are lower than in high-income countries such as Norway. The average monthly salary for a public sector medical doctor is 250 NZD (1 NZD  $\approx$  1,000 MMK), while the private salaried doctors receive at least 600 NZD. The GPs in this research earned an average of 1,000 NZD per month if they had 15 daily patient consultations at a cost of 3 NZD per patient. Since the GPs

earned a higher income than other medical doctors and those with higher patient consultations could earn more, it can be assumed that GPs would be less likely to accept the fixed salary payment option.

A finding that was not expected, was that GPs with a higher daily patient consultation load were less likely to accept the capitation payment. A possible explanation might be the rising burden of non-communicable diseases, combined with patterns of health-seeking behaviour in Myanmar. In the period 2009 to 2019, non-communicable diseases accounted for 70% of death and disability in Myanmar, reflected in high numbers of chronically ill patients requiring regular follow-up care (University of Washington, 2020). In Myanmar, people are also not hesitant to seek clinic services when they are sick, with GP clinics being the second most frequently attended source of healthcare, after rural health centres (Aye et al., 2019; Moe et al., 2012). These factors suggest a combination of high patient numbers attending GP clinics with non-communicable diseases with a greater need for more follow-up consultations. This may discourage GPs from accepting capitation payments calculated on the basis of enrolled patients alone.

Table 10 summarises the socio-demographic characteristics, clinical practice settings, and clinic service profiles that have significant associations with the acceptability of payment methods, and also compares them with their counterpart variables.

**Table 10:** Variables that Predicted the Acceptability of Payment Methods

Characteristics of CDs		Odds	95% CI	
Characteristics of GPs	В	Ratio	Lower	Upper
Socio-demographic Characteristics				
Capitation				
Male				
Female	-0.75	0.47*	0.27	0.82
Salary				
MB BS				
Postgraduate Diploma	-0.18	0.84	0.47	1.48
Master's or PhD	0.80	2.23*	1.11	4.45
Performance-based payment				
Foreign Experience	-1.83	0.16*	0.05	0.51
GP Practice Settings				
Performance-based payment				
Urban				
Peri-urban	-1.08	0.34*	0.12	0.96
Rural	-1.37	0.26*	0.08	0.84
GP Clinic Profile				
Capitation				
Average Patient Consultation	-0.02	0.98*	0.97	0.99
Salary				
Average Daily Patient Consultation	-0.02	0.98*	0.96	0.99

*Note.* \* = p < .05.

# **5.3 GP Preferences for Different Payment Methods**

This research also investigated GP preferences for the four payment methods: capitation, FFS, salary, and performance-based payment. In strategic purchasing, previous studies have defined preference as a greater interest in one specific payment method over another (van Overbeeke et al., 2019). In this study, performance-based payment was the most preferred method with 371 (59.6%) of all responses that express a preference, followed by FFS with 346 (55.6%) of 'preferred' answers. Salary was the least preferred payment option (397, 63.8% of 'not preferred' responses), with capitation recording 290 (46.6%) of 'not preferred' responses.

The finding on salary corroborates that of Karakolias et al. (2017), who reported that the majority of primary care doctors in Greece did not prefer salary. However, they differ from the study that found Norwegian GPs preferred salary over capitation and FFS (Holte et al., 2015). While previous studies examined payment preferences for capitation, FFS, and salary, none of the literature reviewed considered performance-based payment methods.

## **5.3.1 GP Clinic Profile and Payment Preferences**

Of the eight clinic factors examined in relation to GP payment preferences, this research found that only three variables were statistically significant. These were the number of health services offered, clinic opening hours, and daily patient consultations (Table 11). Study findings indicated that the number of health services offered and clinic opening hours had positive associations with GP preferences for salary payment. If the GPs provided five health services, their odds of preferring salary payment increased 3.53 times (95% CI = 1.36 - 9.16) compared to the views of GPs who offered only one clinic service. The odds of preferring salary payment also increased by 1.07 times (95% CI = 1.01 - 1.13) for every additional hour GPs' clinics were open. Both findings that favoured salary were unexpected.

Several previous studies on salary preferences found that younger female providers preferred salary payment due to its flexibility for work—life balance (Halvorsen et al., 2012; Holte et al., 2015; Karakolias et al., 2017; Ogundeji et al., 2021; Wright & Batchelor, 2002). These studies suggest that healthcare providers also value these 'non-cash' forms of payment beyond financial remuneration for their services (for instance, having flexibility for family responsibilities). In the present research, the appreciation of payment in kind was also found in GPs responses with respect to affiliated third-party organisations payments. However, this research could not demonstrate any association between GPs' age or gender and their salary preferences. It could possibly be due to the skewness of research data that only included 161 (25.9%) female GPs and a high proportion of GPs ≤33 years old (51.1%).

This research also reported that GPs' daily consultation load was negatively correlated with salary preference but positively associated with performance-based payment. The odds of preferring salary payment decreased by 2.5% (OR = 0.98, 95% CI = 0.96 - 0.99),

for every additional consultation, while preferences for performance-based payment increased by 1.02 times (95% CI = 1.01 - 1.04). Consistent with findings on payment acceptability, participating GPs did not prefer salary payments if they had a higher consultation load. However, when the payment was linked with performance indicators, GPs were more likely to prefer it. These results are attributable to GPs' views on the relative income security of both methods. Performance-based payment was seen to secure higher income than salary if GPs had a high consultation load. This finding is also reflected in research by Ogundeji et al. (2021), which reported the influence of income security on physicians' payment preferences in Canada.

Table 11 describes the health service profile variables, the number of health services and clinic service delivery, which have significant relationships with salary and performance-based preferences.

**Table 11:** Variables that Predicted Preferences for Payment Methods

Characteristics of GPs	В	Odds	95% CI		
Characteristics of GPS		Ratio	Lower	Upper	
Salary					
Number of Health Services					
One Health Service					
Two Health Services	0.38	1.46	0.84	2.54	
Three Health Services	-0.20	0.82	0.45	1.49	
Four Health Services	-0.05	0.95	0.46	1.94	
Five Health Services	1.26	3.53*	1.36	9.16	
Six Health Services	-0.53	0.59	0.12	2.83	
Seven or more Health Services	-1.16	0.31	0.05	1.99	
Clinic Service Delivery					
Clinic Opening Hours	0.06	1.07*	1.01	1.13	
Average Daily Patient Consultation	-0.03	0.98*	0.96	0.99	
Performance-based payment					
Average Daily Patient Consultation	0.02	1.02*	1.01	1.04	
Alata X OF					

*Note*. \* = p < .05.

#### 5.4 Conclusion

#### **5.4.1** Revisiting Aims and Objectives

The importance of UHC in providing equitable quality healthcare without financial duress has been reinforced during the COVID-19 pandemic. The global health emergency has underlined the need for agile, accessible primary healthcare support, especially for those most at risk. In this context, healthcare financing represents a central element of successful UHC (Jamison et al., 2006), including the strategic purchasing of services from front-line primary health providers, such as GPs.

The rationale underpinning this study recognised that the views and perceptions of Myanmar GPs on potential strategic purchasing payment methods could usefully inform future decision-making in the implementation of UHC. Through an online survey of GPs in Myanmar, this research explored the acceptability of different payment methods already used in UHC settings elsewhere, as well as GP preferences for specific payment methods. It found that performance-based payment was the most acceptable and most preferred payment method, followed by FFS. Salary was the least acceptable and least preferred, while findings on capitation acceptability as a payment method could not be determined.

#### **5.4.2** Study Strengths

This study demonstrated several strengths. First, this research is the first study in Myanmar to investigate GPs' perceptions, attitudes, and beliefs on the acceptability and preference of specific payment methods, with the scope to be a baseline study for strategic purchasing in Myanmar. It may also be one of the first studies on this subject in Southeast Asia. Second, the study demonstrated the utility and cost-effectiveness of online survey methods in achieving wide geographic coverage of a dispersed target group. By applying Facebook Ads Manager, the study was able to include GPs from all of Myanmar's 15 states and regions.

In contrast, conducting this research using face-to-face methods would have been both time-consuming and expensive. In the context of COVID-19, it would not have been feasible to conduct a face-to-face survey. Despite disruptions to health service

provision due to lockdown conditions in the country, this data gathering method demonstrated its effectiveness in reaching a wide range of GPs across Myanmar.

#### **5.4.3 Study Limitations and Challenges**

This study also has limitations. These include difficulties in verifying the authenticity of respondents claiming to be GPs, as well as a potentially biased study sample. The primary investigator could not verify the identification or registration numbers of participating GPs due to the survey's anonymity. Despite recruiting study participants through third-party organisations, it was not possible to independently verify the GP accreditation of those responding.

Findings may also be non-representative due to skewing of the participants' gender and age distribution. Of the study respondents, 456 (73.3%) were male GPs, and 318 (51.1%) were 33 years old or younger. Although it was not possible to compare this distribution to the socio-demographic profile of all GPs practising in Myanmar, the skewing in favour of younger male respondents represents an explicit limitation. Third, although Facebook usage is widespread in Myanmar, its use as a data collection tool is highly likely to have excluded GPs without a Facebook account.

A fourth critical challenge of this study draws on its implementation during the COVID-19 pandemic, a global health emergency. On the one hand, it could be argued that this period did not represent the steady-state conditions expected to underpin the expansion of UHC. On the other hand, data collection in Myanmar during the pandemic provided crucial insights into GPs' perceptions about the sustainability of their practice during an emergency. Such insights are central for developing health services in fragile states or those that experience wide-ranging shocks.

As a fifth challenge, the security situation in Myanmar now compromises the feasibility of implementing the findings as initially anticipated. The prevailing political tension imposes major obstacles to continue the provision of safe and secure health services within the country. Given the unstable and fragile conditions, the prospects of moving forward to UHC in Myanmar at this time or in the near future are unlikely to be realistic.

# 5.5 Study Implications

### **5.5.1** Implications for Health Services

There are several important implications of this study. First, it highlighted the value of systematic research on healthcare provider opinions prior to the introduction of nationwide strategic purchasing arrangements. The findings of GP preferences for performance-based payment and this payments method's higher level of acceptability signal the importance of considering payment options beyond the 'blunter' strategic purchasing approaches such as capitation or FFS.

The research also underscored the limited number of empirical studies on strategic purchasing in LMICs, especially in Southeast Asia. While advances in UHC are urgently sought in these and other Asian countries, prevailing research on strategic purchasing mainly derives from higher-income countries, whose development context differs markedly from that of LMICs.

This study provided critical insight into the continuity of primary health services in Myanmar, an LMIC experiencing both long-term epidemiological changes in its disease burden, as well as major short-term shocks and severe service disruptions due to rising state fragility. Furthermore, research findings that highlighted the positive relationship between the number of daily patient consultations and GPs' preferences for performance-based payment suggest this may the result of the impact of a growing non-communicable disease burden, characterised by the need for more follow-up consultations. The capacity to accommodate this would need to be considered in any nationwide strategic purchasing plan.

In the specific context of Myanmar, the political turmoil and the collapse of government-funded health services since February 2021 represent a significant and discouraging setback for the country's hopes and plans for UHC by 2030. However, this study offers possible insight into achieving the continuity of primary health services during such crises. Despite the disruption of government-funded community health services, anecdotal evidence indicates that third-party organisations and their affiliated GPs have continued to function, providing limited healthcare services in the country. While third-party organisations and their affiliated GPs cannot function on a scale needed for nationwide coverage, this capacity and architecture represent a

possible short-term alternative to government services during public health or other complex emergencies.

# **5.5.2** Implications for Future Research

This study highlighted the need for more empirical research on strategic purchasing, especially in LMICs. Future research in Myanmar should consider applying a mixed-method approach to explore GPs' perceptions, attitudes, and beliefs in-depth. It should also contemplate possible payment options to withstand simultaneous and multiple shocks, especially as the previous public health system has collapsed. In covering matters that were beyond the scope of the present research, future studies also need to incorporate the opinions of other stakeholders such as third-party organisations, health policymakers, and health finance specialists.

# 5.6 Chapter Summary

This chapter discussed the study's findings in relation to existing literature and highlighted both the practice and the research implications of study results. It revisited the finding that performance-based payment was the most accepted and most preferred payment method for participating GPs and explained the differences in GPs' perceptions, attitudes, and beliefs of the payment methods investigated. These findings underscored the challenges in introducing a "one-size-fits-all" nationwide approach to strategic purchasing arrangements for front-line practitioners.

The chapter also noted the shortcomings of generic UHC strategies and strategic purchasing mechanisms. These methods assume stable, steady-state conditions but may not consider human-induced or naturally triggered shocks. In the case of Myanmar, since 2020, the combined effects of the ongoing COVID-19 pandemic and political tensions have resulted in significant disruptions and the collapse of government health services. It represents a serious setback in the country's progress towards achieving UHC by 2030.

However, the research suggests that, despite severe disruption to government health services, there has been continuity of care by those front-line health services funded through third-party organisations. This, among other under-researched themes identified in this study, requires further investigation.

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# **Appendix A: Tables**

Appendix A includes the tables for multicollinearity testing of logistic regression, descriptive statistics of clinic service delivery, and logistic regression results of statistically significant payment acceptability and preference models.

 Table 12: Collinearity Diagnostics of Variables

Characteristics of Clinic Service Delivery	Collinearity	Statistics
- Characteristics of Chilic Service Delivery	Tolerance	VIF
GP experience in years	0.966	1.036
Average clinic opening hours per day	0.826	1.210
Average waiting time per patient in minutes	0.934	1.071
Average consultation fees per patient	0.971	1.029
Average consultation load per day	0.793	1.260

*Note*. Dependent variable: Age. The variables showed no correlation.

 Table 13: Descriptive Statistics of Clinic Service Delivery

			((0.5)	Skew	ness	Kurtosis		
Clinic Service Delivery	n	Range	Med (IQR) —	Z	SE	Z	SE	
Duration of GP practice (years)	619*	0.5 – 50	7 (6)	1.74	.09	2.23	.19	
Average clinic opening hours per day (hours)	620*	1 – 24	7 (4)	2.18	.09	5.95	.19	
Average waiting time per patient (minutes)	603*	1 – 126	15 (10)	3.41	.10	16.6	.19	
Average number of patients per day	620*	1 – 200	15 (20)	3.34	.09	18.3	.19	
Average consultation fees per patient (Myanmar Kyats)	619*	0 – 50,000	3000 (1500)	11.29	.09	180	.19	

Note. \* Only complete datasets used.

 Table 14: Logistic Regression Predicting Odds of Capitation Acceptability

Characteristics of GPs	В	S.E.	Wald	df	Çi a	Odds Ratio -	95%	CI
Characteristics of GPS	В	S.E.	vvalu	uı	Sig.	Odds Ratio =	Lower	Upper
Socio-demographic Characteristics								
Age Groups			.78	2	.68			
34 – 54 years	-0.16	0.28	0.31	1.00	0.58	0.86	0.49	1.49
>= 55 years	-0.62	0.71	0.77	1.00	0.38	0.54	0.13	2.16
Gender			7.21	2	.03			
Female*	-0.75	0.28	7.21	1.00	0.01*	0.47	0.27	0.82
Unspecified Gender	20.24	18353	0.00	1.00	1.00	614115938	0.00	
Education			.628	2	.73			
Postgraduate Diploma	0.28	0.36	0.61	1.00	0.43	1.32	0.66	2.67
Master's or PhD	0.13	0.39	0.12	1.00	0.73	1.14	0.53	2.44
Foreign Experience	0.46	0.42	1.23	1.00	0.27	1.59	0.70	3.59
Average Monthly Income			5.55	4	.24			
1,000 NZD to 2,000 NZD	-0.04	0.28	0.02	1.00	0.90	0.97	0.55	1.69
2,000 NZD to 3,000 NZD	-0.71	0.38	3.60	1.00	0.06	0.49	0.24	1.02
3,000 NZD to 4,000 NZD	0.46	0.77	0.36	1.00	0.55	1.58	0.35	7.10

> 4,000 NZD	-0.45	0.48	0.88	1.00	0.35	0.64	0.25	1.63
Clinic Geographical Location								
Region	-0.21	0.30	0.49	1.00	0.49	0.81	0.45	1.46
Practice Setting			2.37	2	.31			
Peri-urban	0.33	0.29	1.27	1.00	0.26	1.39	0.78	2.47
Rural	-0.20	0.31	0.44	1.00	0.51	0.82	0.45	1.49
Clinic Health Services Profile								
Number of Health Services			6.99	6	.32			
Two Health Services	-0.47	0.32	2.13	1.00	0.15	0.62	0.33	1.18
Three Health Services	-0.50	0.34	2.19	1.00	0.14	0.61	0.31	1.18
Four Health Services	-0.54	0.39	1.97	1.00	0.16	0.58	0.27	1.24
Five Health Services	1.15	0.82	1.98	1.00	0.16	3.16	0.64	15.65
Six Health Services	0.02	1.01	0.00	1.00	0.99	1.02	0.14	7.38
Seven or more Health Services	20.07	17740	0.00	1.00	1.00	522574555	0.00	
Clinic Service Delivery								
GP Duration of Experience	0.01	0.02	0.29	1.00	0.59	1.01	0.97	1.06
Clinic Opening Hours	0.04	0.04	1.22	1.00	0.27	1.04	0.97	1.12
Average Consultation Load*	-0.02	0.01	6.65	1.00	0.01*	0.98	0.97	1.00

Patient Waiting Time	0.00	0.01	0.10	1.00	0.76	1.00	0.98	1.01
Consultation Fees	0.00	0.00	1.04	1.00	0.31	1.00	1.00	1.00
GP Affiliation with a third-party organ	isation							
Affiliated third-party organisation	-0.03	0.96	0.00	1.00	0.98	0.97	0.15	6.39
Number of Affiliated Network			2.41	2	.29			
Affiliated with two third-party organisations	0.39	0.95	0.17	1.00	0.68	1.48	0.23	9.59
Affiliated with three or more third-party organisations	1.02	1.01	1.03	1.00	0.31	2.77	0.39	19.90
Constant	1.71	0.52	11.06	1.00	0.00	5.54		

 Table 15: Logistic Regression Predicting Odds of Salary Acceptability

Characteristics of CDs	D	C F	Wold	df	C:~	Odds	95%	S CI
Characteristics of GPs	В	S.E.	Wald	ar	Sig.	Ratio	Lower	Upper
Socio-demographic Characteristics								
Age Groups			4.71	2	.09			
34 – 54 years	-0.12	0.24	0.27	1.00	0.61	0.88	0.55	1.42
>= 55 years	1.06	0.66	2.62	1.00	0.11	2.90	0.80	10.51
Gender			.67	2	.72			
Female	-0.18	0.25	0.55	1.00	0.46	0.83	0.52	1.35
Unspecified Gender	0.40	1.33	0.09	1.00	0.76	1.50	0.11	20.36
Education			6.93	2	.03			
Postgraduate Diploma	-0.18	0.29	0.37	1.00	0.55	0.84	0.47	1.48
Master's or PhD*	0.80	0.35	5.13	1.00	0.02*	2.23	1.11	4.45
Foreign Experience	-0.17	0.34	0.27	1.00	0.60	0.84	0.43	1.62
Average Monthly Income			3.86	4	.43			
1,000 NZD to 2,000 NZD	0.03	0.24	0.01	1.00	0.92	1.03	0.64	1.64
2,000 NZD to 3,000 NZD	-0.45	0.36	1.58	1.00	0.21	0.64	0.32	1.29
3,000 NZD to 4,000 NZD	0.16	0.48	0.12	1.00	0.73	1.18	0.46	3.01

> 4,000 NZD	-0.56	0.44	1.64	1.00	0.20	0.57	0.24	1.34
Clinic Geographical Location								
Region	-0.33	0.27	1.57	1.00	0.21	0.72	0.43	1.21
Practice Setting			1.21	2	.55			
Peri-urban	0.25	0.25	0.98	1.00	0.32	1.28	0.79	2.08
Rural	-0.05	0.27	0.03	1.00	0.86	0.96	0.56	1.63
Clinic Health Services Profile								
Number of Health Services			3.72	6	.72			
Two Health Services	-0.07	0.28	0.05	1.00	0.82	0.94	0.54	1.62
Three Health Services	-0.19	0.29	0.44	1.00	0.51	0.83	0.47	1.45
Four Health Services	-0.23	0.34	0.45	1.00	0.50	0.80	0.41	1.56
Five Health Services	0.43	0.47	0.85	1.00	0.36	1.54	0.62	3.85
Six Health Services	0.37	0.71	0.27	1.00	0.61	1.44	0.36	5.84
Seven or more Health Services	-1.30	1.30	1.00	1.00	0.32	0.27	0.02	3.49
Clinic Service Delivery								
GP Duration of Experience	-0.03	0.02	2.02	1.00	0.16	0.97	0.93	1.01
Clinic Opening Hours	0.06	0.03	3.68	1.00	0.06	1.06	1.00	1.12
Average Consultation Load*	-0.02	0.01	8.88	1.00	0.003*	0.98	0.96	0.99

Patient Waiting Time	-0.01	0.01	0.92	1.00	0.34	0.99	0.98	1.01
Consultation Fees	0.00	0.00	0.00	1.00	0.98	1.00	1.00	1.00
GP Affiliation with a third-party organisation								
Affiliated third-party organisation	0.56	0.83	0.46	1.00	0.50	1.76	0.34	9.00
Number of Affiliated Network			.38	2	.83			
Affiliated with two third-party organisations	-0.38	0.83	0.21	1.00	0.65	0.69	0.14	3.47
Affiliated with three or more third-party organisations	-0.22	0.86	0.07	1.00	0.80	0.80	0.15	4.31
Constant	0.67	0.45	2.28	1.00	0.13	1.96		

 Table 16: Logistic Regression Predicting Odds of Performance-based Payment Acceptability

Characteristics of GPs	В	C E	Wald	df	Cia	Odds Ratio	95%	6 CI
Characteristics of GPS	ь	S.E.	waiu	uı	Sig.	Odds Ratio	Lower	Upper
Socio-demographic Characteristics								
Age Groups			1.21	2	.55			
34 – 54 years	-0.54	0.49	1.21	1.00	0.27	0.59	0.23	1.52
>= 55 years	18.40	4040	0.00	1.00	1.00	97820315	0.00	
Gender			2.67	2	.26			
Female	-0.26	0.51	0.26	1.00	0.61	0.77	0.29	2.08
Unspecified Gender	-2.64	1.65	2.55	1.00	0.11	0.07	0.00	1.82
Education			.47	2	.79			
Postgraduate Diploma	0.26	0.66	0.16	1.00	0.69	1.30	0.36	4.70
Master's or PhD	0.45	0.68	0.44	1.00	0.51	1.56	0.42	5.87
Foreign Experience**	-1.83	0.59	9.64	1.00	0.002**	0.16	0.05	0.51
Average Monthly Income			4.46	4	.35			
1,000 NZD to 2,000 NZD	0.72	0.53	1.83	1.00	0.18	2.06	0.72	5.86
2,000 NZD to 3,000 NZD	1.16	0.87	1.77	1.00	0.18	3.19	0.58	17.68
3,000 NZD to 4,000 NZD	0.28	0.95	0.09	1.00	0.77	1.33	0.21	8.51
> 4,000 NZD	-0.39	0.73	0.28	1.00	0.60	0.68	0.16	2.83

Clinic Geographical Location								
Region	-0.04	0.62	0.01	1.00	0.94	0.96	0.28	3.23
Practice Setting			6.14	2	.047			
Peri-urban*	-1.08	0.53	4.14	1.00	0.04*	0.34	0.12	0.96
Rural*	-1.37	0.61	5.09	1.00	0.02*	0.26	0.08	0.84
Clinic Health Services Profile								
Number of Health Services			5.16	6.00	0.52			
Two Health Services	0.46	0.59	0.61	1.00	0.44	1.59	0.50	5.08
Three Health Services	0.88	0.66	1.77	1.00	0.18	2.40	0.66	8.72
Four Health Services	-0.66	0.63	1.10	1.00	0.29	0.52	0.15	1.77
Five Health Services	0.24	0.88	0.08	1.00	0.78	1.28	0.23	7.18
Six Health Services	19.13	10130	0.00	1.00	1.00	203229843	0.00	
Seven or more Health Services	19.16	12918	0.00	1.00	1.00	208832576	0.00	
Clinic Service Delivery								
GP Duration of Experience	0.00	0.05	0.00	1.00	1.00	1.00	0.90	1.11
Clinic Opening Hours	-0.01	0.06	0.02	1.00	0.90	0.99	0.89	1.11
Average Consultation Load	0.00	0.02	0.02	1.00	0.90	1.00	0.97	1.03
Patient Waiting Time	-0.01	0.01	0.53	1.00	0.47	0.99	0.96	1.02

Consultation Fees	0.00	0.00	1.33	1.00	0.25	1.00	1.00	1.00
GP Affiliation with a third-party organisation	n							
Affiliated third-party organisation	17.91	12665.36	0.00	1.00	1.00	59809758	0.00	
Number of Affiliated Network			0.00	2.00	1.00			
Affiliated with two third-party organisations	-17.72	12665.36	0.00	1.00	1.00	0.00	0.00	
Affiliated with three or more third- party organisations	1.40	13386.20	0.00	1.00	1.00	4.06	0.00	
Constant	3.84	1.04	13.72	1.00	0.00	46.42		

 Table 17: Logistic Regression Predicting Odds of Salary Preference

Characteristics of CDs	D	C F	Wold	٦t	C:~	Odds	95%	6 CI
Characteristics of GPs	В	S.E.	Wald	df	Sig.	Ratio	Lower	Upper
Socio-demographic Characteristics								
Age Groups			.16	2	.93			
34 – 54 years	0.07	0.25	0.08	1	0.78	1.07	0.66	1.75
>= 55 years	-0.07	0.67	0.01	1.00	0.91	0.93	0.25	3.46
Gender			3.97	2	.14			
Female	0.20	0.25	0.62	1.00	0.43	1.22	0.75	1.98
Unspecified Gender	2.49	1.33	3.53	1.00	0.06	12.10	0.90	163.15
Education			1.21	2	.55			
Postgraduate Diploma	-0.25	0.33	0.60	1.00	0.44	0.78	0.41	1.47
Master's or PhD	-0.35	0.36	0.96	1.00	0.33	0.71	0.35	1.42
Foreign Experience	0.19	0.36	0.28	1.00	0.60	1.21	0.60	2.44
Average Monthly Income			6.64	4	.16			
1,000 NZD to 2,000 NZD	0.41	0.25	2.61	1.00	0.11	1.50	0.92	2.45
2,000 NZD to 3,000 NZD	0.35	0.37	0.94	1.00	0.33	1.43	0.70	2.92
3,000 NZD to 4,000 NZD	-0.28	0.64	0.19	1.00	0.66	0.76	0.22	2.65
> 4,000 NZD	0.96	0.44	4.85	1.00	0.03	2.62	1.11	6.18

Clinic Geographical Location								
Region	-0.23	0.27	0.72	1.00	0.40	0.79	0.46	1.36
Practice Setting			.63	2	.73			
Peri-urban	-0.02	0.26	0.01	1.00	0.94	0.98	0.60	1.62
Rural	-0.23	0.29	0.61	1.00	0.44	0.80	0.45	1.42
Clinic Health Services Profile								
Number of Health Services			13.48	6	.04			
Two Health Services	0.38	0.28	1.76	1.00	0.18	1.46	0.84	2.54
Three Health Services	-0.203	0.307	0.44	1.00	0.51	0.82	0.45	1.49
Four Health Services	-0.05	0.37	0.02	1.00	0.88	0.95	0.46	1.94
Five Health Services*	1.26	0.49	6.75	1.00	0.01*	3.53	1.36	9.16
Six Health Services	-0.53	0.80	0.44	1.00	0.51	0.59	0.12	2.83
Seven or more Health Services	-1.16	0.95	1.51	1.00	0.22	0.31	0.05	1.99
Clinic Service Delivery								
GP Duration of Experience	-0.01	0.02	0.19	1.00	0.66	0.99	0.95	1.04
Clinic Opening Hours*	0.06	0.03	5.06	1.00	0.03*	1.07	1.01	1.13
Average Consultation Load**	-0.03	0	8.65	1.00	0.003**	.98	0.96	0.99
Patient Waiting Time	0.00	0	0.38	1.00	0.54	1	0.99	1.02

Consultation Fees	0.00	0.00	0.53	1.00	0.47	1.00	1.00	1.00
GP Affiliation with a third-party organisation								
Affiliated third-party organisation	-1.16	1.26	0.85	1.00	0.36	0.31	0.03	3.72
Number of Affiliated Network			1.77	2	.41			
Affiliated with two third-party organisations	0.94	1.26	0.56	1.00	0.46	2.57	0.22	30.38
Affiliated with three or more third-party organisations	0.47	1.30	0.13	1.00	0.72	1.60	0.13	20.41
Constant	-1.04	0.47	4.94	1.00	0.03	0.35		

 Table 18: Logistic Regression Predicting Odds of Performance-based Payment Preference

Characteristics of CDs	В	C E	Wald	df	Sig.	Odds Ratio	95% CI	
Characteristics of GPs	В	S.E.					Lower	Upper
Socio-demographic Characteristics								
Age Groups			2.12	2	.35			
34 – 54 years	0.14	0.23	0.38	1	0.54	1.15	0.74	1.8
>= 55 years	0.89	0.61	2.10	1	0.15	2.42	0.73	8.01
Gender			5.43	2	.07			
Female	0.46	0	3.85	1.00	0.05	2	1.00	2.48
Unspecified gender	-1.27	1.11	1.32	1.00	0.25	0.28	0.03	2.45
Education			2.85	2	.24			
Postgraduate Diploma	0.49	0.29	2.84	1.00	0.09	1.63	0.92	2.88
Master's or PhD	0.17	0.31	0.31	1.00	0.58	1.19	0.64	2.20
Foreign Experience	-0.55	0.31	3.08	1.00	0.08	0.58	0.31	1.07
Average Monthly Income			6.35	4	.18			
1,000 NZD to 2,000 NZD	-0.39	0.23	3.01	1.00	0.08	0.68	0.44	1.05
2,000 NZD to 3,000 NZD	-0.51	0	2.51	1.00	0.11	1	0.32	1.13
3,000 NZD to 4,000 NZD	0.33	1	0.45	1.00	0.50	1	0.52	3.73
> 4,000 NZD	-0.59	0.41	2.06	1.00	0.15	0.56	0.25	1.24

Clinic Geographical Location								
Region	0.00	0.25	0.00	1.00	0.99	1.00	0.61	1.64
Practice Setting			1.88	2.00	0.39			
Peri-urban	-0.30	0.23	1.67	1.00	0.20	0.75	0.48	1.17
Rural	-0.22	0.25	0.74	1.00	0.39	0.81	0.49	1.32
Clinic Health Services Profile								
Number of Health Services			9.25	6.00	0.16			
Two Health Services	-0.28	0.25	1.23	1.00	0.27	0.76	0.46	1.24
Three Health Services	0.50	0.27	3.35	1.00	0.07	1.65	0.97	2.81
Four Health Services	-0.06	0.32	0.03	1.00	0.85	0.94	0.51	1.76
Five Health Services	-0.32	0.42	0.59	1.00	0.44	0.72	0.32	1.65
Six Health Services	0.141	0.709	0.04	1.00	0.84	1.15	0.29	4.63
Seven or more Health Services	20.61	12613	0.00	1.00	1.00	892143701	0.00	
Clinic Service Delivery								
GP Duration of Experience	-0.03	0.02	1.81	1.00	0.18	0.97	0.93	1.01
Clinic Opening Hours	-0.02	0.03	0.65	1.00	0.42	0.98	0.93	1.03
Average Consultation Load*	0.02	0.01	7.50	1.00	0.01*	1.02	1.01	1.04
Patient Waiting Time	0.00	0.01	0.12	1.00	0.73	1.00	0.99	1.01

Consultation Fees	0.00	0.00	0.05	1.00	0.83	1.00	1.00	1.00
GP Affiliation with a third-party organisation								
Affiliated third-party organisation	-0.86	0.89	0.93	1.00	0.34	0.42	0.07	2.43
Number of Affiliated Network			1.08	2	.58			
Affiliated with two third-party organisations	0.69	0.88	0.61	1.00	0.44	1.99	0.35	11.27
Affiliated with three or more third-party organisations	0.89	0.91	0.95	1.00	0.33	2.43	0.41	14.56
Constant	0.69	0.43	2.57	1.00	0.11	2.00		

## **Appendix B: Facebook Advertisement (English Version)**

#### An Invitation to Take Part in An Online Survey

Mingalarpar, Saya and Sayarma!

I am Ei Mon Thinn Kyu, a Master of Public Health student at Auckland University of Technology (AUT), New Zealand. I am from the 2005 batch of the University of Medicine, Mandalay, graduated in 2012. I have vast experience of working in the non-governmental sector for more than six years. May I kindly invite you to participate in my current Master of Public Health research.

First of all, let me explain a little bit about my research. When the universal health coverage is implemented in Myanmar, health services from the private providers will be purchased by either the government or the non-governmental organisations. Different types of payment methods are being used in health services purchasing. My research will investigate Myanmar general practitioners' preferences for healthcare provider payment mechanisms. This research aims to find the association between demographic and health service characteristics of general practitioners and their preferences for payment mechanisms.

This research is conducted through an online survey which takes 10-15 minutes of your time. Your confidential information including your name, medical license (SAMA) number, physical, and email addresses will not be asked in the survey. This research also includes 20 lucky draws of the phone bill, each of which worth 5,000 Myanmar kyats, as a token of appreciation.

Hence, may I invite you to participate in this survey if you are

- 1. graduated from one of the medical universities in Myanmar.
- 2. have experience working as a general practitioner in Myanmar for at least six months.

However, if you are currently working as a permanent staff of the universal health coverage projects in either department of the Ministry of Health and Sports or the

international or local non-governmental organisations, I am sorry to inform you that you will not be able to take part in this survey due to the potential conflict of interest.

If you would like to take part in the research, please click the following link and it will take you to the online survey page. By completing the survey, you agree to participate in this research. Any kind of discomfort or risk is not anticipated in this research. However, if you feel uncomfortable answering any of those questions in the survey, please simply quit the page. Removal of your data, after you have completed the survey, may not be possible since we cannot identify you based on your answers.

More information about this research will also be available on the first page of the online survey. If you are happy with the information provided, you are more than welcome to take part in our online survey.

Thank you so much for your time and effort.

# **Appendix C: Facebook Advertisement (Burmese Version)**



### အွန်လိုင်းစစ်တမ်းတွင် ပါဝင်ဖြေဆိုပေးရန် ဖိတ်ခေါ်ခြင်း

မင်္ဂလာပါ ဆရာဆရာမတို့ရှင့်

ကိုယ့်ကိုယ်ကိုယ် အရင် မိတ်ဆက်ပါရစေ။ ကျွန်မက အိမ္ဗန်သင်းကြူပါ။ နယူးဗီလန်နိုင်ငံ Auckland University of Technology (AUT) မှာ Master of Public Health ကို သင်ယူနေပါတယ်။ ကျွန်မက မန္တလေးဆေးကျောင်း 2005 batch ကဖြစ်ပြီး ၂၀၁၂ မှာ ဘွဲ့ရခဲ့ပါတယ်။ ကျောင်းပြီးတော့ NGO လောကမှာ ခြောက်နှစ်ကျော်လောက် အလုပ်လုပ်ခဲ့ပါတယ်။ အခုလက်ရှိ ကျွန်မရဲ့ MPH research မှာ ပါဝင်ဖြေကြားပေးဖို့ ဆရာဆရာမတို့ကို ဖိတ်ခေါ်ပါရစေ။

အရင်ဦးဆုံး ကျွန်မရဲ့ research အကြောင်းကို နည်းနည်းရှင်းပြချင်ပါတယ်။ မြန်မာနိုင်ငံမှာ လူတိုင်းလက်လှမ်းမီလွှမ်းခြုံနိုင်တဲ့ ကျန်းမာရေးစောင့်ရှောက်မှုစနစ် (Universal Health Coverage-UHC) အကောင်အထည်ပေါ်လာတဲ့အခါ ပုဂ္ဂလိကဆရာဝန်တွေဆီက ကျန်းမာရေးဝန်ဆောင်မှုတွေကို အစိုးရ ဒါမှမဟုတ် NGO အဖွဲ့အစည်းတွေက ဝယ်ယူကြမှာ ဖြစ်ပါတယ်။ အဲ့လို ဝယ်ယူတဲ့အခါမှာ အသုံးပြုတဲ့ ငွေပေးချေမှုနည်းလမ်းတွေ အများကြီးရှိပါတယ်။ ကျွန်မရဲ့ research ကတော့ ဒီနည်းလမ်းတွေနဲ့ ပတ်သက်ပြီး GPတွေအနေနဲ့ ဘယ်လိုနည်းလမ်းမျိုးကို ပိုသဘောကျတယ်ဆိုတာအပေါ် လေ့လာဆန်းစစ်ချင်တာပဲဖြစ်ပါတယ်။ ဒီသုတေသနမှာ GP တွေရဲ့ လက်ရှိပေးနေတဲ့ ကျန်းမာရေးဝန်ဆောင်မှုအချက်အလက်တွေနဲ့ ငွေပေးချေမှုစနစ် တစ်ခုနဲ့တစ်ခုအပေါ် နှစ်သက်မှုကွဲပြားခြင်းကြားမှာ ဆက်စပ်မှုရှိလားမရှိလားဆိုတာ ရှာဖို့ အဓိကရည်ရွယ်ပါတယ်။

ဒီသုတေသနကို အွန်လိုင်းစစ်တမ်းနဲ့ ကောက်ယူမှာဖြစ်ပြီး ဆရာ/ဆရာမတို့ရဲ့အချိန် ၁၀မိနစ်ကနေ ၁၅မိနစ် ဝန်းကျင်ပဲ ပေးရမှာဖြစ်ပါတယ်။ ဒီသုတေသနမှာ ဆရာဆရာမတို့ရဲ့ ကိုယ်ရေးအချက်အလက်တွေဖြစ်တဲ့ နာမည်၊ ဆမနံပါတ်၊ နေရပ်လိပ်စာ အတိအကျ၊ အီးမေးလိပ်စာ စတာတွေကို လုံးဝမမေးမြန်းပါဘူး။ ဒေတာကောက်ပြီးသွားတဲ့အခါကျရင်လည်း ပါဝင်ဖြေဆိုပေးတဲ့သူတွေကို ကျေးဇူးတင်တဲ့အနေနဲ့ ၅၀၀၀ တန် ဖုန်းဘေကဒ်၂၀ ကိုလည်း မဲဖောက်ပေးသွားမှာဖြစ်ပါတယ်။

ဒါ့ကြောင့် **GP လုပ်သက်အနည်းဆုံး ၆ လ**ရှိတဲ့ ဆရာ/ဆရာမတို့အနေနဲ့ အခု အွန်လိုင်းစစ်တမ်းမှာ ပါဝင်ဖြေဆိုပေးဖို့ မေတ္တာရပ်ခံပါရစေ။ ဒါပေမယ့် ဆရာဆရာမတို့က GP အပြင် ကျန်းမာရေးနဲ့အားကစားဝန်ကြီးဌာန သို့မဟုတ် အစိုးရမဟုတ်တဲ့ NGO အဖွဲ့အစည်းတွေရဲ့ <u>UHC project</u> တွေမှာ အမြဲတမ်းဝန်ထမ်းအနေနဲ့ အလုပ်လုပ်နေတယ်/ အလုပ်လုပ်ဖူးတယ် ဆိုရင်တော့ ဒီသုတေသနမှာ ပါဝင်ဖြေဆိုလို့မရပါဘူး။

ပါဝင်ဖြေဆိုပေးမယ့် ဆရာဆရာမများအနေနဲ့က အခုဖော်ပြထားတဲ့ link ကို နှိပ်လိုက်ရုံပါပဲ။ အဆုံးထိဖြေဆိုပေးပြီးတာနဲ့ ဆရာဆရာမတို့ဟာ ဒီသုတေသနမှာ ပါဝင်ဖို့ အလိုအလျောက် သဘောတူညီပြီးသားဖြစ်သွားမှာပါ။ ဒီသုတေသနမှာ ဆရာဆရာမအနေနဲ့ အဆင်မပြေမှု၊ စိတ်မသက်မသာဖြစ်မှုနဲ့ အန္တရာယ်တစုံတရာ ကြုံတွေ့ရလိမ့်မယ်လို့ လုံးဝမျှော်လင့်မထားပါဘူး။ တကယ်လို့ ဖြေဆိုရင်းနဲ့ အဆင်မပြေတဲ့ မေးခွန်းတွေပါလာခဲ့ရင်လည်း ဆရာဆရာမတို့အနေနဲ့ ဖြေလက်စကို ချက်ချင်းရပ်ပစ်ပြီး စစ်တမ်းကနေ ထွက်လိုက်လို့ရပါတယ်။ ကျွန်မတို့သုတေသီများဘက်က ဆရာဆရာမတို့အဖြေပေါ်မူတည်ပြီး ဘယ်သူဘယ်ဝါဆိုတာ ခွဲခြားလို့မရတဲ့အတွက် အားလုံးဖြေဆိုပြီးသွားရင်တော့ ဆရာဆရာမတို့ရဲ့အဖြေတွေကို ဖျက်ဖို့၊ ပြောင်းလဲဖို့ မဖြစ်နိုင်တော့ပါဘူး။

ဒီသုတေသနနဲ့ ပတ်သက်ပြီး ပိုပြီးပြည့်စုံတဲ့ အချက်အလက်တွေကို အွန်လိုင်းစစ်တမ်းရဲ့ ပထမဆုံးစာမျက်နှာမှာ အသေးစိတ်ဖော်ပြထားပါတယ်။ အားလုံးကို ကျေးဇူးအများကြီးတင်ပါတယ်ရှင်။ ကူညီပေးကြပါဦးနော်။

## **Appendix D: Qualtrics Online Survey**

# Preferences for healthcare provider payment mechanisms in Myanmar

#### **Survey Flow**

Block: ဖြေဆိုသူ သတင်းအချက်အလက်မှတ်တမ်း (1 Question)

Standard: သင်၏ စစ်တမ်းဖြေဆိုရန် ကိုက်ညီမှုကို စစ်ဆေးခြင်း (6 Questions)

Standard: ကျန်းမာရေးဝန်ဆောင်မှုပေးခြင်းဆိုင်ရာ အချက်အလက် (12 Questions)

Standard: ငွေပေးချေမှုနည်းလမ်းများ (14 Questions)

Standard: လူဦးရေဆိုင်ရာ အချက်အလက် (3 Questions)

Standard: ကျေးဇူးတုံ့ပြန်ခြင်းအစီအစဉ် (1 Question)

Page Break

Start of Block: ဖြေဆိုသူ သတင်းအချက်အလက်မှတ်တမ်း

မင်္ဂလာပါ။

ကျွန်မက နယူးဇီလန်နိုင်ငံ၊ Auckland University of Technology က ပြည်သူ့ကျန်းမာရေးဆိုင်ရာ မဟာဘွဲ့ ကျောင်းသူ အိမ္ပန်သင်းကြူ ဖြစ်ပါတယ်။ မြန်မာနိုင်ငံက အထွေထွေရောဂါကုဆရာဝန်တွေအနေနဲ့ ကျန်းမာရေး စောင့်ရှောက်မှုဆိုင်ရာ ငွေပေးချေမှု နည်းလမ်းတွေနဲ့ ပတ်သက်ပြီး ဘယ်လိုနည်းလမ်းတွေကို ပိုသဘောကျတယ်ဆိုတာအပေါ် စစ်တမ်းကောက်ယူတဲ့ သုတေသနတစ်ခုမှာ ပါဝင်ဖို့ ဆရာ/ဆရာမကို ဖိတ်ခေါ်ချင်ပါတယ်။

မြန်မာနိုင်ငံဟာ ၂၀၃၀ ခုနှစ်မှာ ဆင်းရဲချမ်းသာမရွေး လူတိုင်း လက်လှမ်းမီလွှမ်းခြုံနိုင်တဲ့ ကျန်းမာရေး စောင့်ရှောက်မှုစနစ် (Universal Health Coverage) ရရှိဖို့ ကြိုးစားနေတာ ဖြစ်ပါတယ်။ လူတိုင်း လက်လှမ်းမီလွှမ်းခြုံနိုင်တဲ့ ကျန်းမာရေး စောင့်ရှောက်မှုစနစ်ကို မြန်မာနိုင်ငံတွင်းမှာ အကောင်အထည်ဖော်တဲ့အခါ အထွေထွေ ရောဂါကုဆရာဝန်တွေ အပါအဝင် တစ်သီးပုဂ္ဂလဝန်ဆောင်မှုပေးသူတွေရဲ့ကျန်းမာရေး ဝန်ဆောင်မှုတွေကို အစိုးရ ဒါမှမဟုတ် ပြင်ပအဖွဲ့အစည်းတွေက ပြည်သူလူထုအတွက် ငွေပေးချေ ဝယ်ယူမှာ ဖြစ်ပါတယ်။ ဒီလို ဝယ်ယူတဲ့အခါမှာ အသုံးပြုမယ့် ငွေပေးချေမှုစနစ်တစ်ခုချင်းစီပေါ် မူတည်ပြီး ကွဲပြားခြားနားတဲ့ အကျိုးအမြတ်တွေကို အထွေထွေရောဂါကုဆရာဝန်တွေက ရရှိမှာပါ။ ဒီသုတေသနဟာ ကျန်းမာရေး စောင့်ရှောက်မှုဆိုင်ရာ ငွေပေးချေမှုစနစ်တွေနဲ့ ပတ်သက်လာရင် မြန်မာနိုင်ငံက အထွေထွေ ရောဂါကု ဆရာဝန်တွေရဲ့ပိုမိုသဘောကျတဲ့ ပုံစံတွေနဲ့ ယင်းတို့ရဲ့နောက်ခံလူဦးရေဆိုင်ရာနဲ့ ကျန်းမာရေးစောင့်ရှောက်မှုဆိုင်ရာ အချက်အလက်တွေကြား ဆက်နွယ်မှုကို ရှာဖွေသွားမှာ ဖြစ်ပါတယ်။ ဒီသုတေသနရဲ့ ရည်ရွယ်ချက်ကတော့ ပုဂ္ဂလိကဆရာဝန်တွေဆီက ကျန်းမာရေးဝန်ဆောင်မှုတွေကို ဝယ်ယူနိုင်မယ့် ငွေပေးချေစနစ်တစ်ခု မြန်မာနိုင်ငံမှာ အမြန်ဆုံးအကောင်အထည်ဖော်နိုင်ဖို့နဲ့ ကျန်းမာရေးမူဝါဒတွေ ချမှတ်တဲ့အခါမှာ အထွေထွေရောဂါကုဆရာဝန်တွေရဲ့ထင်မြင်ယူဆချက်များကိုပါ ထည့်သွင်းစဉ်းစားနိုင်ဖို့ ရည်ရွယ်ပါတယ်။

ဒီသုတေသနမှာ ဆရာ/ဆရာမရဲ့ နောက်ခံလူဦးရေဆိုင်ရာအချက်အလက်တွေနဲ့ ဆရာ/ဆရာမ အလုပ်လုပ်ကိုင်နေတဲ့ ဆေးခန်းရဲ့ ကျန်းမာရေးဝန်ဆောင်မှုဆိုင်ရာ အချက်အလက်တွေအကြောင်း မေးမြန်းမှာဖြစ်ပါတယ်။ အဲ့ဒီနောက်မှာတော့ ငွေပေးချေမှုစနစ် တစ်ခုချင်းစီအပေါ်အမြင်၊ ဆရာ/ဆရာမ ပိုမိုသဘောကျတဲ့ ငွေပေးချေမှုစနစ်များ အကြောင်းနဲ့ အကြိုက်ဆုံးနဲ့ မကြိုက်ဆုံး ရွေးချယ်မှုတွေကို ဘာကြောင့် ရွေးချယ်ရတယ် ဆိုတဲ့ အကြောင်းပြချက်တွေကို မေးမှာဖြစ်ပါတယ်။ ဒီသုတေသနဟာ အစိုးရမဟုတ်တဲ့ အဖွဲ့အစည်းတစ်ရပ်ရပ်နဲ့ သော်လည်းကောင်း၊ မြန်မာနိုင်ငံ ကျန်းမာရေးနှင့် အားကစားဝန်ကြီးဌာနနဲ့သော်လည်းကောင်း တစ်စုံတစ်ရာ ပတ်သက်ခြင်း မရှိပါဘူး။ ဒီသုတေသနရဲ့သုတေသီဟာ နယူးဇီလန်နိုင်ငံ နိုင်ငံခြားရေးနဲ့ ကုန်သွယ်ရေးဝန်ကြီးဌာနက ပေးအပ်တဲ့ နယူးဇီလန်စကောလားရှစ်ကို ရရှိထားသူဖြစ်ပေမယ့်လည်း ဝန်ကြီးဌာနဟာ ဒီသုတေသနရဲ့ဘယ်အပိုင်းကိုမှ ကြားဝင်စွက်ဖက်မှာ မဟုတ်ပါဘူး။

ဒီသုတေသနမှာ ပါဝင်ခြင်းဟာ ဆရာ/ဆရာမရဲ့မိမိသဘောဆန္ဒအလျောက် မိမိရွေးချယ်မှုသာ ဖြစ်ပါတယ်။ ဒီသုတေသနမှာ ပါဝင်ဖို့ ရွေးချယ်ခြင်း၊ မရွေးချယ်ခြင်းကြောင့်လည်း ဆရာ/ဆရာမအပေါ် ကောင်းကျိုးဆိုးကျိုး တစ်စုံတစ်ရာ ရှိမှာ မဟုတ်ပါဘူး။ ဆရာ/ဆရာမအနေနဲ့ မေးခွန်းတွေကို ဖြေဆိုနေစဉ်အတွင်းမှာ ပါဝင်ဖြေဆိုမှုကနေ အချိန်မရွေး နုတ်ထွက်လိုက်နိုင်ပါတယ်။ စစ်တမ်းကို ပြီးဆုံးအောင် ဖြေဆိုခြင်းအားဖြင့် ဆရာ/ဆရာမဟာ ဒီသုတေသနမှာ ပါဝင်ဖို့ အလိုအလျောက် သဘောတူညီမှုပြုပြီးသား ဖြစ်သွားမှာပါ။ ကျွန်မတို့ သုတေသီများဘက်က ဖြေဆိုသူရဲ့အဖြေပေါ်မူတည်ပြီး ဘယ်သူဘယ်ဝါဖြစ်တယ်ဆိုတာ ခွဲခြားမသိရှိနိုင်တဲ့အတွက် စစ်တမ်းကို ပြီးစီးအောင် ဖြေဆိုပြီးသွားရင်တော့ ဆရာ/ဆရာမရဲ့ပါဝင်မှုကို ဒီသုတေသနရဲ့သဘောသဘာဝနဲ့ ပတ်သက်ပြီး စိုးရိမ်မှုတစ်စုံတစ်ရာရှိတယ်ဆိုရင် သုတေသနကြီးကြပ်သူဖြစ်တဲ့ Dr. Ailsa Holloway, ကျန်းမာရေးနှင့် သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာသိပ္ပံဌာန, Auckland University of Technology (AUT), New Zealand, ailsa.holloway@aut.ac.nz, (+649) 921 9999 Ext 6796 ကို ချက်ချင်းအကြောင်းကြားပေးပါ။ ဒီသုတေသနရဲ့ကျင့်ဝတ်ပိုင်းဆိုင်ရာနဲ့ ပတ်သက်ပြီး စိုးရိမ်မှုရှိရင်တော့ AUT ကျင့်ဝတ်ကော်မတီအမှုဆောင်အတွင်းရေးမှုး ethics@aut.ac.nz, (+649) 921 9999 Ext 6038 ကို အကြောင်းကြားသင့်ပါတယ်။ ဒီသုတေသနနဲ့ပတ်သတ်ပြီး အသေးစိတ်သိရှိလိုရင်တော့ သုတေသီဖြစ်တဲ့ အိမ္ဗန်သင်းကြူ၊ ပြည်သူ့ကျန်းမာရေး မဟာဘွဲ့ကျောင်းသူ၊ Auckland University of Technology, New Zealand, xxv2583@autuni.ac.nz, (+64) 22 547 2266 နဲ့ အထက်မှာ ဖော်ပြထားတဲ့

#### Mingalapar!

I am Ei Mon Thinn Kyu, a Master of Public Health student at the Auckland University of Technology, New Zealand. I would like to invite you to participate in research that examines the preferences of general practitioners for payment mechanisms in service purchasing of universal health coverage.

Myanmar is trying to achieve universal health coverage by 2030. When the universal health coverage is implemented in Myanmar, the health services of private providers including general practitioners will be purchased by either the Government or the third parties. The purchaser will provide some forms of the payment mechanism to the general practitioners. Each form will provide a different set of incentives depending on the context. This research will find out the general practitioners' preferences for payment mechanisms and their associations with background demographic and health service characteristics. The purpose of this research is to identify the most preferred payment mechanism by the general practitioners in Myanmar and contribute to the decision making of payment method in service purchasing.

You will be asked about your background demographic and health services characteristics of your clinic in this research. Then, your opinions on each payment mechanism, preferences for them, and reasons for your first and last preferences will be asked. This research is neither associated with any non-governmental organisations nor the Ministry of Health and Sports, Myanmar. Although the researcher is an awardee of the New Zealand Scholarship Programme funded by the New Zealand Ministry of Foreign Affairs and Trade (MFAT), the MFAT will not intervene in any part of this research.

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You can withdraw from the study at any time

during the process of answering the questions. By completing the survey, you agree to participate in this research. After you have completed the survey, the removal of your data may not be possible since we cannot identify you based on your answers.

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr. Ailsa Holloway, Faculty of Health and Environmental Sciences, Auckland University of Technology (AUT), New Zealand, <a href="mailsa.holloway@aut.ac.nz">ailsa.holloway@aut.ac.nz</a>, (+649) 921 9999 Ext 6796.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, <a href="mailto:ethics@aut.ac.nz">ethics@aut.ac.nz</a>, (+649) 921 9999 Ext 6038.

If you would like to know further information about this research, please feel free to contact the researcher Ei Mon Thinn Kyu, Master of Public Health Student, Auckland University of Technology, New Zealand, <a href="mailto:xxv2583@autuni.ac.nz">xxv2583@autuni.ac.nz</a>, (+64) 22 547 2266, and the forementioned supervisor of this research.

End of Block: ဖြေဆိုသူ သတင်းအချက်အလက်မှတ်တမ်း

Start of Block: သင်၏ စစ်တမ်းဖြေဆိုရန် ကိုက်ညီမှုကို စစ်ဆေးခြင်း
*
Q2.1 သင်ဟာ မြန်မာနိုင်ငံ ဆေးတက္ကသိုလ် တစ်ခုခုက M.B.B.S ဘွဲ့ရရှိထားတဲ့ ဆေးဘက်ဆိုင်ရာ
ဆရာဝန်တစ်ယောက် ဟုတ်ပါသလား?
🔾 ဟုတ်ပါတယ်။ (1)
🔾 မဟုတ်ပါ။ (2)
Are you a medical doctor holding an M.B., B.S. degree from one of the Myanmar medical universities?
Are you a medical doctor holding an ivi.b., b.s. degree from one of the ivigalinial medical diliversities:
○ Yes
○ No

```
Display This Question:
If Q2.3 = လုပ်ကိုင်နေပါတယ်။
```

If Q2.3 = Yes

Q2.4 သင်အလုပ်လုပ်ကိုင်နေတဲ့ အစိုးရကဏ္ဍပိုင်းဆိုင်ရာ ဒါမှမဟုတ် အစိုးရမဟုတ်တဲ့ အဖွဲ့အစည်းအလုပ်ဟာ လူတိုင်းလက်လှမ်းမီလွှမ်းခြုံနိုင်တဲ့ ကျန်းမာရေး စောင့်ရှောက်မှုစနစ် (Universal Health Coverage – UHC) နဲ့ တိုက်ရိုက်ပတ်သက်နေတဲ့ စီမံကိန်းတွေ ပါဝင်ပါသလား?

- 🔾 ပါဝင်ပါတယ်။ (1)
- 🔾 မပါဝင်ပါ။ (2)

Does your job in the NGOs or the Government sector involve the projects directly related to Universal Health Coverage (UHC)?

O Yes

O No

```
Display This Question:

If Q2.1 = ဟုတ်ပါတယ်။

And Q2.2 = ရှိပါတယ်။

And Q2.3 = မလုပ်ကိုင်နေပါ။

Or If

Q2.1 = ဟုတ်ပါတယ်။

And Q2.2 = ရှိပါတယ်။

And Q2.3 = လုပ်ကိုင်နေပါတယ်။

And Q2.4 = မပါဝင်ပါ။
```

If Q2.1 = Yes, And Q2.2 = Yes, And Q2.3 = No OR

Q2.1 = Yes, And Q2.2 = Yes, And Q2.3 = Yes, And Q2.4 = No,

Q2.5 ဆရာ/ဆရာမဟာ ဒီစစ်တမ်းကို ဖြေဆိုဖို့ သတ်မှတ်ထားတဲ့အချက်တွေနဲ့ ကိုက်ညီတဲ့အတွက် ဆက်လက်ဖြေဆိုနိုင်ပါပြီ

As you are eligible to participate in this study, you can now continue the survey.

Skip To: End of Block If Q2.5 Is Displayed

```
Display This Question:
     And Q2.2 = မရှိပါ။
Or If
     And Q2.4 = မပါဝင်ပါ။
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Q2.1 = မဟုတ်ပါ။
    And Q2.4 = ပါဝင်ပါတယ်။
Or If
    And Q2.2 = မရှိပါ။
If Q2.1 = Yes, And Q2.2 = No, And Q2.3 = No, OR
Q2.1 = No, And Q2.2 = Yes, And Q2.3 = No, OR
Q2.1 = No, And Q2.2 = No, And Q2.3 = No, OR
Q2.1 = No, And Q2.2 = Yes, And Q2.3 = Yes, And Q2.4 = No, OR
```

Q2.1 = Yes, And Q2.2 = No, And Q2.3 = Yes, And Q2.4 = No, OR

Q2.1 = Yes, And Q2.2 = Yes, And Q2.3 = Yes, And Q2.4 = Yes, **OR** 

Q2.1 = No, And Q2.2 = No, And Q2.3 = Yes, And Q2.4 = No, OR

Q2.1 = No, And Q2.2 = Yes, And Q2.3 = Yes, And Q2.4 = Yes, **OR** 

Q2.1 = Yes, And Q2.2 = No, And Q2.3 = Yes, And Q2.4 = Yes, **OR** 

Q2.1 = No, And Q2.2 = No, And Q2.3 = Yes, And Q2.4 = Yes,

Q2.6 ဝမ်းနည်းပါတယ်။ ဆရာ/ဆရာမဟာ ဒီစစ်တမ်းမှာ အကျိုးစီးပွား ပဋိပက္ခဖြစ်နိုင်ချေရှိတဲ့အတွက် ဒီစစ်တမ်းကို ပါဝင်ဖြေဆိုလို့ မရပါဘူး။ စိတ်ပါဝင်စားမှုအတွက် အထူးပင် ကျေးဇူးတင်ရှိပါတယ်။

We are sorry. You cannot participate in this survey since there might be a potential conflict of interest in this research. Thank you so much for your interest.

Skip To: End of Survey If Q2.6 Is Displayed
End of Block: သင်၏ စစ်တမ်းဖြေဆိုရန် ကိုက်ညီမှုကို စစ်ဆေးခြင်း
Start of Block: ကျန်းမာရေးဝန်ဆောင်မှုပေးခြင်းဆိုင်ရာ အချက်အလက်
*
Q3.1 အထွေထွေရောဂါကုဆရာဝန်တစ်ဦးအဖြစ် အလုပ်လုပ်ကိုင်နေတာ ဘယ်လောက် ကြာပြီလဲ? (သင်နှင့်
မသက်ဆိုင်သော အဖြေအတွက် "0" ကို ရေးပါ)
O နှစ် (1)
○ o (2)
How long have you been working as a General Practitioner? (Please write "0" for the answer that does not apply to yours)
Years
O Months

*
Q3.2 ပြည်ပနိုင်ငံတစ်ခုခုမှာ အလုပ်လုပ်ဖူးတဲ့ (သို့) ပညာသင်ယူဖူးတဲ့ အတွေ့အကြုံတစ်ခုခု ရှိပါသလား?
🔾 ှိပါတယ်။ (1)
🔾 မရှိပါ။ (2)
Do you have any experience of working or studying in a foreign country?
○ Yes
○ No
*
Q3.3 ဆေးခန်းဖွင့်လှစ်ရာ တိုင်း/ပြည်နယ်
▼ ကချင်ပြည်နယ် (1) နေပြည်တော်ကောင်စီနယ်မြေ (15)
In which state/region is your clinic operating?

- 1.1. Kachin
- 1.2. Kayah
- 1.3. Kayin
- 1.4. Chin
- 1.5. Mon
- 1.6. Rakhine
- 1.7. Shan
- 1.8. Yangon
- 1.9. Mandalay
- 1.10. Magway
- 1.11. Sagaing
- 1.12. Bago
- 1.13. Ayeyarwady
- 1.14. Tanintharyi
- 1.15. Naypyidaw

Q3.4 သင့်ရဲ့ဆေးခန်းက တိုင်း/ပြည်နယ်ရဲ့ဘယ်နေရာမှာ ဖွင့်ထားတာပါလဲ?		
O တိုင်းအဆင့်/ပြည်နယ်အဆင့် (1)		
🔾 ခရိုင်အဆင့်/မြို့နယ်အဆင့် (2)		
O ကျေးရွာအုပ်စုအဆင့်/ကျေးရွာအဆင့် (3)		
In which level of state/region is your clinic operating?		
State level/ Regional level		
O District level/ Township level		
Village tract level/ Village level		
*		
Q3.5 သင့်ဆေးခန်းနဲ့ ချိတ်ဆက်လုပ်ကိုင်နေတဲ့ ကွန်ရက်တစ်ခုခု ရှိပါသလား? (အဖြေမှန်အားလုံးကို ရွေးချယ်ရန်		
မရှိပါ။ (1)		
မြန်မာနိုင်ငံ ဆရာဝန်အသင်း (MMA) နဲ့ ချိတ်ဆက်ထားပါတယ်။ (2)		
Population Services International/Myanmar (PSI/Myanmar) နဲ့ ချိတ်ဆက်ထားပါတယ်။		
(3)		
အခြားကွန်ရက်နဲ့ ချိတ်ဆက်ထားပါတယ်။ အဖွဲ့အစည်းအမည် ဖော်ပြပေးရန် (4) 		
Does your clinic have any affiliated network? (Choose all that apply)		
O No.		

Yes, with Myanmar Medical Association (MMA).
Yes, with Population Services International/Myanmar (PSI/Myanmar).
Yes, with other. Please specify
Skip To: Q3.7 If Q3.5 = မရှိပါ။
Skip To: Q3.7 If Q3.5 = No
Q3.6
သင့်ဆေးခန်းက ကွန်ရက်တစ်ခုခုနဲ့ ချိတ်ဆက်ထားတယ်ဆိုရင် လက်ရှိအချိန်မှာ အဲဒီကွန်ရက်က
ဘယ်လိုငွေပေးချေမှုနည်းလမ်းကို အသုံးပြုနေလဲ? (အဖြေမှန်အားလုံးကို ရွေးချယ်ရန်)
လစာ (လူနာ အရေအတွက် သို့မဟုတ် ကြည့်ရှုစမ်းသပ်သည့် အကြိမ်ရေပေါ် မမှုတည်ဘဲ
သတ်မှတ်ထားသော ပမာဏတစ်ခုဖြင့် လစဉ်ငွေပေးချေမှု။) (1)
Performance-based paymentလုပ်ဆောင်ချက်အပေါ် အခြေခံသည့် ပေးချေမှု
(သတ်မှတ်ထားသော ကျန်းမာရေး ဝန်ဆောင်မှုတစ်ခုချင်းစီအတွက် ငွေပမာဏတစ်ခု ပုံသေ ပေးခြင်း။
ဥပမာ- တီဘီပိုးတွေ့လူနာတစ်ဦးလျှင် ၅၀၀၀ ကျပ်) (2)
Fee-for-service (လူနာစမ်းသပ်ကြည့်ရှုမှုတစ်ခုစီအတွက် ငွေပမာဏတစ်ခု ပုံသေပေးခြင်း။
ဥပမာ - လူနာစမ်းသပ်ကြည့်ရှုမှု တစ်ကြိမ်လျှင် မြန်မာငွေ ၅၀၀၀ ကျပ်) (3)
နှစ်မျိုး သို့မဟုတ် နှစ်မျိုးထက်ပိုသော ငွေပေးချေမှုနည်းလမ်း။ နည်းလမ်းပုံစံများအား
အသေးစိတ်ဖော်ပြပေးပါရန် (4)
အခြား။ အသေးစိတ်ဖော်ပြပေးပါရန် (5)
<del></del>

If your clinic is affiliated with a network, what is the current payment method by the network? (Choose all that apply)

	Salary (I made)	Monthly payment regardless of the number of enrolled people or the visit the patients	
	Performance-based incentive (You are provided a fixed amount of money for specific health services. For example, 5000 Myanmar Kyats for one sputum positive case of Tuberculosis)		
	Fee-for-service (You are provided a fixed amount of money for each consultation you made. For example, 5000 Myanmar Kyats for one patient visit)		
	O Two or I	more mixed payment methods, please specify	
	Others,	please specify	
*	]		
Q3.	7 သင့်ရဲ့ဆေးရ	ခန်းမှာ ဘယ်လို ကျန်းမာရေး ဝန်ဆောင်မှုတွေ ပေးပါသလဲ? (အဖြေမှန်အားလုံး ရွေးချယ်ရန်)	
		အထွေထွေ (1)	
		အထူးကု (2)	
		အသေးစား ခွဲစိတ်မှု (3)	
		အကြီးစား ခွဲစိတ်မှု (4)	
		ကျန်းမာရေး ပညာပေးခြင်း (5)	
		သွေးစစ်၊ ဆီးစစ် နှင့် အခြား Laboratory Investigation များ (6)	
		ဓါတ်မှန်၊ Ultrasound အပါအဝင် Imaging service များ (7)	
		အခြား။ အသေးစိတ်ဖော်ပြပေးပါရန် (8)	

General medical care
O Specialist care
O Minor operation procedures
Major operation procedures
Health promotion and education
Laboratory investigation
O Imaging services such as Chest X-Ray and Ultrasound
Others, please specify
*
Q3.8 တစ်နေ့ကို ပျမ်းမျှဆေးခန်းဖွင့်ချိန် ဘယ်နှစ်နာရီ ရှိပါသလဲ?
What is your average clinic opening hours per day?
*
Q3.9 သင့်ဆေးခန်းကို လာတဲ့ လူနာတစ်ယောက်အနေနဲ့ ရောဂါပြသဖို့ စောင့်ရချိန် (waiting time) က
ပျမ်းမျှအားဖြင့် ဘယ်လောက် ကြာပါသလဲ? (သင်နှင့်မသက်ဆိုင်သော အဖြေအတွက် "0" ကို ရေးပါ)
O နာရီ (1)
O မိနစ် (2)
How long is the average waiting time for a patient at your clinic? (Please write "0" for the answer that does not apply to yours)
O Hours

O Minutes
*
Q3.10 တစ်နေ့တစ်နေ့ သင့်ဆီကို ပျမ်းမျှအားဖြင့် လူနာဘယ်နှစ်ယောက် လာပါသလဲ? 
What is your average number of patients per day?
*
Q3.11 လူနာတစ်ယောက်အတွက် ပျမ်းမျှ တိုင်ပင်ဆွေးနွေးခအဖြစ် သင် ဘယ်လောက် ကောက်ခံပါသလဲ?
What is your average consultation fee per client?
*

ရှိပါသလဲ? 🔾 မြန်မာကျပ် ၁,၀၀၀,၀၀၀ အောက် (1) 🔾 မြန်မာကျပ် ၁,၀၀၀,၀၀၀ မှ မြန်မာကျပ်၂,၀၀၀,၀၀၀ ကြား (2) 🔾 မြန်မာကျပ်၂,၀၀၀,၀၀၀ မှ မြန်မာကျပ် ၃,၀၀၀,၀၀၀ ကြား (3) 🔾 မြန်မာကျပ် ၃,၀၀၀,၀၀၀ မှ မြန်မာကျပ် ၄,၀၀၀,၀၀၀ ကြား (4) 🔾 မြန်မာကျပ် ၄,၀၀၀,၀၀၀ အထက် (5) How much is your average family income per month including yours (in Myanmar Kyats)? Less than 1,000,000 MMK 1,000,000 MMK to 2,000,000 MMK 2,000,001 MMK to 3,000,000 MMK 3,000,001 MMK to 4,000,000 MMK O More than 4,000,000 MMK

Q3.12 သင်အပါအဝင် သင့်**မိသားစု**တစ်ခုလုံးရဲ့တစ်လတာ ပျမ်းမျှဝင်ငွေဟာ (မြန်မာကျပ်ငွေနဲ့) ဘယ်လောက်

End of Block: ကျန်းမာရေးဝန်ဆောင်မှုပေးခြင်းဆိုင်ရာ အချက်အလက်

Start of Block: ငွေပေးချေမှုနည်းလမ်းများ

Q4.1 နောက်ထပ်လာမယ့် မေးခွန်းတွေမှာတော့ ငွေပေးချေမှု နည်းလမ်းနဲ့ ပတ်သက်ပြီး သင့်ရဲ့ လက်ခံနိုင်မှု၊ ပိုမိုနှစ်သက်မှုနဲ့ အဲ့ဒီအတွက် အကြောင်းပြချက်တွေကို မေးမြန်းသွားမှာ ဖြစ်ပါတယ်။ မေးခွန်းတွေကို ပိုမိုနားလည်နိုင်ဖို့အတွက် သင့်ကိုယ်သင် လူဦးရေ ၅,၀၀၀ ရှိတဲ့ ရွာတစ်ရွာက အထွေထွေရောဂါကု ဆရာဝန်တစ်ဦး အဖြစ် စိတ်ကူးကြည့်ပါ။ ဒီလူတွေထဲမှာ လူ ၁,၀၀၀ ကို ကျန်းမာရေးစောင့်ရှောက်မှုပေးဖို့ အစိုးရ ဒါမှမဟုတ် ကြားခံအဖွဲ့အစည်းတစ်ခုက အောက်ဖော်ပြပါ ငွေပေးချေမှုစနစ်တွေထဲက တစ်ခုကို အသုံးပြုပြီး သင့်ထံမှ ကျန်းမာရေးဝန်ဆောင်မှုကို ဝယ်ယူထားပါတယ်။ အဲ့ဒီငွေပေးချေမှု နည်းလမ်းတစ်ခုကလွဲပြီး လူနာတွေဆီက သော်လည်းကောင်း၊ အစိုးရ (သို့) ကြားခံအဖွဲ့အစည်းဆီကသော်လည်းကောင်း သင်ဟာ အပို အခကြေးငွေ တစ်စုံတစ်ရာ ရရှိမှာ မဟုတ်ပါဘူး။

In the following questions, you will be asked about your acceptability, preferences, and reasons for your preferences for the provider payment mechanisms. To help you understand the questions more clearly, please assume that you are a general practitioner in a village where 5,000 people are living. Among them, 1,000 people are enrolled in your clinic to receive health services. The government or a third-party will pay you by one of the following payment mechanisms to cover the cost of health services for those 1,000 enrolled people. Apart from one of these payment methods, you will not receive any additional fees from the patients or the government or the third-party.

\*

Q36 Capitation - သင့်ဆေးခန်းမှာ စာရင်းသွင်းထားတဲ့ လူအယောက်စီတိုင်းအတွက် သတ်မှတ်ထားတဲ့ ငွေပမာဏတစ်ခုကို သင်ကြိုတင်ရရှိမှာ ဖြစ်ပါတယ်။ ဒီငွေပေးချေမှုဟာ လူနာဆေးခန်းလာပြတဲ့ အခေါက်အရေအတွက်အပေါ် မမူတည်ပါဘူး။ ဆိုလိုတာက လူနာတစ်ယောက်ဟာ တစ်လအတွင်းမှာ ဘယ်နှခေါက်ပဲ လာပြသည်ဖြစ်စေ၊ လာပြသူက တစ်ယောက်တည်းဖြစ်နေသရွေ့သူလာပြတဲ့ အခေါက်ရေပေါ်မူတည်ပြီး ငွေကြေးတွက်ချက်မှုမရှိပါဘူး။ ဒါပေမယ့် စာရင်းသွင်းထားတဲ့ လူ ၁၀၀၀ ထဲက ၅၀၀ ပဲ လာပြမယ်ဆိုရင် စာရင်းသွင်းထားတဲ့ လူဦးရေအရေအတွက်နဲ့ ငွေကြေးတွက်ချက်တာ ဖြစ်တဲ့အတွက် လူ ၁၀၀၀ စာ ငွေပမာဏကို ရရှိမှာဖြစ်ပါတယ်။ စာရင်းသွင်း လူဦးရေများလေလေ ကြိုတင်ရရှိမယ့် ငွေပမာဏ ပိုများလေလေဖြစ်မှာပါ။

ဒီငွေပေးချေမှု နည်းလမ်းကို သင်ဘယ်လောက်အတိုင်းအတာအထိ လက်ခံနိုင်ပါသလဲ?

🔾 အလွန်လက်ခံပါတယ်။ (1)
🔾 လက်ခံပါတယ်။ (2)
🔾 လက်ခံသည်လည်း မဟုတ် လက်မခံသည်လည်း မဟုတ်သည့် ကြားနေသဘောထား။ (3)
🔾 လက်မခံပါ။ (4)
🔾 လုံးဝလက်မခံပါ။ (5)
Capitation - You will receive an advanced, fixed amount of money for every people enrolled in your clinic. This payment does not depend on the number of visits. It means that regardless of the number of
visits a patient pays, you will receive that fixed amount as long as it is the same person. However, if 500
people among the 1,000 enrolled people visit, you will receive the payment for the 1,000 people since
the payment is calculated based on the number of enrolled people. If the number of enrolled people
increases, the advance money you received will also increase.
To what extent can you accept this payment method?
O Very acceptable
O Acceptable
Neutral, neither acceptable nor unacceptable.
Ounacceptable
O Very unacceptable
*

Q37 Fee-for-service - လူနာတစ်ဦးတည်းအတွက် follow-up visit တွေ အပါအဝင် လူနာကြည့်ရှုတဲ့ အကြိမ် တစ်ကြိမ်ကို ဘယ်လောက်နှုန်းပေါ်မူတည်ပြီး ပေးတဲ့ တိကျတဲ့ ငွေပမာဏတစ်ခုကို သင်ရရှိမှာ ဖြစ်ပါတယ်။ ဒီငွေပေးချေမှုဟာ လူနာကြည့်ရှုတဲ့ အကြိမ်အရေအတွက်ပေါ် မူတည်ပြီး၊ လူဦးရေ အရေအတွက်ပေါ်ကို မမူတည်ပါဘူး။ ဆိုလိုတာက လူနာတစ်ယောက်ဟာ သင့်ဆီကို တစ်လမှာ နှစ်ကြိမ် လာရောက် ပြသမယ်ဆိုရင် သင်ဟာ နှစ်ကြိမ်စာ ပိုက်ဆံရရှိမှာ ဖြစ်ပါတယ်။ မြန်မာနိုင်ငံမှာ လက်ရှိကျင့်သုံးနေတဲ့ ငွေပေးချေမှုနည်းလမ်းနဲ့

အတူတူပါပဲ။ မတူတာကတော့ အခကြေးငွေကို သင်ကိုယ်တိုင် သတ်မှတ်ခွင့်မရှိပဲ ငွေပေးချေတဲ့အဖွဲ့အစည်းက		
သတ်မှတ်မှာ ဖြစ်ပါတယ်။		
ဒီငွေပေးချေမှု နည်းလမ်းကို သင်ဘယ်လောက်အတိုင်းအတာအထိ လက်ခံနိုင်ပါသလဲ?		
🔾 အလွန်လက်ခံပါတယ်။ (1)		
🔾 လက်ခံပါတယ်။ (2)		
🔾 လက်ခံသည်လည်း မဟုတ် လက်မခံသည်လည်း မဟုတ်သည့် ကြားနေသဘောထား။ (3)		
🔾 လက်မခံပါ။ (4)		
O လုံးဝလက်မခံပါ။ (5)		
Fee-for-service - You will receive a fixed amount of money for every consultation you made including follow-up visits. This payment depends on the number of visits but does not depend on the people. It means that if the same person visits you twice, you will be paid for two visits. This payment method is the same as the one that most general practitioners in Myanmar are currently practicing. The only difference is the amount of money cannot be determined by you. It will be determined by the organisation that purchase your health services.		
To what extent can you accept this payment method?		
O Very acceptable		
Acceptable		
Neutral, neither acceptable nor unacceptable.		
○ Unacceptable		
Very unacceptable		

Q39 လစာ - သင်ဟာ လတိုင်းအတွက် တိကျတဲ့ ငွေပမာဏတစ်ခုကို ရရှိနေမှာ ဖြစ်ပြီး ဒါဟာ လူနာအရေအတွက်
အပေါ်သော်လည်းကောင်း၊ လူနာကြည့်ရှုတဲ့ အကြိမ်အရေအတွက်အပေါ်သော်လည်းကောင်း မူတည်နေခြင်း
မရှိပါဘူး။ သင်နဲ့ သင့်ကို လစာပေးတဲ့ အဖွဲ့အစည်းကြား ကြိုတင်သဘောတူညီချက်အပေါ် ပဲ မူတည်ပါတယ်။
ဒီငွေပေးချေမှု နည်းလမ်းကို သင်ဘယ်လောက်အတိုင်းအတာအထိ လက်ခံနိုင်ပါသလဲ?
🔾 အလွန်လက်ခံပါတယ်။ (1)
🔾 လက်ခံပါတယ်။ (2)
🔾 လက်ခံသည်လည်း မဟုတ် လက်မခံသည်လည်း မဟုတ်သည့် ကြားနေသဘောထား။ (3)
🔾 လက်မခံပါ။ (4)
O လုံးဝလက်မခံပါ။ (5)
Salary - You will receive a fixed amount of money each month, which depends on neither the number of enrolled people nor patients' visits. It only depends on the advance agreement made by you and the organisation that purchase your health services.
To what extent can you accept this payment method?
O Very acceptable
Acceptable
Neutral, neither acceptable nor unacceptable.
Ounacceptable
O Very unacceptable

Q38 Performance-based payment(လုပ်ဆောင်ချက်ပေါ် အခြေခံတဲ့ ငွေပေးချေမှု) - သတ်မှတ်ထားတဲ့ ကျန်းမာရေး ဝန်ဆောင်မှု အမျိုးအစားတစ်ခုစီအတွက် တိကျတဲ့ ငွေပမာဏတစ်ခုကို သင်ရရှိနေမှာ ဖြစ်ပါတယ်။ ဥပမာ - တီဘီပိုးတွေ့လူနာတစ်ဦးလျှင် ၅၀၀၀ ကျပ်၊ ငှက်ဖျားပိုးတစ်ခါစစ်လျှင် ၁၀၀၀ ကျပ်၊ HIV ပိုးတစ်ခါစစ်လျှင် ၂၀၀၀ကျပ်။ ဒီငွေပေးချေမှုစနစ်မှာတော့ သင်ဟာ လူနာ ဒါမှမဟုတ် သင့်ဆီက ကျန်းမာရေးဝန်ဆောင်မှုကို ဝယ်ယူထားတဲ့ အဖွဲ့အစည်းဆီကနေ ဝန်ဆောင်မှုအရည်အသွေးပေါ် မှုတည်ပြီး ထပ်ဆောင်းအပိုဝင်ငွေလည်း ရရှိနေဦးမှာပါ။

ဒီငွေပေးချေမှု နည်းလမ်းကို သင်ဘယ်လောက်အတိုင်းအတာအထိ လက်ခံနိုင်ပါသလဲ?

- 🔾 အလွန်လက်ခံပါတယ်။ (1)
- 🔾 လက်ခံပါတယ်။ (2)
- 🔾 လက်ခံသည်လည်း မဟုတ် လက်မခံသည်လည်း မဟုတ်သည့် ကြားနေသဘောထား။ (3)
- 🔾 လက်မခံပါ။ (4)
- 🔾 လုံးဝလက်မခံပါ။ (5)

Performance-based payment- You will receive a fixed amount of money for specific health services. For example, 5,000 Myanmar Kyats for one sputum positive Tuberculosis case, 1,000 Myanmar Kyats for one Malaria test and 2,000 Myanmar Kyats for one HIV test. In this payment, you will also receive an extra amount of money, depending on your quality of performance, from the patients or the organisation that purchase your health services.

To what extent can you accept this payment method?

- O Very acceptable
- Acceptable

Neutral, neither acceptable nor unacceptable.
O Unacceptable
O Very unacceptable
*
Q4.2 အပေါ်မှာ ဖော်ပြခဲ့တဲ့ အချက်အလက်တွေအပေါ် အခြေခံပြီး ငွေပေးချေမှု နည်းလမ်းတွေကို
သင့်အကြိုက်အတိုင်း စီစဉ်ပေးပါ။ (သင်အကြိုက်ဆုံးနည်းလမ်းကို "1" ဟု ရွေးချယ်ပြီး မကြိုက်ဆုံးကို "4" ဟု
ရွေးချယ်ပါ။)
Capitation (စာရင်းသွင်းလူဦးရေ အရေအတွက်ပေါ် မူတည်တဲ့ ငွေပေးချေမှု) (1)
Fees-for-service (လူနာလာပြသည့် အကြိမ်အရေအတွက်ပေါ် အခြေခံတဲ့ ငွေပေးချေမှု) (2)
Performance-based payment(လုပ်ဆောင်ချက်ပေါ် အခြေခံတဲ့ ငွေပေးချေမှု) (4)
Based on the information provided above, please rank the payment methods in order of your
preference. (Choose "1" for your most preferred method and "4" for the least preferred.)
Capitation (payment depending on the number of enrolled people)
Fees-for-service (payment depending on the number of patient visits)
Salary
O Performance-based payment
Display This Question:

Q4.3	အကြုံကဲဆု	း ငွေပေးချေမှု နည်းလမ်းအနေနဲ့ Capitation ကို ဘာလို့ရွေးချယ်ရတာလ?
(ജ	ဖြမှန်အားလုံ	းကို ရွေးချယ်ရန်)
		ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဝင်ငွေကို အတည်တကျဖြစ်စေပါတယ်။ (1)
		ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ဆေးခန်းကို လူနာပိုများလာစေနိုင်ပါတယ်။ (2)
	ြ မြှင့်တင်ပေးနို	ကိုယ့်ဆေးခန်းရဲ့ကျန်းမာရေး ဝန်ဆောင်မှု အရည်အသွေးကို ဒီငွေပေးချေမှုစနစ်က နိုင်ပါတယ်။ (3)
		ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်မှာ ငွေကြေးဆိုင်ရာ အခက်အခဲတွေ ရှိမလာနိုင်ပါဘူး။ (4)
	ြေ လျှော့ချပေးနို	ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ဆေးခန်းမှာ လူနာတွေ ပြသဖို့ စောင့်ရချိန် (waiting time) ကို နိုင်ပါတယ်။ (5)
	(Continuity o	ဒီငွေပေးချေမှုစနစ်ကြောင့် လူနာကို စဉ်ဆက်မပြတ် စောင့်ရှောက်ကုသနိုင်မှုအပိုင်း of care) မှာ တိုးတက်လာနိုင်ပါတယ်။ (6)
	<b>ာ</b> ရရှိစေပါတပ	ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဆေးခန်းစီမံခန့်ခွဲမှုမှာ ကိုယ်ပိုင်လွတ်လပ်ခွင့် ပိုမို ၁်။ (7)
	ြ ပိုလုပ်နိုင်လာ	ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လူနာတွေကို ကျန်းမာရေးပညာပေး မယ်။ (8)
		အခြား အကြောင်းပြချက်များ။ အသေးစိတ်ဖော်ပြပေးပါရန် (9)
Why	do you choo	ose capitation as your first preferred payment? (Choose all that apply)
	O This pay	ment method can secure my income.
	O The nun	nber of patient visits at my clinic will be increased due to this payment method.

Health services quality of my clinic will be improved by this payment method.
I will not have any financial risk because of this payment method.
This payment method will reduce the patients' waiting time in my clinic.
The continuity of patient care will be improved by this payment method.
This payment method can give more personal freedom in my clinic management.
O I can perform more health promotion and education measures in my clinic due to this payment method.
Other reasons, please specify

Display This Question:

If Q4.2 [ Fees-for-service (လူနာလာပြသည့် အကြိမ်အရေအတွက်ပေါ် အခြခံတဲ့ ငွေပေးချေမှု) ] = 1

Q4.4 အကြိုက်ဆုံ	း ငွေပေးချေမှု နည်းလမ်းအနေနဲ့ Fee-for-service ကို ဘာလို့ရွေးချယ်ရတာလဲ?
(အဖြေမှန်အားလုံ	ားကို ရွေးချယ်ရန်)
	ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဝင်ငွေကို အတည်တကျဖြစ်စေပါတယ်။ (1)
	ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ဆေးခန်းကို လူနာပိုများလာစေနိုင်ပါတယ်။ (2)
မြှင့်တင်ပေး	ကိုယ့်ဆေးခန်းရဲ့ကျန်းမာရေး ဝန်ဆောင်မှု အရည်အသွေးကို ဒီငွေပေးချေမှုစနစ်က နိုင်ပါတယ်။ (3)
	ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်မှာ ငွေကြေးဆိုင်ရာ အခက်အခဲတွေ ရှိမလာနိုင်ပါဘူး။ (4)
လျှော့ချပေး	ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ဆေးခန်းမှာ လူနာတွေ ပြသဖို့ စောင့်ရချိန် (waiting time) ကို နိုင်ပါတယ်။ (5)
(Continuity	ဒီငွေပေးချေမှုစနစ်ကြောင့် လူနာကို စဉ်ဆက်မပြတ် စောင့်ရှောက်ကုသနိုင်မှုအပိုင်း of care) မှာ တိုးတက်လာနိုင်ပါတယ်။ (6)
ရရှိစေပါတပ	ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဆေးခန်းစီမံခန့်ခွဲမှုမှာ ကိုယ်ပိုင်လွတ်လပ်ခွင့် ပိုမို ယ်။ (7)
ပိုလုပ်နိုင်လာ	ငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လူနာတွေကို ကျန်းမာရေးပညာပေး ၁မယ်။ (8)
	အခြား အကြောင်းပြချက်များ။ အသေးစိတ်ဖော်ပြပေးပါရန် (9)
Why do you cho	ose fee-for-service as your first preferred payment? (Choose all that apply)
O This par	yment method can secure my income.
O The nu	mher of nations visits at my clinic will be increased due to this navment method

Health services quality of my clinic will be improved by this payment method.
I will not have any financial risk because of this payment method.
O This payment method will reduce the patients' waiting time in my clinic.
The continuity of patient care will be improved by this payment method.
O This payment method can give more personal freedom in my clinic management.
O I can perform more health promotion and education measures in my clinic due to this payment method.
Other reasons, please specify
Display This Question:

Q4.5 အကြိုက်ဆုံး ငွေ	ပေးချေမှု နည်းလမ်းအနေနဲ့ လစာကို ဘာလို့ရွေးချယ်ရတာလဲ? (အဖြေမှန်အားလုံးကို
ရွေးချယ်ရန်)	
36	ငွပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဝင်ငွေကို အတည်တကျဖြစ်စေပါတယ်။ (1)
36	ငွပေးချေမှုစနစ်က ကိုယ့်ဆေးခန်းကို လူနာပိုများလာစေနိုင်ပါတယ်။ (2)
ကို မြှင့်တင်ပေးနိုင်ပါ	ယ့်ဆေးခန်းရဲ့ကျန်းမာရေး ဝန်ဆောင်မှု အရည်အသွေးကို ဒီငွေပေးချေမှုစနစ်က တယ်။ (3)
36	ငွပေးချေမှုစနစ်ကြောင့် ကိုယ့်မှာ ငွေကြေးဆိုင်ရာ အခက်အခဲတွေ ရှိမလာနိုင်ပါဘူး။ (4)
ီ လျှော့ချပေးနိုင်ပါ	ငွပေးချေမှုစနစ်က ကိုယ့် ဆေးခန်းမှာ လူနာတွေ ပြသဖို့ စောင့်ရချိန် (waiting time) ကို တယ်။ (5)
	ငွပေးချေမှုစနစ်ကြောင့် လူနာကို စဉ်ဆက်မပြတ် စောင့်ရှောက်ကုသနိုင်မှုအပိုင်း are) မှာ တိုးတက်လာနိုင်ပါတယ်။ (6)
ိီေ ရရှိစေပါတယ်။ (	ငွပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဆေးခန်းစီမံခန့်ခွဲမှုမှာ ကိုယ်ပိုင်လွတ်လပ်ခွင့် ပိုမို (7)
ီ ပိုလုပ်နိုင်လာမယ်	ငွပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လူနာတွေကို ကျန်းမာရေးပညာပေး ်။ (8)
39	ခြား အကြောင်းပြချက်များ။ အသေးစိတ်ဖော်ပြပေးပါရန် (9) 
Why do you choose s	salary as your first preferred payment? (Choose all that apply)
O This paymer	nt method can secure my income.
O The number	r of nations visits at my clinic will be increased due to this navment method

Health services quality of my clinic will be improved by this payment method.
I will not have any financial risk because of this payment method.
This payment method will reduce the patients' waiting time in my clinic.
The continuity of patient care will be improved by this payment method.
This payment method can give more personal freedom in my clinic management.
O I can perform more health promotion and education measures in my clinic due to this payment method.
Other reasons, please specify

Display This Question:

If Q4.2 [ Performance-based payment(လုပ်ဆောင်ချက်ပေါ် အခြေခံတဲ့ ငွေပေးချေမှု) ] = 1

Q4.6 အကြိုက်ဆုံး ဓ	ငွေပေးချေမှု နည်းလမ်းအနေနဲ့ Performance-based payment(လုပ်ဆောင်ချက်ပေါ်
အခြေခံတဲ့ ငွေပေးေ	ချမှု) ကို ဘာလို့ရွေးချယ်ရတာလဲ? (အဖြေမှန်အားလုံးကို ရွေးချယ်ရန်)
93	ငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဝင်ငွေကို အတည်တကျဖြစ်စေပါတယ်။ (1)
<u> </u>	ငွေပေးချေမှုစနစ်က ကိုယ့်ဆေးခန်းကို လူနာပိုများလာစေနိုင်ပါတယ်။ (2)
် မြှင့်တင်ပေးနိုင်	ဂိုယ့်ဆေးခန်းရဲ့ကျန်းမာရေး ဝန်ဆောင်မှု အရည်အသွေးကို ဒီငွေပေးချေမှုစနစ်က ပါတယ်။ (3)
9	ငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်မှာ ငွေကြေးဆိုင်ရာ အခက်အခဲတွေ ရှိမလာနိုင်ပါဘူး။ (4)
ရွိ လျှော့ချပေးနိုင်ပ	ငွေပေးချေမှုစနစ်က ကိုယ့် ဆေးခန်းမှာ လူနာတွေ ပြသဖို့ စောင့်ရချိန် (waiting time) ကို ပါတယ်။ (5)
	ငွေပေးချေမှုစနစ်ကြောင့် လူနာကို စဉ်ဆက်မပြတ် စောင့်ရှောက်ကုသနိုင်မှုအပိုင်း care) မှာ တိုးတက်လာနိုင်ပါတယ်။ (6)
္ခ်ိ ရရှိစေပါတယ်။	ငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ ဆေးခန်းစီမံခန့်ခွဲမှုမှာ ကိုယ်ပိုင်လွတ်လပ်ခွင့် ပိုမို (7)
ှိ ပိုလုပ်နိုင်လာမပ	ငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လူနာတွေကို ကျန်းမာရေးပညာပေး ယ်။ (8)
3	ာခြား အကြောင်းပြချက်များ။ အသေးစိတ်ဖော်ပြပေးပါရန်  (9)
Why do you choose apply)	e Performance-based paymentas your first preferred payment? (Choose all that
O This paym	ent method can secure my income.
O The numb	er of patient visits at my clinic will be increased due to this payment method.

Health services quality of my clinic will be improved by this payment method.
I will not have any financial risk because of this payment method.
This payment method will reduce the patients' waiting time in my clinic.
The continuity of patient care will be improved by this payment method.
O This payment method can give more personal freedom in my clinic management.
O I can perform more health promotion and education measures in my clinic due to this payment method.
Other reasons, please specify

Display This Question:

If Q4.2 [ Capitation (စာရင်းသွင်းလူဦးရေ အရေအတွက်ပေါ် မူတည်တဲ့ ငွေပေးချေမှု) ] = 4

Q4.7 သင် ကြိုက်နှစ်သက်မှု အနည်းဆုံး ငွေပေးချေမှု နည်းလမ်းအနေနဲ့ Capitation ကို ဘာလို့ရွေးချယ်ရတာလဲ?	
(အဖြေမှန်အားလုံးကို ရွေးချယ်ရန်)	
ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဝင်ငွေကို ထိခိုက်စေနိုင်တယ်။ (1)	
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လာပြတဲ့ လူနာအရေအတွက် နည်းသွားစေနိုင်တယ်။ (2)	
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းရဲ့ကျန်းမာရေး ဝန်ဆောင်မှု အရည်အသွေးပိုင်းမှာ ထိခိုက်မှုတွေ ဖြစ်လာစေနိုင်တယ်။ (3)	
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်မှာ ငွေကြေးဆိုင်ရာ အခက်အခဲတွေ ရှိလာနိုင်ပါတယ်။ (4)	
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းကို လာတဲ့ လူနာတွေ ပြသဖို့ စောင့်ရချိန် (Waiting time) ကို ပိုကြာစေနိုင်တယ်။ (5)	
ဒီငွေပေးချေမှုစနစ်ကြောင့် လူနာကို စဉ်ဆက်မပြတ် စောင့်ရှောက်ကုသနိုင်မှုအပိုင်း (Continuity of care) မှာ ထိခိုက်ယုတ်လျော့မှုတွေ ရှိလာနိုင်ပါတယ်။ (6)	
ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ ဆေးခန်းစီမံခန့်ခွဲမှု ကိုယ်ပိုင်လွတ်လပ်ခွင့်ကို ထိခိုက်နိုင်ပါတယ်။ (7)	
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လူနာတွေကို ကျန်းမာရေးအသိပညာပေးတာတွေ လုပ်ဖို့ခက်ခဲသွားမယ်။ (8)	
အခြား အကြောင်းပြချက်များ။ အသေးစိတ်ဖော်ပြပေးပါရန် (9) 	
Why do you choose capitation as your least preferred payment? (Choose all that apply)	
This payment method can disrupt my income.	
The number of patient visits at my clinic will be declined due to this payment method.	

Health services quality of my clinic will be deteriorated by this payment method.
O I might have some financial risks because of this payment method.
This payment method will prolong the waiting time of patients in my clinic.
The continuity of patient care will be worsened by this payment method.
O This payment method can give less personal freedom in my clinic management.
It is difficult to perform health promotion and education measures in my clinic due to this payment method.
Other reasons, please specify

Display This Question:

ıf Q4.2 [ Fees-for-service (လူနာလာပြသည့် အကြိမ်အရေအတွက်ပေါ် အခြေခံတဲ့ ငွေပေးချေမူ) ] = 4

Q4.8 သင် ကြိုက်နှစ်သက်မှု အနည်းဆုံး ငွေပေးချေမှု နည်းလမ်းအနေနဲ့ Fee-for-service ကို
ဘာလို့ရွေးချယ်ရတာလဲ? (အဖြေမှန်အားလုံးကို ရွေးချယ်ရန်)
ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဝင်ငွေကို ခိုက်စေနိုင်တယ်။ (1)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လာပြတဲ့ လူနာအရေအတွက် နည်းသွားစေနိုင်တယ်။ (2)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းရဲ့ကျန်းမာရေး ဝန်ဆောင်မှု အရည်အသွေးပိုင်းမှာ ခိုက်မှုတွေ ဖြစ်လာစေနိုင်တယ်။ (3)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်မှာ ငွေကြေးဆိုင်ရာ အခက်အခဲတွေ ရှိလာနိုင်ပါတယ်။ (4)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့် ဆေးခန်းကို လာတဲ့ လူနာတွေ ပြသဖို့ စောင့်ရချိန် (Waiting time) ကို ပိုကြာစေနိုင်တယ်။ (5)
ဒီငွေပေးချေမှုစနစ်ကြောင့် လူနာကို စဉ်ဆက်မပြတ် စောင့်ရှောက်ကုသနိုင်မှုအပိုင်း (Continuity of care) မှာ ထိခိုက်ယုတ်လျော့မှုတွေ ရှိလာနိုင်ပါတယ်။ (6)
ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ ဆေးခန်းစီမံခန့်ခွဲမှု ကိုယ်ပိုင်လွတ်လပ်ခွင့်ကု ခိုက်နိုင်ပါတယ်။ (7)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လူနာတွေကို ကျန်းမာရေးအသိပညာပေးတာတွေ လုပ်ဖို့ခက်ခဲသွားမယ်။ (8)
အခြား အကြောင်းပြချက်များ။ အသေးစိတ်ဖော်ပြပေးပါရန် (9) 
Why do you choose fee-for-service as your least preferred payment? (Choose all that apply)
This payment method can disrupt my income.
The number of patient visits at my clinic will be declined due to this payment method.

Health services quality of my clinic will be deteriorated by this payment method.
I might have some financial risks because of this payment method.
This payment method will prolong the waiting time of patients in my clinic.
The continuity of patient care will be worsened by this payment method.
This payment method can give less personal freedom in my clinic management.
It is difficult to perform health promotion and education measures in my clinic due to this payment method.
Other reasons, please specify

Display This Question:

If Q4.2 [ 心の] = 4

Q4.9 သင် ကြိုက်နှစ်သက်မှု အနည်းဆုံး ငွေပေးချေမှု နည်းလမ်းအနေနဲ့ လစာ ကို ဘာလို့ရွေးချယ်ရတာလဲ?
(အဖြေမှန်အားလုံးကို ရွေးချယ်ရန်)
ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဝင်ငွေကို ထိခိုက်စေနိုင်တယ်။ (1)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လာပြတဲ့ လူနာအရေအတွက် နည်းသွားစေနိုင်တယ်။ (2)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းရဲ့ကျန်းမာရေး ဝန်ဆောင်မှု အရည်အသွေးပိုင်းမှာ ထိခိုက်မှုတွေ ဖြစ်လာစေနိုင်တယ်။ (3)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်မှာ ငွေကြေးဆိုင်ရာ အခက်အခဲတွေ ရှိလာနိုင်ပါတယ်။ (4)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့် ဆေးခန်းကို လာတဲ့ လူနာတွေ ပြသဖို့ စောင့်ရချိန် (Waiting time) ကို ပိုကြာစေနိုင်တယ်။ (5)
ဒီငွေပေးချေမှုစနစ်ကြောင့် လူနာကို စဉ်ဆက်မပြတ် စောင့်ရှောက်ကုသနိုင်မှုအပိုင်း (Continuity of care) မှာ ထိခိုက်ယုတ်လျော့မှုတွေ ရှိလာနိုင်ပါတယ်။ (6)
ဒီငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ ဆေးခန်းစီမံခန့်ခွဲမှု ကိုယ်ပိုင်လွတ်လပ်ခွင့်ကို ထိခိုက်နိုင်ပါတယ်။ (7)
ဒီငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လူနာတွေကို ကျန်းမာရေးအသိပညာပေးတာတွေ လုပ်ဖို့ခက်ခဲသွားမယ်။ (8)
အခြား အကြောင်းပြချက်များ။ အသေးစိတ်ဖော်ပြပေးပါရန် (9) 
Why do you choose salary as your least preferred payment? (Choose all that apply)
This payment method can disrupt my income.
The number of patient visits at my clinic will be declined due to this payment method.

Health services quality of my clinic will be deteriorated by this payment method.
I might have some financial risks because of this payment method.
This payment method will prolong the waiting time of patients in my clinic.
The continuity of patient care will be worsened by this payment method.
This payment method can give less personal freedom in my clinic management.
It is difficult to perform health promotion and education measures in my clinic due to this payment method.
Other reasons, please specify

Display This Question:

If Q4.2 [ Performance-based payment(လုပ်ဆောင်ချက်ပေါ် အခြခံတဲ့ ငွေပေးချေမှု) ] = 4

Q4.10 သင် ကြုက်နှစ်	ာသက်မှု အနည်းဆုံး ငွေပေးချေမှု နည်းလမ်းအနေနဲ့ Performance-based
payment(လုပ်ဆောင်	ချက်ပေါ် အခြေခံတဲ့ ငွေပေးချေမှု) ကို ဘာလို့ရွေးချယ်ရတာလဲ? (အဖြေမှန်အားလုံးကို
ရွေးချယ်ရန်)	
36	ငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ဝင်ငွေကို ထိခိုက်စေနိုင်တယ်။ (1)
်ီ နည်းသွားစေနိုင်ဝ	ငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လာပြတဲ့ လူနာအရေအတွက် ဘယ်။ (2)
_	ငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းရဲ့ကျန်းမာရေး ဝန်ဆောင်မှု အရည်အသွေးပိုင်းမှာ စ်လာစေနိုင်တယ်။ (3)
36	ငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်မှာ ငွေကြေးဆိုင်ရာ အခက်အခဲတွေ ရှိလာနိုင်ပါတယ်။ (4)
time) ကို ပိုကြာစ	ငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့် ဆေးခန်းကို လာတဲ့ လူနာတွေ ပြသဖို့ စောင့်ရချိန် (Waiting စေနိုင်တယ်။ (5)
	ငွေပေးချေမှုစနစ်ကြောင့် လူနာကို စဉ်ဆက်မပြတ် စောင့်ရှောက်ကုသနိုင်မှုအပိုင်း are) မှာ ထိခိုက်ယုတ်လျော့မှုတွေ ရှိလာနိုင်ပါတယ်။ (6)
္ခြီ ထိခိုက်နိုင်ပါတပ	ငွေပေးချေမှုစနစ်က ကိုယ့်ရဲ့ ဆေးခန်းစီမံခန့်ခွဲမှု ကိုယ်ပိုင်လွတ်လပ်ခွင့်ကို ပ်။ (7)
	ငွေပေးချေမှုစနစ်ကြောင့် ကိုယ့်ဆေးခန်းမှာ လူနာတွေကို ဝိပညာပေးတာတွေ လုပ်ဖို့ခက်ခဲသွားမယ်။ (8)
39	ခြား အကြောင်းပြချက်များ။ အသေးစိတ်ဖော်ပြပေးပါရန် (9)

Why do you choose Performance-based paymentas your least preferred payment? (Choose all that apply)

This payment method can disrupt my income.
The number of patient visits at my clinic will be declined due to this payment method.
Health services quality of my clinic will be deteriorated by this payment method.
I might have some financial risks because of this payment method.
This payment method will prolong the waiting time of patients in my clinic.
The continuity of patient care will be worsened by this payment method.
This payment method can give less personal freedom in my clinic management.
It is difficult to perform health promotion and education measures in my clinic due to this payment method.
Other reasons, please specify
End of Block: ငွေပေးချေမှုနည်းလမ်းများ
Start of Block: လူဦးရေဆိုင်ရာ အချက်အလက်
*
Q5.1 ပြည့်ပြီးအသက်
Age at your last birthday

O Ph.D. သို့မဟုတ် ပါရဂူဘွဲ့ (Doctorate) (4)

🔾 အခြား။ ကျေးဇူးပြု၍ ဖော်ပြပေးပါရန် (5)

Vhat is your highest level of education?	
O M.B., B.S	
O Postgraduate Diploma	
O Master degree	
O Ph.D. or Doctorate	
Others, please specify	
ind of Block: လူဦးရေဆိုင်ရာ အချက်အလက်	

Start of Block: ကျေးဇူးတုံ့ပြန်ခြင်းအစီအစဉ်

Q6.1 ဒီသုတေသနမှာ ပါဝင်ဖြေဆိုပေးသူတွေကို ကျေးဇူးတင်တဲ့အနေနဲ့ မြန်မာငွေကျပ် ၅,၀၀၀ တန်ဖိုးရှိတဲ့ phone bill ကဒ် ၂၀ကို မဲဖောက်ပေးသွားမှာ ဖြစ်ပါတယ်။ ဒီအစီအစဉ်မှာ ပါဝင်ချင်တယ်ဆိုရင် ကျေးဇူးပြုပြီး အောက်ပါ link ကို နှိပ်ပါ။ သုတေသနကို အားလုံးဆောင်ရွက်ပြီး တစ်လအတွင်းမှာ ကံထူးသူများကို ဖုန်းဘေလွှဲပေးမှာဖြစ်ပါတယ်။

https://aut.au1.qualtrics.com/jfe/form/SV 5zOE6kad4s5SZCJ

As a token of gratitude, this research includes 20 lucky draws of phone bill, each of which worth 5,000 Myanmar Kyats. If you would like to take part in the lucky draw, please click the following link. The winners of the lucky draws will receive the phone bill within one month after completing the research.

https://aut.au1.qualtrics.com/jfe/form/SV 5zOE6kad4s5SZCJ

End of Block: ကျေးဇူးတုံ့ပြန်ခြင်းအစီအစဉ်

# **Appendix E: Lucky Draw Survey**

		. o [	ے د	L, č		Θ	_ Ç
ကျေ	၊းဇား၊	တ၊	นธ	ıac	းအ	മങ	<b>0</b> 2
T U	Î ÎL	آلط	יו כ	<u>י</u>			Ū

Survey	<b>Flow</b>
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Block: ကျေး <b>ဇူးတုံ့ပြန်ခြင်းအစီအစဉ် (3 Questions</b> )
Page Break
Start of Block: ကျေးဇူးတုံ့ပြန်ခြင်းအစီအစဉ်
Q1 ဒီသုတေသနမှာ ပါဝင်ဖြေဆိုပေးသူတွေကို ကျေးဇူးတင်တဲ့အနေနဲ့ မြန်မာငွေကျပ် ၅,၀၀၀
တန်ဖိုးရှိတဲ့ phone bill ကဒ်၂၀ကို မဲဖောက်ပေးသွားမှာ ဖြစ်ပါတယ်။ ဒီအစီအစဉ်မှာ
ပါဝင်ချင်တယ်ဆိုရင် ကျေးဇူးပြုပြီး သင့်ရဲ့မိုဘိုင်းဖုန်းနံပါတ်နဲ့ ဖုန်းကဒ်အမျိုးအစားကို
အောက်မှာ ဖော်ပြပေးပါ။ သုတေသန အားလုံးဆောင်ရွက်အပြီး တစ်လအတွင်းမှာ
ကံထူးသူများကို ဖုန်းဘေလွှဲပေးမှာဖြစ်ပါတယ်။
As a token of gratitude, this research includes 20 lucky draws of phone bill, each of which worth 5,000
Myanmar Kyats. If you would like to take part in the lucky draw, please click the following link. The
winners of the lucky draws will receive the phone bill within one month after completing the research.
Q2 ဖုန်းနံပါတ်
Phone Number

Name of Telecommunication Company	
End of Block: ကျေးဇူးတုံ့ပြန်ခြင်းအစီအစဉ်	

# **Appendix F: Researcher's Codebook**

**Table 19:** Codebook for Data Analysis

SPSS Name	Variable (in Unit)	Coding Instructions	Measurem ent Scale
ID	ID		Scale
Age	Completed age (in Years)		Scale
Agegp3	Age group	1 = <=33, 2 = 34-54, 3 = 55+	Ordinal
Gender	Gender identity of the participants	1 = Male, 2 = Female, 3 = Others, 4 = Do not want to disclose	Nominal
Recode_Gender	Gender identity of the participants (In compressed variables)	2 = Male, 2 = Female, 3 = Unspecified	Nominal
Education	Highest level of education completed	1 = M.B., B.S, 2 = Postgrad Diploma, 3 = Master or PhD/Doctorate	Ordinal
Recode_Education	Highest level of education completed (In compressed variables)	2 = M.B., B.S, 2 = Postgrad Diploma, 3 = Master, 4 = PhD/Doctorate	Ordinal
GP_Experience_Years	Experiences of working as a General Practitioner (in Years)		Scale
Foreign_Experinence	Working or Studying experiences in foreign countries	0 = No, 1 = Yes	Nominal
StateRegion	State or Region where the clinic is located	1 = Kachin, 2 = Kayah, 3 = Kayin, 4 = Chin, 5 = Mon, 6 = Rakhine, 7 = Shan, 8 = Yangon, 9 = Mandalay, 10 = Magway, 11 = Sagaing, 12 = Bago, 13 = Ayeyarwady, 14 = Tanintharyi, 15 = Naypyidaw	Nominal
UrbanRural	Area of state or region where the clinic is located	1 = Urban, 2 = Peri urban, 3 = Rural	Nominal

Membership	Membership of GPs with local or international network	0 = No, 1 = Yes	Nominal
ММА	Members of Myanmar Medical Association (MMA)	0 = No, 1 = Yes	Nominal
PSI	Members of Population Services International/Myanmar (PSI)	0 = No, 1 = Yes	Nominal
OtherNetworks	Members of other networks	0 = No, 1 = Yes	Nominal
No_of_Network	Number of networks that GPs are membered		Ordinal
Salary_Network	Salary as a payment method of the network	0 = No, 1 = Yes	Nominal
P4P_Network	Performance-based-payment as a payment method of the network	0 = No, 1 = Yes	Nominal
FFS_Network	Fee-for-service as a payment method of the network	0 = No, 1 = Yes	Nominal
TwoOrMore_Network	Two or more payment methods in the network	0 = No, 1 = Yes	Nominal
Other_Network	Other payment methods in the network	0 = No, 1 = Yes	Nominal
GeneralMedicalCare	General medical care provided at the clinic	0 = No, 1 = Yes	Nominal
SpecialistCare	Specialist medical care provided at the clinic	0 = No, 1 = Yes	Nominal
MinorOp	Minor operation provided at the clinic	0 = No, 1 = Yes	Nominal

MajorOp	Major operation provided at the clinic	0 = No, 1 = Yes	Nominal
HE	Health education and promotion provided at the clinic	0 = No, 1 = Yes	Nominal
Lab	Laboratory investigation provided at the clinic	0 = No, 1 = Yes	Nominal
Imaging	Imaging services provided at the clinic	0 = No, 1 = Yes	Nominal
OtherHS	Other health services provided at the clinic	0 = No, 1 = Yes	Nominal
OpeningHours	Average clinic opening hours per day (in Hours)		Scale
WaitingTime_Minutes	Average waiting time per patient (in Minutes)		Scale
PaitentLoad	Average number of patients per day		Scale
ConsultationFees	Average consultation fees per patient (in Myanmar Kyats)		Scale
Income	Average family income per month (in Myanmar Kyats)	1 = <1,000,000MMK, 2 = 1,000,000MMK to 2,000,000MMK, 3 = 2,000,001MMK to 3,000,000MMK, 4 = 3,000,001MMK to 4,000,000MMK, 5 = >4,000,000MMK	Ordinal
Capitation_Acceptability	Acceptability of capitation payment method	1 = Very unacceptable, 2 = Unacceptable, 3 = Neutral, 4 = Acceptable, 5 = Very acceptable	Ordinal
FFS_Acceptability	Acceptability of FFS payment method	1 = Very unacceptable, 2 = Unacceptable, 3 = Neutral, 4 = Acceptable, 5 = Very acceptable	Ordinal
Salary_Acceptability	Acceptability of salary payment method	1 = Very unacceptable, 2 = Unacceptable, 3 = Neutral, 4 = Acceptable, 5 = Very acceptable	Ordinal
P4P_Acceptability	Acceptability of P4P method	1 = Very unacceptable, 2 = Unacceptable, 3 = Neutral, 4 = Acceptable, 5 = Very acceptable	Ordinal

Capitation_Preference	Preferences of capitation payment method	1 = Most preferred, 2 = Preferred, 3 = Not preferred, 4 = Least preferred	Nominal
FFS_Preference	Preferences of FFS payment method	2 = Most preferred, 2 = Preferred, 3 = Not preferred, 4 = Least preferred	Nominal
Salary_Preference	Preferences of salary payment method	3 = Most preferred, 2 = Preferred, 3 = Not preferred, 4 = Least preferred	Nominal
P4P_Preference	Preferences of P4P method	4 = Most preferred, 2 = Preferred, 3 = Not preferred, 4 = Least preferred	Nominal
Capitation1st_IncomeSecure	Income security reason for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal
Capitation1st_IncreasedVisit	Increased patients visit reason for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal
Capitation1st_ImprovedQuality	Improved healthcare quality reason for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal
Capitation1st_NoFinancialRisk	No financial risk reason for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal
Capitation1st_ReduceWaitingTime	Reduced patient waiting time reason for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal
Capitation1st_ImprovedContinuity	Improved continuity of care reason for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal
Capitation1st_MoreFreedom	More freedom in clinic management reason for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal
Capitation1st_MoreHE	More health education and promotion reason for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal
Capitation1st_Others	Other reasons for choosing capitation as the first preference	0 = No, 1 = Yes	Nominal

FFS1st_IncomeSecure	Income security reason for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
FFS1st_IncreasedVisit	Increased patients visit reason for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
FFS1st_ImprovedQuality	Improved healthcare quality reason for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
FFS1st_NoFinancialRisk	No financial risk reason for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
FFS1st_ReduceWaitingTime	Reduced patient waiting time reason for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
FFS1st_ImprovedContinuity	Improved continuity of care reason for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
FFS1st_MoreFreedom	More freedom in clinic management reason for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
FFS1st_MoreHE	More health education and promotion reason for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
FFS1st_Others	Other reasons for choosing FFS as the first preference	0 = No, 1 = Yes	Nominal
Salary1st_IncomeSecure	Income security reason for choosing salary as the first preference	0 = No, 1 = Yes	Nominal
Salary1st_IncreasedVisit	Increased patients visit reason for choosing salary as the first preference	0 = No, 1 = Yes	Nominal
Salary1st_ImprovedQuality	Improved healthcare quality reason for choosing salary as the first preference	0 = No, 1 = Yes	Nominal
Salary1st_NoFinancialRisk	No financial risk reason for choosing salary as the first preference	0 = No, 1 = Yes	Nominal

Salary1st_ReduceWaitingTime	Reduced patient waiting time reason for choosing salary as the first preference	0 = No, 1 = Yes	Nominal
Salary1st_ImprovedContinuity	Improved continuity of care reason for choosing salary as the first preference	0 = No, 1 = Yes	Nominal
Salary1st_MoreFreedom	More freedom in clinic management reason for choosing salary as the first preference	0 = No, 1 = Yes	Nominal
Salary1st_MoreHE	More health education and promotion reason for choosing salary as the first preference	0 = No, 1 = Yes	Nominal
Salary1st_Others	Other reasons for choosing salary as the first preference	0 = No, 1 = Yes	Nominal
P4P1st_IncomeSecure	Income security reason for choosing P4P as the first preference	0 = No, 1 = Yes	Nominal
P4P1st_IncreasedVisit	Increased patients visit reason for choosing P4P as the first preference	0 = No, 1 = Yes	Nominal
P4P1st_ImprovedQuality	Improved healthcare quality reason for choosing P4P as the first preference	0 = No, 1 = Yes	Nominal
P4P1st_NoFinancialRisk	No financial risk reason for choosing P4P as the first preference	0 = No, 1 = Yes	Nominal
P4P1st_ReduceWaitingTime	Reduced patient waiting time reason for choosing P4P as the first preference	0 = No, 1 = Yes	Nominal
P4P1st_ImprovedContinuity	Improved continuity of care reason for choosing P4P as the first preference	0 = No, 1 = Yes	Nominal
P4P1st_MoreFreedom	More freedom in clinic management reason for choosing P4P as the first preference	0 = No, 1 = Yes	Nominal
P4P1st_MoreHE	More health education and promotion reason for choosing P4P as the first preference	0 = No, 1 = Yes	Nominal

P4P1st_Others	Other reasons for choosing P4Pas the first preference	0 = No, 1 = Yes	Nominal
Capitation4th_IncomeDisrupt	Income insecurity reason for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
Capitation4th_ReducedVisit	Decreased patient visit reason for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
Capitation4th_DecreasedQuality	Declined healthcare quality reason for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
Capitation4th_FinancialRisk	Financial risk reason for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
Capitation4th_ProlongWaitingTime	Increased patient waiting time reason for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
Capitation4th_ReducedContinuity	Deteriorated continuity of care reason for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
Capitation4th_LessFreedom	Less freedom in clinic management reason for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
Capitation4th_NoHE	Less health education and promotion reason for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
Capitation4th_Others	Other reasons for choosing capitation as the last preference	0 = No, 1 = Yes	Nominal
FFS4th_IncomeDisrupt	Income insecurity reason for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal
FFS4th_ReducedVisit	Decreased patient visit reason for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal
FFS4th_DecreasedQuality	Declined healthcare quality reason for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal

FFS4th_FinancialRisk	Financial risk reason for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal
FFS4th_ProlongWaitingTime	Increased patient waiting time reason for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal
FFS4th_ReducedContinuity	Deteriorated continuity of care reason for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal
FFS4th_LessFreedom	Less freedom in clinic management reason for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal
FFS4th_NoHE	Less health education and promotion reason for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal
FFS4th_Others	Other reasons for choosing FFS as the last preference	0 = No, 1 = Yes	Nominal
Salary4th_IncomeDisrupt	Income insecurity reason for choosing salary as the last preference	0 = No, 1 = Yes	Nominal
Salary4th_ReducedVisit	Decreased patient visit reason for choosing salary as the last preference	0 = No, 1 = Yes	Nominal
Salary4th_DecreasedQuality	Declined healthcare quality reason for choosing salary as the last preference	0 = No, 1 = Yes	Nominal
Salary4th_FinancialRisk	Financial risk reason for choosing salary as the last preference	0 = No, 1 = Yes	Nominal
Salary4th_ProlongWaitingTime	Increased patient waiting time reason for choosing salary as the last preference	0 = No, 1 = Yes	Nominal
Salary4th_ReducedContinuity	Deteriorated continuity of care reason for choosing salary as the last preference	0 = No, 1 = Yes	Nominal
Salary4th_LessFreedom	Less freedom in clinic management reason for choosing salary as the last preference	0 = No, 1 = Yes	Nominal

Salary4th_NoHE	Less health education and promotion reason for choosing salary as the last preference	0 = No, 1 = Yes	Nominal
Salary4th_Others	Other reasons for choosing salary as the last preference	0 = No, 1 = Yes	Nominal
P4P4th_IncomeDisrupt	Income insecurity reason for choosing P4P as the last preference	0 = No, 1 = Yes	Nominal
P4P4th_ReducedVisit	Decreased patient visit reason for choosing P4P as the last preference	0 = No, 1 = Yes	Nominal
P4P4th_DecreasedQuality	Declined healthcare quality reason for choosing P4Pas the last preference	0 = No, 1 = Yes	Nominal
P4P4th_FinancialRisk	Financial risk reason for choosing P4P as the last preference	0 = No, 1 = Yes	Nominal
P4P4th_ProlongWaitingTime	Increased patient waiting time reason for choosing P4P as the last preference	0 = No, 1 = Yes	Nominal
P4P4th_ReducedContinuity	Deteriorated continuity of care reason for choosing P4P as the last preference	0 = No, 1 = Yes	Nominal
P4P4th_LessFreedom	Less freedom in clinic management reason for choosing P4Pas the last preference	0 = No, 1 = Yes	Nominal
P4P4th_NoHE	Less health education and promotion reason for choosing P4P as the last preference	0 = No, 1 = Yes	Nominal
P4P4th_Others	Other reasons for choosing P4P as the last preference	0 = No, 1 = Yes	Nominal

### **Appendix G: PGR1 Approval Letter**



3 September 2020 Ei Mon Thinn Kyu

Dear Ei Mon Thinn,

Thank you for submitting your PGR1 Research Proposal for the Master of Public Health.

Your proposal has been reviewed and approved by the Faculty of Health and Environmental Sciences, which will be noted at the Postgraduate Research Committee September 2020 meeting.

Your research details are:

Programme: AK3805 Master of Public Health
Paper enrolment: HEAL901 Dissertation 60 pts

Student ID: 18030239

Working title: Preferences for healthcare provider payment mechanisms in

Myanmar: Investigating general practitioners' opinions

Primary supervisor: Dr Ailsa Holloway
Start date: 13 July 2020
Expected completion date: 8 January 2021

For more information about the programme of study, please refer to the *Postgraduate Handbook*.

The AUT website for forms and handbooks is:

https://sdw.aut.ac.nz/postgraduate-research/pg-forms-policies-and-processes

Yours sincerely

**Professor Susan Crowther** 

Acting Associate Dean Postgraduate Research · Hoa Mautaki Taura Rangahau Faculty of Health and Environmental Sciences · Te Ara Hauora A Pūtaiao Auckland University of Technology · Te Wānanga Aronui o Tāmaki Makau Rau 09 921 9999 extension 7301

Cc Primary supervisor Dr Ailsa Holloway

### **Appendix H: Ethics Approval Letter**



#### **Auckland University of Technology Ethics Committee (AUTEC)**

Auckland University of Technology D-88, Private Bag 92006, Auckland 1142, NZ T: +64 9 921 9999 ext. 8316 E: ethics@aut.ac.nz www.aut.ac.nz/researchethics

12 October 2020

Ailsa Holloway Faculty of Health and Environmental Sciences

Dear Ailsa

Re Ethics Application: 20/300 Preferences for healthcare provider payment mechanisms in Myanmar:

Investigating general practitioners' opinions

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 12 October 2023.

#### **Standard Conditions of Approval**

- 1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC in this application.
- A progress report is due annually on the anniversary of the approval date, using the EA2 form.
- 3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
- 4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form.
- Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
- 6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.
- 7. It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard and that all the dates on the documents are updated.

AUTEC grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

Please quote the application number and title on all future correspondence related to this project.

For any enquiries please contact <a href="mailto:ethics@aut.ac.nz">ethics@aut.ac.nz</a>. The forms mentioned above are available online through http://www.aut.ac.nz/research/researchethics

(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat

**Auckland University of Technology Ethics Committee** 

xxv2583@autuni.ac.nz

## **Appendix I: Confidentiality Agreement with Translator**



### **Confidentiality Agreement**

For an interpreter.

Project title: Preferences for healthcare provider payment mechanisms in Myanmar:

Investigating general practitioners' opinions

Project Supervisor: Dr. Ailsa Holloway

Researcher: Ei Mon Thinn Kyu

I understand that the interviews meetings or material I will be asked to translate is confidential.

I understand that the content of the interviews meetings or material can only be discussed with the researchers.

• I will not keep any copies of the translations nor allow third parties access to them.

whise

Translator 's signature:

Translator's name : Sithu Aung
Translator's Contact Details (if appropriate):

Sithu Aung

No (32), 5<sup>th</sup> Street, Pathein Nyunt Quarter, Mingalar Taungnyunt Township, Yangon, Myanmar sithuaung2992@gmail.com

+959 798423655

Date: 2<sup>nd</sup> September, 2020

Project Supervisor's Contact Details (if appropriate):

Dr. Ailsa Holloway,

Faculty of Health and Environmental Sciences,

Auckland University of Technology (AUT),

New Zealand,

ailsa.holloway@aut.ac.nz,

(+649) 921 9999 Ext 6796.

Approved by the Auckland University of Technology Ethics Committee on type the date on which the final approval was granted AUTEC Reference number type the AUTEC reference number

Note: The Translator should retain a copy of this form.