Strengthening Alignments between National Health Financing System and Primary Health Care: Lessons from Taiwan

by

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Thesis submitted in partial fulfillment of
the requirements for the degree of
Master of Science in the Duke Global Health Institute
in the Graduate School of Duke University

2020

ABSTRACT

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Abstract

Background: To tackle the demographic and epidemiologic challenges, countries around the world need to build a health system centered on primary health care (PHC) in which a supportive financing system is a premise. In this study, the Taiwanese PHC system is taken as a key example. It represents a system that the study can analyze to identify best practice and, additionally, draw out lessons that other systems can consider, replicate and apply for their own primary healthcare delivery needs. Methods: This study used a qualitative research approach to explore stakeholders' perspectives on the role that the National Health Insurance (NHI) of Taiwan plays in the delivery of PHC. The qualitative data was two-fold: (1) 21 in-depth interviews with local and national health insurance administrators, hospital and health centers' administrative managers, and service providers at private and hospital levels; and (2) participatory on-site observations of PHC delivery in health facilities and communities. Results: Nvivo 12 was used to conduct data analysis. The data revealed five main themes: (1) Payment method system reform; (2) integrated care services to improve PHC delivery; (3) E-health and technology's role in regulation and care delivery; (4) leadership support; and (5) education for both service users and providers. Conclusions: The study's findings include a need to refine the payment methods while keeping geographic disparities and effective incentives in mind; strengthen leadership support at different levels; improve

the feasibility and performance of e-health tools; improve the transparency and accountability of the regulation policies; and continuously work on health education.

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1. Introduction

Countries around the world are experiencing epidemiologic and demographic transitions. On the one hand, accompanying the rapid socioeconomic development of the society, non-communicable diseases (NCDs), including stroke, cancers, and diabetes, have become the leading cause of morbidity and mortality globally (WHO, 2018a). On the other hand, the life expectancy of people and the pace of population ageing are increasing dramatically worldwide: for example, by 2050, the world's population aged 60 years and older is expected to hit 2 billion (WHO, 2018b). These transitions are creating challenges to health systems globally with growing demand of health services, which indicate the needs for optimizing the health care delivery and financing system for sustainability.

In 2015, Universal Health Coverage (UHC) was adopted as a sub-objective of Sustainable Development Goal (SDG) 3. Its aim was to improve access to health services, especially for underserved population; enhance the health of individuals covered; and provide financial risk protection (UN, 2016). According to Watkins et al. (2018), for UHC to be attainable, a country-specific and contextual priority-setting process is essential, which depends on political, economic, demographic and epidemiological factors that influence the value of money for specific interventions. A set of prioritized health services publicly financed through a UHC scheme is called a health benefits package. The World Health Organization (WHO, 2019) recognizes that primary health care (PHC)

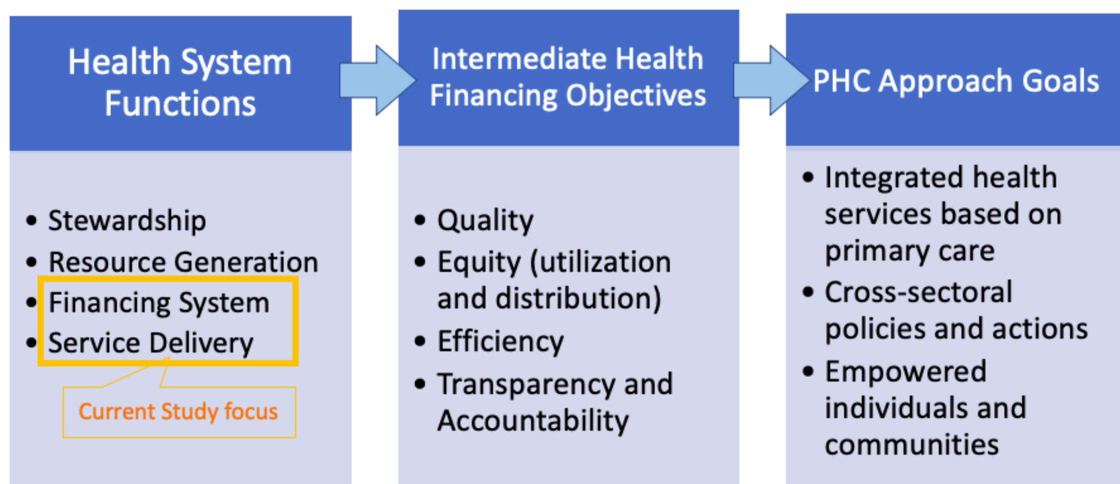
should be prioritized in a defined benefit package, because a health system centered on primary health care (PHC) delivers better health outcomes, efficiency and quality of care; in fact, 90 percent of an individual's lifetime health needs can be covered by PHC (WHO, 2019a). In addition, primary level services are also responsive to patients' non-health needs, which are essential for the realization of patient-centered care (Doherty & Govender, 2004). Therefore, while exploring cost-effective solutions for the growing care needs brought by demographic and economic transitions, countries around the world should aim to build a health system with strong PHC.

According to WHO's definition, PHC is a "whole-of-society approach to health", targeting highest level and equitable distribution of health and well-being by addressing people´s needs and preferences as early as possible along the continuum of health services: From health promotion and disease prevention to treatment, rehabilitation and palliative care, and as close as feasible to people's daily environment (WHO, 2018c). PHC has three components: (1) Integrated health services based on primary care and essential public health functions; (2) cross-sectoral policies and actions; and (3) individual and community empowerment (WHO, 2019a).

Yet, every country needs to deliver health services with limited financial, institutional and social resources. In other words, health systems must raise and allocate resources efficiently to ensure sustainability. Once political and public consensus has been reached on a benefit package, the next step concerns the package's implementation

within the country's health system (Watkins et al., 2018). In this regard, a well-functioning health financing system is critical; it holds the potential to either enhance or obstruct the achievement of health system goals (Kutzin, 2013). To facilitate policymaker attempts to align the instruments of health financing policy with their respective objectives, WHO (2008) proposes a framework in which to approach and analyze country-specific health financing policy (Figure 1). WHO further points out that strategic purchasing of health services can improve health system performance toward UHC, and being "strategic" means to be actively engaged in defining the service-mix and volume, and in selecting the provider-mix corroborated by evidence (WHO, 2017).

Figure 1. Links of health system functions, financing system objectives, and PHC approach goals.



Adapted from: WHO (2008) Health financing policy: a guide for decision-makers; WHO (2019) Primary health care.

The variety of finance health system approaches belies the fact that they are all

systems of insurance, apart from pure out-of-pocket payments (WHO, 2008). This is to argue that despite the variety of labels applied to health financing systems, due in large part to particular national and political considerations, the fundamental nature of finance health systems means decisionmakers should actively draw on the available and applicable experience of other countries/models.

Taiwan established its National Health Insurance system in 1995. It has been widely recognized for its management of cost and relatively high efficiency (Cheng, 2016). Enrolment into the system is mandatory for all citizens. It offers a uniform and comprehensive benefit package, including inpatient and outpatient care, prescription drugs, dental care, traditional Chinese medicine, child birth care, physical rehabilitation, home care, chronic mental health care, and end-of-life care (Cheng, 2016). In addition, the government has developed innovative practices for better delivery of primary health care. For instance, the Family Practice Integrated Care Project (FPICP) was launched in 2003 to promote the community health care group-based practice in the primary care sector. Evaluation results of FPICP indicated a steady increase in utilization of preventive health services (Jan et al., 2018).

Nevertheless, Taiwan's NHI system does face severe challenges brought on by demographic and epidemiologic transitions as well as geographic disparities. For instance, by 2026 Taiwan will become a "super-aged" society in which more than 21 percent of the population age 65 or older (NDC, 2018). This development suggests a

continuous increase in the utilization of health services and a decrease in system revenues, as a result of the deduction in the working-age population. Currently, and also reflective of this aging population, the country's leading causes for morbidity and mortality are non-communicable diseases, such as diabetes, heart diseases and cancers (IHME, 2017). As well, there are noticeable differences in the main social and economic indicators between the capital city, Taipei, and the east coast county, Taitung, which is Taiwan's largest indigenous population center. These differences are shown in Table 1:

Table 1. Social, Economic and Health Indicators of Taipei and Taitung

	Taipei	**Taitung**
Average household income	NT$ 1.38 m (US$ 45,136)	NT$ 751,292 (US$ 24,573)
Average life expectancy	83.6	75.8
# Doctors per 10,000 people	37.51	13.71

Source: Ministry of the Interior, Taiwan (2018). Retrieved from: https://dep.mohw.gov.tw/DOS/np-1725-113.html

In order to improve service quality and reduce costs, the authority has made constant efforts to reform and refine the NHI system. For example, the lack of referral system at the initial stage of NHI has resulted in certain severe waste issues of medical resources among service users, such as the common "doctor-shopping" behavior, which means individuals visit several doctors and/or hospitals without professional referrals for the same health conditions (Chang, 2001). The NHI has recognized this issue and initiated several solutions, such as offering a discount on the co-payment for patients

who visit medical centers through GP's referrals (Wu, 2010). Another area of NHI concern has been the quality of care (Wu, 2010). The authority has been experimenting with solutions to improve quality of care while keeping expenditure under control. In this case, for example, the NHI has developed a comprehensive supervision system to monitor the practice of practitioners and institutions (NHIA, 2017a). It has piloted "pay-for-performance" schemes on healthcare provisions including chronic diseases management services (NHIA, 2017b). Therefore, Taiwan can offer valuable experiences of good practice and lessons to the health financing systems worldwide to achieve their health system goals, including the PHC objectives.

The primary goal of this study was to contribute to strengthening alignments between the health financing systems and the health system's primary health care delivery. Through the case study of Taiwan, the objectives of this study are to capture the perspectives of stakeholders, including health care providers and administrators, on the alignments between Taiwan's NHI system and its PHC delivery; to identify best practice and key lessons that health financing systems can consider and apply to support primary healthcare delivery; and to provide policy recommendations based on the results.

2. Methods

2.1 Overall design of study

This study used a qualitative research approach to explore stakeholders' perspectives on the role that the National Health Insurance (NHI) of Taiwan plays in the delivery of primary health care (PHC). The goal of the data collection and subsequent analysis was to identify best practices and lessons that other national insurance systems can use to support primary healthcare delivery. The qualitative data was two-fold: (1) In-depth interviews with local and national health insurance administrators, hospital and health centers' administrative managers, and service providers at private and hospital levels; and (2) participatory direct on-site observations of PHC delivery in the service providers' institutions and communities. The Institutional Review Board of Duke Kunshan University approved the study protocol. All participants provided verbal informed consent.

2.2 Setting and participants

Considering the geographical disparities in Taiwan, in order to have a more representative sample for the study population and enrich the diversity of data, this study aims to interview eligible participants in both Taipei and Taitung. These participants represent Taiwan's socioeconomic spectrum. To be eligible for this study, participants needed to be 18 years of age or above. Individuals were eligible if they held

a position (either currently or previously) as a doctor, nurse, or administrative staff in a medical institution (including clinics and hospitals of different levels) or a government department of health or NHI related work at different levels. Participants were recruited with the help of two liaisons: Senior administrative staff working in Taitung St. Mary's Hospital, an area hospital mainly providing primary health care to local communities through partnership with community health facilities, and Koo Foundation Sun Yat-Sen Cancer Center in Taipei, a national medical center closely working with community health centers and clinics. St. Mary's and Koo Foundation are both in the NHI network. These two liaisons were selected on the basis that they worked closely with the staff in each department and were familiar with their backgrounds and work schedules. They were provided with both verbal and written background information of the study and the characteristics of participants targeted for the interviews. The liaisons then helped to identify potential participants and assisted with scheduling interviews. During the selection process, the liaisons ensured the participants were willing to give consent to be interviewed.

In order to have a broad perspective on the research question, the study identified a total of 21 eligible individuals who have working experience in national, regional and local levels of health care settings. This group included eight administrative staff (four with non-medical backgrounds, two with experience as doctors, and two with experience as nurses), six doctors, and seven nurses. All participants provided consent

to participate in this study. The majority of participants (n=15) gave verbal consent to have the interview recorded with a digital voice recorder, while remaining participants refused to make audio records due to confidentiality concerns and hospital privacy policies but did allow the researcher to take detailed notes during the interview. Each interview participant received a small gift that was equal to RMB 100 (460TWD) as compensation for their time to participate in the study.

2.3 Data collection

2.3.1 In-depth interviews

All interviewers were conducted by the student researcher. In order to ensure the quality of the data-collection process, the researcher attended a workshop on qualitative research methods, which included a discussion of ethical considerations in qualitative research.

The researcher conducted all interviews in Mandarin Chinese. The interviews were scheduled at a time convenient for the participant and located in confidential meeting rooms arranged by the partner hospitals. At the beginning of each interview, the researcher introduced and explained the purpose of the interview and assured the participant that all the data collected for this research project would be kept strictly confidential. The discussion followed the stages described by Rubin, H.J. and Rubin, I.S.

(1995); as such, the researcher tried to establish rapport in a natural environment, build trust, and encourage openness and depth by showing understanding.

Interview guides were tailored for participant groups. For administrative staff, the interview guide included questions about the history, decision-making processes, and challenges of applying national medical insurance policies into practice, with a focus on specific opportunities to support primary care delivery. Participant thoughts and attitudes about the current medical insurance policies and PHC practice were also explored. For practitioners, the interview guide included questions about whether they had experienced changes in their daily work in response to policies or practice of medical insurance; observed any changes in the patients' care seeking behaviors that reflected changes in the policies or practice of medical insurance; and their thoughts and attitudes about the current medical insurance policies and/or practice.

At the end of each interview, the researcher clarified with the participant any concerns and questions s/he had about the study and informed s/he how to maintain contact with the researcher.

2.3.2 On-site observations

In the original design, this research aimed to conduct focus group discussions with patients to understand whether the current practice of the NHI can effectively meet their primary health care needs; however, this was not approved by the partner hospitals because of privacy regulations. In lieu of patient interviews, the partner

hospitals made arrangements for the researcher to shadow local community nurses for home visits; attend primary care group visits to a diabetes clinic and a cancer medical center to conduct observations of other primary health care services in local communities, clinics and hospitals, and talk to staff who had experience of using NHI for treatments. The contents of observation include: The interaction and contacts between health professionals and patients in hospital and community-level; primary healthcare services and activities organized by hospitals and local health centers; and the administrative and regulative procedures of the national health insurance at the service providers' institutions and in the local communities. Direct observations offered researchers the opportunity to see the participants in their clinical setting, providing a more comprehensive and truthful account of their behavior (Ulin et al., 2015). Using the themes revealed in the interviews as a guide, the researcher took detailed notes during observation events and wrote memos for each observation immediately after it was conducted. These observation notes were reviewed and compared against the interview memos to identify similarities and differences while developing thematic codes for analysis. During this observation, the researcher identified barriers and facilitators for the public to access PHC, collected general opinions on the NHI system and PHC delivery, and improved understanding about the implementation details of insurance policies, which complemented and triangulated the findings of the interviews.

2.4 Analysis

The audio-recorded interviews were transcribed in Chinese by a research assistant who was not involved directly in the interviews. As a bilingual with competent fluency in both Chinese and English, I proofread all transcripts against the audio files for accuracy and consistency. For each transcript, I wrote a document memo to summarize the data in English. This memo writing process enables the analyst to explore and challenge interpretations when examining data and, while remaining true to the data, achieve abstraction (Birks et al., 2008). Afterwards, I developed a codebook that included structural codes informed by the interview guide and thematic codes identified through the document memos. The documents were uploaded into Nvivo 12 and coded using the framework. The codebook was iteratively revised through the coding process to reflect the emerging themes. I also identified representative quotes during this process and translated the texts from Chinese into English. Following this coding phase, queries were run for each of the structural and thematic code. Analytic memos were written to synthesize the data.

3. Results

Based on the literature review undertaken for this study (Cheng 2003, Cheng 2016, NHIA 2017a, NHIA 2017b, NHIA 2018), 99.6 percentage of Taiwan's population is covered by the government-run, single-payer National Health Insurance (NHI). The NHI is a universal health care scheme offering comprehensive coverage including inpatient and patient care, prescription drugs, dental services, home care and traditional Chinese medicine (TCM). Over 92 percentage of Taiwan's clinics and hospitals are contracted to NHI, providing patients with a wide range of service provider choice. NHI collects premiums from insured citizens. These premiums are based on a calculation that includes incomes, such as wages, stock dividends and bonuses. Low-income household and institutionalized personnel premiums are covered by the government. In 2002, the NHI completed its phase-in program towards global budgeting for the entire system, but it remains controversial issue, primarily because it did not consider the differences between regions and hospitals. The NHI pays the service providers predominantly on a classic fee-for-service basis, which has caused an increase in the volume of medically unnecessary services delivered. Therefore, the government has started experiments on pay-for-performance methods for asthma, diabetes, breast cancer, cervical cancer, and tuberculosis. In addition, various plans have been launched for improving the integrity of service delivery, including the Integrative Delivery Services (IDS) plan and the Family Practice Integrated Care Project (FPICP).

The study's sample includes eight administrative staff (four with non-medical backgrounds, two with doctor experience, and two with nurse experience), six doctors, and seven nurses. This results section will report the main themes that emerged in the interviews which are triangulated by the on-site observation, and highlight the components that are essential for supporting primary health care delivery. The data analysis revealed five main themes:

1) Payment method system reform;
2) PHC delivery improvements via integrated care services;
3) Digital tools and e-health technologies in regulation and care delivery;
4) Leadership support;
5) Education for both service users and providers.

For each theme identified above, useful information emerged for the NHI system to provide better support to primary healthcare delivery will be presented below. Participant quotes supporting each theme are illustrated in Table 2.

Theme 1. Need to reform the payment method system

Doctors and administrators at both national and local levels strongly expressed that the payment methods of the NHI system are not satisfactory; in fact, at times the payment methods discouraged health care providers and institutions from providing high quality services. Regarding the annual global hospital budget from the National Health Insurance Administration (NHIA), all Taitung located administrators noted that

the current global budget allocation does not take into consideration geographic disparities. As a result, equity in health care delivery is an issue. In terms of the current fee-for-service method for paying health care providers, participants commented that it is “not effective for improving quality”, and “worse quality means more earnings”, because practitioners tend to deliver more and even unnecessary procedures to maximize their income. Some of the doctors expressed a concern that this approach will affect patient health outcomes, including management of chronic diseases such as diabetes, which will in turn increase the health expenditure of the NHI system. A pay-for-performance approach was discussed as a preferred alternative to the current fee-for-service approach. Although the NHI has launched several pay-for-performance schemes, they were considered ineffective by the health professionals and administrators interviewed in this study. These interviewees described the schemes as “dilettantish”, “still in a transitional period”, and “not exactly what is meant by pay-for-performance”, and the most frequent reason given was that the competition incentives for quality improvement is not enough. Some hospital administrators with medical backgrounds identified key factors for an ideal pay-for-performance design. In particular, they identified a sound risk management system in which management and treatment fees should be adjusted according to the risks of patients’ conditions – “higher risks, higher payments”. In addition, a good management scheme was perceived as an essential factor. One senior hospital administrator stressed that quality indicators should be

identified in advance and should be understandable and acceptable to patients and their families. Reported obstacles to further expand the pay-for-performance schemes in Taiwan include the lack of trust within the NHI system, calculation challenges based on whether to manage it by disease groups or communities, and pressure from peers. For instance, hospital doctors and administrators noted that some providers considered pay-for-performance methods, such as capitation, to be threats to their profit margins and so refused to change, especially in the private sector which relies on inpatients for income. Detailed representative quotes can be found in Table 2 under Theme 1. During the site visits, the researcher also noticed that practitioners who are paid through a pay-for-performance scheme, such as nurses and doctors in diabetes clinics and centers, appeared to be more motivated and emphasize the quality of care they provide, continuously checking with the patients about their satisfaction of the services.

Theme 2. Integrated care services improved PHC delivery

Health practitioners and institutional administrators acknowledged that the government is promoting integrated care services to facilitate PHC delivery. In the site visits to patients' homes, some service users also expressed their satisfaction about the integrated care services of NHI.

2.1 Home healthcare services

Examples emerged in the interviews include the Medication Home Delivery Service, which benefits patients, local pharmacists and pharmacies with stock (see Table

2 Theme 2.1). While many hospital health professionals and administrators reported that the effectiveness of the differentiated co-payments for outpatient services in different hospital levels are "almost negligible" in keeping patients at the primary level, two national government administrators mention that the NHIA is offering financial incentives for health care providers to deliver services at patients' homes. These payments are five-times higher than the rate providers receive at the hospital. The perceived competition among home healthcare service providers is also believed to improve the quality of care, since patients have the freedom to choose provider and providers are not allowed to charge patients, so "whether you can get the patients or not depends on the quality of your service" (direct quote from a hospital doctor).

2.2. Integrated care programs

In Taiwan, hospitals are divided into local community hospitals, regional hospitals, and medical centers. While better use of preventative services were observed among members of the Community Health Care Groups (CHCGs), one administrator of a community hospital noted that the feasibility of this model can be restricted by the scale of hospitals: Due to the small number of patients and departments, their hospital lacks the incentive to attact physicians of local clinics to build partnership with them (less patients means less payment in a fee-for-service system), which also alludes to the need for payment method reform. Several participants in Taitung mentioned that the local primary health care providers in resource-poor regions cannot fulfil the specialized

care needs of patients. Illustrative of this claim is a comment made by a relative of a patient during a community visit. The relative argued that “we [local people] paid the same amount of premiums, but the service we received is so poor”. The Integrative Delivery Services (IDS) plan was identified by the hospital and government administrators as an effective solution to improve accessibility in rural areas to PHC. The IDS is funded by the NHI, which doubles the payment to providers in hospitals and local clinics. This payment is aimed at encouraging hospitals to coordinate with local clinics to support the care needs of rural communities.

2.3 Case management

Case management was identified by almost all health practitioner and administrator participants as an extremely effective facilitator for PHC delivery. This practice also appears to be well-received among patients in my observation: almost all patients said they are happy with the services they received in the conversation with practitioners during home visits. Case management roles are usually filled by staff with nursing backgrounds who work in various medical settings, from discharge preparation in hospitals to chronic disease management in communities and medical institutions. Participants discussed the development of discharge preparation teams Taiwanese hospitals following the government’s policy to facilitate patients’ returns to PHC settings. Team case managers have a key role to play in this development (see Table 2 Theme 2.3). Several hospital doctors and nurses noted that in this model, the discharge

preparation should start from the first day of hospitalization. In addition, many community and hospital nurses also noted that continuous education is important for maintaining the success of case management; as is the case for certified diabetes educators (CDE) who are required by the NHIA to take continuous learning courses to maintain their qualification to practice. The personalized caring plans made by the case manager and patient was perceived as an efficient strategy to improve health outcomes and patient satisfaction.

Theme 3. Digital tools and e-health technologies in regulation and care delivery

The uptake of IT technology is described as an important component of the NHI system's regulatory and delivery of care processes. Several participants, including both health professionals and administrators, felt that IT technology plays an increasingly large role in their daily work in the NHI system. For instance, the NHI smart card was described by a notable portion of hospital administrators and health practitioners as a useful and efficient tool to target care needs while saving medical resources and time for both service providers and service users. In addition, the government also provided financial support to healthcare institutions and providers in rural areas to improve their internet facilities, specifically to enable the use of the NHI smart card. “My Health Bank”, an online portal where patients could access their medical information, was also identified by several health practitioners as an efficient tool for people to manage their health. An administrator who participated in the design of “My Health Bank” described

it as a "from womb to tomb" health record of an individual. The NHI of believed to be the first health system in the world to have launched this service. Nevertheless, administrators in Taitung noted that the IT system needs to be further improved to facilitate home visits in rural areas, where the access to internet is poor. In addition, some hospital administrators commented that changes in the supervision regulations associated with using the NHI smart cards are too fast to follow, such as the regulation on issuing medications (see Table1, Theme 3). In the site visits to rural communities, sometimes the local community nurses had to write down information on paper for records, because they could not access the information system of NHI due to weak Internet signal. Furthermore, two patients we visited complained about the care services they received, it turned out that the NHIA issued new regulations on the service items received by the patients, which were not explained clearly enough by the practitioner in a timely manner.

Theme 4. Leadership and governance

Leadership and governance at different levels were perceived by all participants as imperative to the alignment of the NHI system and PHC delivery. Various participants consider a leadership role to be a facilitator, while others described it as a barrier. At the national government level, although participants all agreed that the governance policies were encouraging the improvement of PHC delivery, local and regional administrators reported that the supervision practices of the NHI system were

not reasonable and that supervision may even discourage PHC providers to maintain and improve the quality of services (see Table 2 Theme 4). Several hospital health professionals and administrators noted that leadership in the hospitals is also critical for PHC delivery improvement. They discussed good practices of the hospital leaders in PHC delivery, while some reported that they felt a lack of support in their practice from senior leadership. During my observation of the PHC delivery activities in the hospitals, some service users mentioned in their conversation with the practitioners that they chose to come to this specific hospital, because they learnt that the leaders here are very "good" and "supportive" in providing the primary care they needed.

Theme 5. Education for both service users and providers

A range of perspectives on the importance of education was discussed by most participants. This discussion included education for both service users and health care providers. Administrators and health professionals recognized that population health education is vital for PHC delivery. A hospital doctor interviewed for this study made the argument directly that the NHI is "too good for people to consider health as their own responsibility". In this context, during my home visits with community nurses in Taitung, some local nurses commented that they perceived an increasing negligence in the families and communities of people with health care needs following the launch of the NHI. This negligence has created an extra workload for health care providers. Moral hazards appear to exist in both health service users and providers: While doctor/hospital

shopping behaviour of health service users was reported as a common issue in the NHI, some hospital administrators also expressed their concern about dishonest conduct of service providers, including making false claims from the NHI about the services they delivered.

Table 2. Themes and Representative Quotes from Participants

Themes	Quotes
1. Need to reform payment method system *1.1 Global budget*	"The NHI payment to the local community hospital and to the clinics are almost the same, while the regional hospitals receive higher payments. Therefore, if the clinics refer patients to the regional hospitals, then the clinics can get a higher payment; so, the threshold is different." (Taitung, hospital admin) "I hope that in the future the NHIA can take the regional characteristics into consideration when allocating hospital budgets. To take care of a patient with the same health condition in Taipei and Taitung, there is a big difference in the costs to the service provider." (Taitung, hospital admin) "The budget for all the community hospitals nationwide is same, but we have a different geographical environment and a greater indigenous population. [We also have] a higher proportion of the elderly and children to serve than other areas, so the current approach is not fair to us [health care providers in Taitung]. It would be much better if we can have an independent budget for each area." (Taitung, hospital admin) "I know hospitals even reduce the amount of treatments or outpatient visits to keep their budget balanced. So, people who are really in need of health care service can't get it." (Taitung, hospital admin)
1.2 Fee-for-service	"[Fee-for-service] is a very rude approach – it only manipulates your [provider's] financial matters, but neglects the priorities; thus it decays the quality of care you should have." (Taipei, hospital admin/doctor) "The current fee-for-service payment method can't cover quality; instead, worse quality means more earnings." (Taitung, hospital admin)

	"People need incentives to work. Fee-for-service does not offer incentives for maintaining or improving quality." (Taipei, hospital admin/doctor) "Fee-for-service leads to [a neglectful form of] care quality. If diabetes is not controlled efficiently at an early stage, patients will develop complications that increase the cost of health care – half of the dialysis patients in Taiwan are diabetes patients." (Taipei, community doctor)
1.3 Pay-for-performance	"Pay-for-performance should be an extremely important step in health reform. It can help to better integrate the PHC and hospital care. The example I gave earlier about my hospital – I need to cooperate with PHC clinics, because patients are separated into different places. We work together, and together we gain or lose depending on the outcome; these can all be designed. So, a good scheme can turn conscience into money; if conscience can't be turned into money, the provider won't have conscience [laughs]. So conscience can be weighed and counted. From the perspective of management, we should aim to measure conscience and pay accordingly." (Taitung, national admin/hospital doctor) "In the end, health insurance is a test for a doctor's ethics, but you can't wait for the managers, for the insurance companies, for everyone to become conscientious – instead, you need to design a conscientious plan to incentivize the conscientious people, to let them receive approval and money." (Taipei, community doctor) "Quality means reducing the crisis and recovering the standards of living." (Taipei, community doctor) "Indicators should be set in advance at different stages, and a care provider can be rewarded according to the results. For patients with mental health issues, indicators should cover physiological indicators – to reduce the side effects of medication; the management of disease – to stabilize the condition; emotional stabilization – to be measured by occurrence of committing suicide, attacking others, the frequency of emergency services usage and unplanned hospitalization; normal functioning of the individual – to measure the time of work or study." (Taitung, national admin/hospital doctor)

2. Integrated care services improve PHC delivery *2.1 Home healthcare services*	"Home healthcare service is a must, otherwise patients will stay in the hospital even if s/he doesn't need hospitalization. But if you don't make proper arrangements for them, it's difficult to ask them to leave the hospital." (Taipei, national admin/community doctor) "The NHI is powerful, it has designed service fees for pharmacists. Apart from the cost of the medication itself, there's an extra service fee for packing, delivering and issuing the medication. For example, a pharmacy in Taipei who has stock can get in touch with pharmacists in Taitung to get the patient's prescriptions – usually three-month long-term prescriptions – and regularly deliver the medication to the pharmacist, who will then deliver it to the patient. This approach can benefit the three parties. Patients don't need to go to travel a long distance to get their medication in the hospital. The local pharmacist can have the work and income which they didn't have. And, the pharmacist in Taipei doesn't need to send people all the way to Taitung; they only need to post the medication through an express service." (Taipei, national admin/hospital doctor)
2.2. Integrated care programs	"The IDS plan truly improved care accessibility and quality: when a typhoon hits the area, the roads can be choked by debris for days. So, when the hospitals see typhoon warnings, they will prepare medicine in advance to ensure they have enough medications for the upcoming, disrupted days. If some patients need dialysis, they will use helicopters or cars to transfer them from rural areas to a hospital to ensure the consistency of their various treatment needs." (Taitung, national admin/hospital doctor)
2.3 Case management	"Our hospital has case managers in every department, including our breast department. Actually, case management is a part of the regular NHI assessment. They want to see hospitals set up these roles for their patients." (Taitung, hospital nurse) "The case manager has an important role in the transition period between hospital and community: a case manager on the hospital side will contact the local clinic to inform their case manager that a patient is going back home. Then, the local case manager will conduct home visits to decide what sources this patient needs, and which service providers should be contacted." (Taipei, national and hospital admin/hospital nurse) "Diabetes health education is assigned to a case manager. We will

	make a personalised caring plan for each patient. I enjoyed my work very much, especially helping young people to avoid developing complications brings me sense of accomplishment. I will first assess his/her challenges in self caring. For example, if this patient is not doing regular exercise, I will find out why. He may say that he is too busy to find free time. Then we will make a plan; that is, since he is busy at work, he can do some exercise while watching TV at night, simply stepping [on the spot]. We will make nursing plans for each patient, always one-to-one." (Taitung, hospital nurse)
Theme 3. Digital tools and e-health technologies in regulation and care delivery	"The rapid development of NHI in Taiwan is largely due to two things: the strength in ICT (information communication technology) and well-developed infrastructure. [This second point is a product of] historical reasons." (Taipei, national admin/hospital doctor) "The assistance of technology is increasing. We used to use paper cards and stamps, now we have the NHI card. When you scan [the card] you can see which providers the patient has visited, all their check-ups, scans, and the medications [they have been] issued […]. It is convenient for patients [to use], because they don't need to go back to their hospital to apply for their medical records and even scan the results. [These records and results] can all be accessed with the NHI card." (Taitung, hospital admin) "We have bank accounts. I want people to consider their health as a bank account, which they can keep an eye on using the NHI website." (Taipei, national admin/hospital doctor) "My Health Bank conveys the meaning that health is the responsibility of the individuals, not the government's and not the NHIA's [responsibility]. If you want people to take care of their own health, you must provide them with their health information. From My Health Bank, you can see all of the service providers he has visited, medications he has been issued, treatments he has received, and all their scan results. However, it is not enough to only record medical information. Therefore My Health Bank is extended to include results of health check-ups. And, that's still not enough. All the details of the vaccinations one has received from birth are also recorded; plus, the post-acute care one receives, which is the transition period between hospitalization to be fully recovered. This care has three pathways: either go home or go to a

	rehabilitation institution, or if the condition is not recoverable, then the patient may directly go to hospice services. Therefore, the way My Health Bank was designed is to store an intact health record of your life, from womb to tomb. Taiwan is the first one in the world to have achieved this." (Taipei, national admin/hospital doctor) "It is challenging for us to follow the steps of NHI, they are changing very quickly. For example, this year NHI increased regulation on the repetitive issuing of medication: if this patient was issued a type of medicine by another hospital, and we issued it again, then we will not get paid [by the NHI] for the repetitive amount issued." (Taitung, hospital admin)
Theme 4. Leadership and governance	"The irrational supervision practices are discouraging doctors in PHC settings. For example, the NHIA may assign practitioners from other specialties to check the services delivered by a provider, which is not reasonable." (Taitung, hospital doctor) "In order to monitor the health condition of a patient's blood vessels, I checked their LDL (low density-lipoprotein) cholesterol every month. The NHIA deducted my points, because, according to their regulation, this measurement can only be taken once every three months." (Taipei, community doctor) "Government can't reach every angle of an issue, it can only have a macro view, although they may promote certain PHC services, such as preventative services. A strategy may not be ideal to every area. Hospitals know about the local situation and needs better than the central government. They need to take actions accordingly." (Taitung, hospital admin) "Several hospitals tried to copy our PHC model, but they failed because the hospital leaders did not give enough support." (Taitung, hospital admin/community nurse)
Theme 5. Education on both service users and providers	"Health care cannot only reply on health insurance, which has a limitation on its performance. You should take care of your own health, you have the biggest responsibility. When people need to use NHI, that is too late. So, we need to work on health promotion and delay the time that people need to approach care. That means we need to change our focus, not just on care but health." (Taipei, community doctor) "The NHI professionalized death. Before NHI launched, people in Taiwan had their own system to deal with these things, but now

	they just dump all the responsibilities to the health care providers. This move allowed people who want to 'sell health' to swoop into the market. In addition, the NHI gradually makes people consider health as their government and doctor's responsibility, but not their own responsibility." (Taipei, hospital doctor) "In recent years, family members take less care of patients. They have shifted care tasks to other care takers. While the patients think their children are working and don't want to add to their burden. Their only choice is to turn to people from outside [of the family unit]." (Taitung, community nurse) "'Elder orphans' are not necessarily without dependents. They may live with their children who don't care about the elders. This phenomenon has become more salient in recent years. This change also created a burden for the care providers." (Taitung, hospital admin) "NHI belongs to everyone and we need to cherish it. Medical shopping in Taiwan has wasted resources. Now we need to adjust the premiums around 7-8 years, because people are living longer. The elders consume the largest amount of insurance. In addition, new technology and drugs are expensive, therefore the premiums collected can never be enough to cover the medical expense." (Taipei, national admin/hospital doctor) "There are some loopholes that doctors can take advantage of. The amount a doctor claims may be different from the actual amount. Once a patient scans their NHI card, they don't know what information was keyed into the computer by the provider and what amount the provider will claim." (Taitung, hospital admin/community nurse)

4. Discussion

This study aimed to capture health care provider and administrator views on the various alignments between Taiwan's NHI system and its PHC delivery; to identify best practice and key lessons that health financing systems worldwide can consider and apply to support PHC delivery; and provide policy recommendations based on the results. Various themes emerged in this study that support the findings from the literature review. The perspectives in this study provide new insights into the topic.

Firstly, the current payment methods of the NHI system, including the global budgets to hospitals, and the fee-for-service payments to service providers have discouraged institutions and health care providers from providing high quality services. This finding is consistent with previous studies conducted in Taiwan (Cheng 2016). The current equally distributed annual global budgets to health care institutions are not equal in reality – almost all the participants in Taitung area highlighted the fact that the costs for service delivery varies in different areas and that the NHIA should take graphic disparities into consideration. As such, Taiwan has begun experimenting with pay-for-performance methods when paying health care providers. Doctor participants of this study made clear their preference for this payment method. However, those who had participated in the NHI pay-for-performance programs complained that the current practice employed by the NHIA is not competitive enough to incentivize quality improvements. In this respect, international studies (Ryan et al., 2016; Mendelson, 2017)

have found that the introduction of a pay-for-performance program is not significantly associated with the target population's improved health outcomes. The world's largest primary care pay-for-performance program, the UK's Quality and Outcomes Framework is included in this finding. The result indicates the need to review and improve the design of the payment method. Administrator and health care provider comments recorded in this study provide insights into the ways the program's design can be better optimized. First, a sound risk-management system should be included into the program. In this way, management and treatment fees are charged through a case-mix measurement that corresponds to the risks of patients' conditions. Second, quality indicators should be identified during the development of condition management schemes. This advanced identification phase should be explained to and accepted by patients and their families. In addition to improving the program design, the authority of Taiwan NHI needs to work on building trust within the system. Further expanding the experiment to other conditions to incentivize more providers to improve care quality is another key improvement. Internationally, countries are also exploring other payment methods to complement the fee-for-service approach. For example, Thailand uses capitation to pay for PHC services in order to curb expenditures by disincentivizing service providers from overtreating patients (World Bank, 2007).

Secondly, participants of this study confirmed that the integrated care services launched by the NHIA have supported and improved PHC delivery. The home health

care services appear more effective than the differentiated co-payments for outpatient services in different levels of hospitals to keep patients at the primary level. The authority should encourage competition among home healthcare services providers to further improve the quality of care. In addition, programs such as the Integrative Delivery Services (IDS) plan to strengthen the link between different levels of health care as well as improve rural area accessibility of PHC care. This form of improvement should be further developed. As well, diversified roles of health care providers, such as the case managers in different teams, can be an efficient strategy to improve patient satisfaction and health outcomes. In contrast to the uptake of health providers to coordinate patient management and tailor care to individual needs, a lesson can be found in the Singapore's Agency for Integrated Care approach. It facilitated home treatment by managing referrals of patients to home care services. It also coordinated the placement of individuals with community care providers and facilities (Lee & Satku, 2016). This approach can also be adopted by the NHIA to relieve the workload of service providers and improve the efficiency of coordination.

Thirdly, digital technology undoubtedly can be deployed to facilitate the service delivery and regulation. Indeed, the adoption of digital tools and e-health technologies have the potential to overcome the challenges associated with caring for individuals with complex medical and social needs in primary healthcare settings (Rianne et al., 2019), such as self-management of chronic conditions, including diabetes and mental

health conditions (Stoffers, 2018; Wozney et al., 2017). Furthermore, governments around the world, despite their economic development status, are striving to apply digital tools to enhance health insurance regulation and medical auditing (Addo-Cobbiah et al., 2017). In relation to Taiwan's NHI system, digital tools such as "My Health Bank" give service users the agency to manage their own health. However, some practitioners in this study reported challenges concerning the various necessary upgrades of e-health tools and regulation policies using IT technology. As well, community nurses reported that the underdeveloped IT systems and internet network in rural areas have led to difficulties in taking up e-health tools for home visits and other PHC service delivery. In this regard, WHO (2019b, 2019c) has reviewed the utilization of IT and digital tools in health systems globally and noted that while e-health technology helps to improve the continuity of care through the health system, particular attention should be paid to digitalization initiatives adopted in PHC settings. The goal in this instance is to ensure these tools do not impose undue burden on health care professionals.

Forth, in order to provide effective PHC, the role of leadership of different levels is critical. This study's review of literature highlights the critical role of leadership and governance in the operation and performance of a health system, as they can determine the effectiveness and capacity to achieve the system's goals (Balabanova et al, 2013; Glenton et al., 2013; Duke, 2015). Effective leadership at different levels enable better

planning, management, regulation, and policy implementation (WHO, 2007). The results of this study are consistent with these statements and prove that leadership can either motivate or discourage PHC delivery in urban and rural areas. Additionally, leadership has a dynamic role in all the other themes described here, which can encourage and coordinate organizations and the whole health system to achieve established goals.

Moreover, the concerns over the sustainability of the NHI (Cheng, 2016; NDC, 2018) have also been confirmed by the participants of this study. Participants identified several factors during the interviews that are intertwined with health care delivery. For instance, the lack of a referral system in the NHI system during the beginning phase (Wu, 2010) weakened the primary healthcare. The government has taken remedial measures to keep patients at the PHC level, including an increase to copayment for hospital outpatients as well as a requirement for tertiary hospitals to reduce their outpatient service. However, this study has found that these measure are not effective enough. In similar findings to studies from other countries (Van Dijk et al., 2013; Sohn et al, 2016.), the results of this study suggest moral hazards of both service users and providers can affect the sustainability of the national health insurance system. This result means the government needs to make continuous efforts to increase individual awareness, and come up with innovative strategies to reach the desired education effect. Lastly, while health insurance gives people access to health care, individual health behavior and self-management are key factors in achieving the sustainability of the

national health insurance system (Han, 2017; Park, 2019). The results of this study consistently suggest that relevant lifestyle interventions, including an increase in health practitioner involvement in health promotions, can help to increase patient awareness of preventative measures. These measures correspond to early diagnosis and effective condition management, which help the system to optimize the resources in PHC and reduce the costs on medical treatments.

4.1 Implications for policy and practice

The following are recommendations generated from the results of this study on improving the alignment between Taiwan's NHI system and primary health care delivery. This alignment can potentially benefit other national health systems.

First, PHC goals primarily include integrated health services based on primary care, and empowered individuals and communities. In order to achieve these goals, a health system needs to have a supportive financing system to ensure quality, equity, efficiency, transparency and accountability. To achieve the equity in distribution and utilization of resources, geographical disparities should be considered and be a part of institutional budgetary decisions. In addition, although pay-for-performance approach is considered to be more effective than traditional fee-for-service model, the design of this payment method needs to be carefully reviewed in order to truly incentivize high-quality care. An ideal pay-for-performance program should include two key elements: (1) A sound risk management system with higher payments to higher risk conditions,

and (2) pre-established quality indicators that are explained to and accepted by patients and their families. As well, other payment methods should also be explored to best use resources to improve population health. It should be noted that for any payment method, trust-building among health professionals is essential to its success.

Second, home-based health care that is delivered by service providers can be an effective practice to keep patients at the primary level. It can also be taken up to generate competition among providers and improve the quality of care. In addition, integrative care programs with appropriate incentives to encourage hospital service providers to support community level providers can effectively connect different levels of health care. These programs can improve rural area access to and continuity of PHC.

Third, nursing staff have been identified as having significant potential to improve PHC delivery. This potential includes improving the efficiency of health care resource use. Therefore, health systems need to strengthen their roles and maximize their potential in the system. For instance, case managers selected from the nursing staff can help tailor the care needs of an individual and then coordinate patient management. This approach will, in turn, improve a patient's satisfaction and health outcome. While considering adopting similar practitioner roles in the health system, it should be noted that continuous training and skills development for these roles are essential to ensure the quality of their coordination and management work. In addition, steps should be taken to prevent role burnout.

Fourth, the authority departments and leaders at different levels should improve the transparency and accountability of regulation policies. As well, the leaders of healthcare institutions should motivate staff to deliver better health outcomes for patients through PHC services and reduce moral hazards through continuous education. Moreover, the authority of NHI needs to improve new tool training for practitioner and administrative personnel and inform them about new regulations in a timely manner.

When it comes to the uptake of IT technology in health system, the authority needs to ensure their feasibility in PHC settings, including connection and infrastructure. For instance, the digital network and communication infrastructure for e-health tools in rural areas needs to be improved to facilitate home visits and other service delivery. Moreover, technology training needs to be given to service providers. This training will equip them with the necessary knowledge to efficiently use these e-health and digital tools in their work. Otherwise, these modern tools may burden service providers with extra work and hinder their service delivery.

In order to reduce the moral hazards in the NHI system, continuous education for service users and health care providers is necessary. In addition, more efficient strategies are required to empower the individuals to manage their own health. The society needs to strengthen the connection between family members and communities.

4.2 Study strengths and limitations

This study recruited interview participants from different roles in the health system of national, regional, and local levels, which provided a diverse range of perspectives for the research questions. Additionally, the validity of the findings were enhanced by triangulation of data that are identical from both interviews and observation. Nevertheless, this study has several limitations. First, due to the privacy and confidentiality policies of the two hospitals involved, I could not directly interview patients, which means their perspectives on the research questions are not included in the study. In addition, although I had the opportunity to shadow community nurses for home visits, practitioner behavior could be affected by the Hawthorn Effect, which means they might have modified their activities in response to being observed. Moreover, since the interview participants in this study are mainly health practitioners and hospital administrators, some components of the health finance system could not be examined due to lack of data, such as the procurement and distribution of medicine. These components also affect the quality of PHC delivery. Considering these limitations, future studies should include a broader range of stakeholders for additional input into the research topic, including service users as well as the various roles of providers.

5. Conclusion

Through in-depth interviews with health practitioners and administrative staff working in Taiwan's NIH system, this study generated insights into the ways the NHI system and other national health financing systems can provide better primary health care delivery support. The key implications of this study include the need to refine the payment methods to health institutions and practitioners, to include geographic disparities and more effective incentives in design; strengthen leadership support at different levels to provide more comprehensive PHC services and achieve better health outcomes; improve the feasibility and performance of e-health and digital tools in different settings, especially for rural areas where digital network and communication infrastructure are under-developed; and improve levels of regulatory transparency and accountability. Lastly, and in full acknowledgement of the fact that government policies can affect public health in many ways, health and health care are also the responsibility of the individual. Therefore, health education is and will continuously be a top priority for any health system, with a focus on active engagement in preventative care.

Appendix A: Research Instruments

I. Interview guide for semi-structured in-depth interviews with policy makers and government/institutional leaders

- The operation and management structure of the health facility?
- How did the current operating model start? Influence of the NIH system? The development/evolvement process?
- Do you think the focus of the reform of the national health policies is the same as that of health care workers?
- How does the hospital organize services to reflect national and regional health policies?
- The source of funds for hospitals to provide PHC (such as the proportion of health insurance and charitable donations)?
- Any cooperation with other primary health care institutions (e.g.: family doctors, community clinics)? If so, what is the specific situation?
- Who plays a leadership role in the care integration process? Is leadership effective in planning and implementing an integrated care plan?
- What information and communication technologies are used to promote the integration of hospital care, primary care and post-acute care? Is the patient's medical record shared with all professionals involved in the care of this patient?

- How does the hospital ensure the connection/engagement with primary care units and departments (is the connection seamless)?
- What factors in the policy, system, financial environment, and organizational environment have contributed to or restricted the development, adoption, and implementation of PHC services and related interventions? What about factors that limit or promote their realization? Any solutions (in practice or planned) for the obstacles / problems?
- Have any financial incentives been used to promote the integration of services, and / or improve service quality?
- What role does the information system play in the design, implementation and review of payment mechanisms?
- To what extent are financial incentives effective or ineffective? Are there any unintended consequences?
- What are the financing strategies and challenges / problems for ensuring the sustainability of healthcare plans?
- Do you have any suggestions for improving the NHI policies and / or practices (how to better support the use of PHC services by local residents)?
- How to improve PHC delivery from an institutional perspective?

I. 医保管理部门、医疗机构领导及管理人员访谈提纲

- 医疗机构的运营模式及管理结构？

- 现在的运营模式是如何开始的？和全民健康保险的关系？发展过程如何？
- 您认为国家医疗政策的改革重点是否与医护工作者心中的一致？
- 医院的服务模式如何与国家及地区的健康政策相匹配？
- 医院提供初级医疗服务的资金来源（例如健保和慈善捐助的比例）？
- 是否与其他初级保健机构（例如家庭医生、社区诊所）有合作？若有，具体情况如何？
- 谁在综合过程中担任领导角色？在规划和实施护理整合计划方面，领导是否有效？
- 采用哪些信息和通信技术，促进医院、初级保健和急性期后护理环境的整合？病历是否与所有参与患者护理的专业人员共享？
- 医院如何确保和初级医疗单位和部门间的工作衔接（是否达到无缝衔接）？
- 政策、制度、财务环境以及组织环境中，哪些因素促成或限制了初级医疗服务和相关干预措施的制定、采用和实施？ 还有哪些其他影响因素限制或促进了实现？如何解决（或尝试解决）障碍/问题？
- 是否采用了任何财务奖励来促进服务的整合、和/或提高服务质量？
- 信息管理系统在支付机制的设计、实施和审查中发挥什么作用？
- 财务激励措施在多大程度上有效或无效？是否有任何意外后果？
- 保证医护计划可持续性的融资策略和挑战/问题是什么？
- 您对当前台湾健保政策和/或实践是否有任何改进建议（如何更好地支持当地居民对卫生保健服务的使用）？
- 从机构角度如何更好地提供初级卫生保健？

II. Interview guide for semi-structured in-depth interviews with service providers

- How do you feel about your current job and care provision?
- Have you experienced changes in daily work that were incurred by changes in health insurance policies or practices?
- Have you observed any changes in patients' health care seeking behaviors due to changes in health insurance policies or practices?
- Who is the leader in integrated services involving different health facilities/departments? Do you think the leadership is effective in planning and implementing these integrated care services?
- Is there a designated care coordinator or case manager? If yes, what is the role of the care coordinator or case manager? What is the professional background of this coordinator or case manager (clinician or non-clinician)?
- What is the composition of the multidisciplinary team? Is there a clear division of labor among professionals in the team?
- What information and communication technologies are used to promote the integration of hospital care, primary care and post-acute care? Is the patient's medical record shared with all professionals involved in the care of this patient?
- What are the channels for service users to access hospital services?
- What is the role of service users and their informal caregivers (or family members) in the process of care planning and case management?

- Is there any support provided for self-management of service users? Is there any support provided for informal care workers?
- What is the role of primary care practitioners and emergency care professionals in care coordination?
- In your opinion, have the reforms of NHI been successful?
    - As a service provider, has your motivation for providing services changed before and after the reform? How?
    - Have your patients' satisfaction changed before and after the reforms? How?
- Do you have any suggestions for improving the NHI policies and / or practices (how to better support the use of PHC services by local residents)?
- Before and after the introduction of the integrated care plan / or in recent years of work experience, from the perspective of health care providers and recipients, what aspects do you think have been improved (medical institutions, medical equipment, access to services, referrals, care plan, medication management, nursing coordination, resource utilization, quality of life, self-management ability, patient safety, nursing experience)?

II. 服务提供者访谈提纲

- 您目前提供卫生保健服务的情况和感受？
- 您是否经历过健保政策或实践变更带来的日常工作变化？
- 您是否观察到任和伴随健保政策或实践变化引起的患者寻求医护服务行为的变化？

- 在涉及不同部门的整合服务中，是谁担任领导角色？在规划和实施医护服务整合计划方面，您认为领导是否有效？
- 是否有指定的护理协调员或个案经理？如果是，护理协调员或个案经理的角色是什么？护理协调员或个案经理（临床医师或非临床医师）的专业背景是什么？
- 多学科团队的构成是什么？在团队中，专业人士的分工明确吗？
- 采用哪些信息和通信技术，促进医院、初级保健和急性期后护理环境的整合？病历是否与所有参与患者护理的专业人员共享？
- 服务需求者获得医院提供服务的渠道有哪些？
- 服务使用者及其非正式护理人员（或家庭成员）在护理计划和病例管理方面的作用是什么？
- 对非正规护理人员，或服务使用者自我管理方面，是否提供任何支持？
- 初级保健医生和急症护理专业人员在护理协调方面的作用是什么？
- 在您看来，全民健康保险的改革是否成功？
    - 作为服务提供方，改革前后您提供服务的积极性是否有改变？如何改变？
    - 在您的工作中，改革前后患者满意度是否有改变？如何改变？
- 您对当前全民健保制度和卫生保健服务是否有任何改进建议（如何更好地支持当地居民对卫生保健服务的使用）？
- 在引入护理整合计划之前和之后/或是在近年来的工作经验中，从医疗提供者和接受者的角度看，您认为哪些方面有所改善（医疗机构、医疗设备、就医方便度、转诊、护理计划、药物管理、护理协调、资源使用率、生活质量、自我管理能力、患者安全、护理体验）？

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