Public Private Partnership in Improving Access and Utilization of Health Care Services: Scopes, Opportunities and Challenges

Final Report

Submitted to

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ACRONYMS

AMC = Anti Malaria Campaign

ART = antiretroviral therapy

BIDA = Bangladesh Investment Development Authority

BIN = Business Identification Number

BRAC = Bangladesh Rural Advancement Committee

CBHC = Community Based Health Care

CCEA = Cabinet Committee on Economic Affairs

CCMSL = Country Coordinating Mechanism of Sri Lanka

CDC = Centers for Disease Control and Prevention

DBOD = Design, Build, Operate and Deliver

DBOF = Design Build Operate and Finance

DBOF = Design Build Operate and Finance

DF = Damien Foundation

DGFP = Directorate General of Family Planning

DGHS = Directorate General of Health Services

DH = District Hospitals

DOH = Department of Health

DOTS = Directly observed treatment, short-course

EMT = emergency medical technician

EPI = Expanded Program of Immunization

FGD = Focus Group Discussions

GDP = Gross Domestic Product

GNSPU = Gender, NGO and Stakeholders Participation Unit

GP = General Practitioner

GPs = General practitioners

HEED = Health, Education, and Economic Development

HEU = Health Economics Unit

HNP = Health, Nutrition and Population

HPN = Health, Population and Nutrition

HPNSP = Health, Population, and Nutrition Sector Program

HRH = Human Resources for Health

HSE = health service executives

HSG = Health Services Division

HSM = Hospital Management Services

IDI = In-depth Interviews

JPFE = Joint =Provision =Form Experiments

KAP = Knowledge, attitudes, and practices

KII = Key Informant Interviews

LARC = Long =acting reversible contraceptives

LDoH = Limpopo Provincial Department of Health

LHA = Local health authorities

LoA = Letter of Award

MCH = Maternal child health

MDGs = Millennium Development Goals

MDR-TB = Multi-drug resistant tuberculosis

MEFWD = Medical Education and Family Welfare Division

MNCAH = Maternal, Neonatal, Child and Adolescent Health

MOHFW = Ministry of Health & Family Welfare

MOLGRDC = The Ministry of Local Government Rural Development and Cooperatives

MOU = Memorandum of Understanding

MTCs = MDR-TB treatment Centres

NGOAB = NGO Affairs Bureau of Bangladesh

NICU = Neonatal Intensive Care Unit

NIKDU = National Institute of Kidney Diseases and Urology

NSU = Newborn Stabilization Unit

NTP = National Tuberculosis Control Program

OOP = Out-of-pocket

PCCs = Primary Care Centres

PD = Peritoneal Dialysis

PEPFAR = The US President's Emergency Plan for AIDS Relief

PIP = Program Implementation Plan

PMDT = Programmatic Management of Drug-Resistant TB

PMPs = Private Medical Practitioners

PMTIs = Private Medical Training Institutes

PPFP = Postpartum family planning

PPIPs = Public-Private Investment Partnerships

PPIs = Public-Private Interactions

PPM = Public Private Mix

PPMD = Private Mix DOTS units

PPP = Public-private partnership

PSKP = Progoti Samaj Kallyan Protisthan

PSTC = Population Services Training Centre

RJSC = Registrar of Joint Stock Companies and Firms

RMOs = Regional Malaria Offices

RNTCP = Revised National Tuberculosis Control Program

SCANU = The Special Care Newborn Unit

SEED = Society for Empowerment, Education and Development

SOR = Statement of Objects and Reasons

SPV = Special Purpose/Project Vehicles

SSK = Shasthyo Surokhsha Karmasuch

TEDHA = Tropical and Environmental Diseases and Health Associates Private Limited

TIN = Tax Identification Number

UHC = Universal health coverage

UHC = Upazila Health Complexes

UNILAB = United Laboratories

UPEHSDP = Urban Public and Environment Health Sector Development Project

UPHCSDP = Urban Primary Health Care Services Delivery Project

WRA = Women of reproductive age

WWC = Wildlife Works Carbon

EXECUTIVE SUMMARY

Improved quality and access to healthcare services are essential for a country's development. Private sectors like NGOs, for-profit and non-profit organizations have significantly contributed to health by financing and managing healthcare services in different ways. In developing countries, the private sector becomes more critical because, with limited resources, such countries struggle to ensure proper health care for everybody. That is why, the public-private partnership can offer new opportunities by sharing risks, resources and finance to provide healthcare services under certain conditions. This study, therefore, aimed to find out the possibilities, scopes and challenges of public-private partnership (PPP) which will inform a guideline to design and implement such collaboration to improve access to and quality of health.

A mixed-method approach was followed for the study combining desk review, case studies and qualitative data analysis. A total of 29 documents were reviewed, and 42 participants were interviewed, of which there were 17 service providers, 17 service recipients and eight key informants. The findings in this report are generated from shreds of global, regional and local evidence obtained from the desk reviews, observations from the case study and qualitative data from the interviews and group discussions. Also, feedback from the technical and dissemination workshops are incorporated in the report. All of these informed a policy matrix for public-private partnership in health.

Potential scopes of PPP in health lies in terms of extending the time of public healthcare services, minimizing the cost of the overall treatment and enhancing the capacity of healthcare providers and managers. For the health sector, the government can implement PPP either by hiring private organizations, purchasing services or outsourcing or contracting doctors. Contracting out the underutilized health facilities (such as 10/20 bedded hospitals) and robust referral system (such as through general practitioners recruited by the government) can help expand health service coverage in the country. Partnering with private entities to provide healthcare services to hard-to-reach areas, generic drug production and introducing health insurance can increase equity in health. Also, PPP can be introduced in case of the ambulance, security, laundry, cleaning and waste management service in the public healthcare facilities, diagnostics, dialysis, imaging, emergency services and capacity development of service providers.

Proper implementation of PPP in health requires to have an enabling environment at the policy level. Such an enabling environment can be facilitated by having a PPP guideline for health sector and a legal framework for private partners considering the alignment of values between the public and private sector. Also, institutional capacities in the form of training or guideline in the relevant sectors for the key actors are essential. In the whole process of implementing PPP in health, conflicts of interests must also be carefully considered to not only ensure transparency but also make it scalable and sustainable. Furthermore, PPP must not lead to any market distortion because of the collaboration instead encourage competitive health market in the country.

The findings in the study brought out a series of recommendations and strategies that needs to be taken into account for considering successful PPP in the health sector in Bangladesh. Firstly, the formation of a technical committee with relevant stakeholders in the ministries, its involvement, leadership and guidance will ensure coordination in the process which is currently missing. A comprehensive guideline for PPP in health needs to be developed by the ministry of health that can guide both the technical committee and key stakeholders. With the existence of a leading entity and a guideline, relevant stakeholders in both public and private sector can be sensitized through workshops. These workshops can then help to prioritize the service domains where PPP should be considered and explored. Rest of the steps from identifying potential private entities to implement and monitor the PPP projects should be followed as per the guideline and recommendations from the technical committee.

Achieving universal health coverage by 2030 requires a positive transformation in the health sector. New, innovative, successful and evidence-based approaches through public-private partnerships can pave the way towards achieving the short-term and long-term goals in the health sector and ensure health for all.

1. INTRODUCTION

1.1 BACKGROUND

Health is a fundamental sector that every country needs to develop. However, countries which have limited resources struggle in providing quality health for all individuals and communities which is inclusive by nature and universal by coverage. Therefore, in the finance and management of health services in a country, along with the state, there is a greater involvement of the private sector including non-government organizations (NGOs), business corporations, communities and families. The role of private sector in the developing countries has thus become more critical. Over the years, private organizations and groups in many countries have proved to be very effective in supplementing the roles played by the public sector. In many cases, NGOs and comm unity groups have successfully demonstrated their capacities to reach the poor and marginalized people in terms of delivering health care services. Even private businesses have proven their willingness and capabilities to address the need of public health in many instances. In some cases, they have co-operated in managing and providing government funded or subsidized health services effectively. In other cases, private sector (both for profit and non-profit) has supplemented government services by providing health care services to address public health needs. In this context, under appropriate circumstances, partnerships between public and private sectors can offer new opportunities to optimize resources, improve service delivery and enhance quality of health.

The term "public-private partnership" (PPP) has been receiving considerable attention in the health sector for over two decades, especially in the context of developing countries. Public-Private Partnership (PPP) in general terms, refers to service or business venture which is funded and operated through a partnership between government and one or more private sector entities. A PPP in health is a collaboration between the public sector (namely Ministry of Health and Family Welfare, its divisions - Health Services Division and Medical Education and Family Welfare Divisions, or any directorate, department, wings or units directly under the said divisions) and the nonpublic sector (for profit commercial organizations, not-for-profit NGOs, or individual private healthcare providers) aimed for development, finance or implementation of mechanisms to deliver health, population and nutrition services for citizens of Bangladesh.

The Public means, in applied terminology, both central and local level state institutions. The private, however, can mean any of the following bodies:

- *For-profit commercial entities*: These are entities registered under Registrar of Joint Stock Companies and Firms (RJSC), or stock exchanges and having trade license, Tax Identification Number (TIN), Business Identification Number (BIN) and other certification to operate commercial operations within Bangladesh. International for-profit organizations having branch/liaison office in Bangladesh or having appropriate permission from Bangladesh Investment Development Authority (BIDA) or any other authority can also be considered as entities under this category.

- *NGOs*: These are entities registered under NGO Affairs Bureau of Bangladesh (NGOAB); are non-profit in nature; and organized on a local, national or international level and independent from states, national and international governmental organizations. Not-for profit entities of commercial or multinational companies (e.g. foundations), formed for social welfare and humanitarian motives can also be considered as NGOs under this definition.

- *Individual Private Healthcare Providers:* An individual healthcare provider, having appropriate registration under at least one professional bodies of Bangladesh associated with health, population and nutrition sector (e.g. Bangladesh Medical and Dental Council, Bangladesh Nursing and Midwifery Council, Pharmacy Council of Bangladesh, State Medical Faculty of Bangladesh, etc.) and not employed as an employee of any department or wings of Government of Bangladesh.

PPPs have evolved as a result of pressure to ensure quality in providing health care services in the public sector at a time of shrinking governmental and international development budgets. This is especially relevant in the context of widening disparity in health status between rich and poor countries. Communicable diseases impose a heavy burden on both adults and children in developing countries. Further, the burden of morbidity and mortality from non-communicable diseases has a substantial impact on productivity of the working age population in developing countries. Pharmaceuticals exist which can treat most and prevent many of the diseases accounting for the bulk of morbidity and mortality in developing countries. However, for some diseases, the available therapies require improvement in respect of ease of administration or treatment duration. Moreover, vaccines need to be improved for TB, and developed for malaria, HIV/AIDS, and some other diseases[1].

The PPP implies a commitment to a common goal through the joint: (i) provision of complementary resources and expertise, and (ii) sharing of the risks involved. The concept of PPP is based on the premise that there are some activities which the government does best and other activities where the private sector may have more to offer[2]. Thus, by allowing each sector to focus upon what it does best, quality services can be ensured in an economically efficient manner by improving equity, efficiency, accountability, quality and accessibility of the entire health system. Advocates argue that the public and private sectors can potentially gain from one another in the form of resources, technology, knowledge and skills, management practices, cost efficiency and even a make-over of their respective images[3]. PPPs have benefits at three different levels: (i) improving health standards of the people; (ii) reducing the investment burden of the governments; and (iii) increasing profits of the private sector.

The design of PPP is also very important for successful implementation of PPP model. A successful PPP implementation requires capacity for efficient completion of evaluations,

[1] Widdus, R. (2001). Public-private partnerships for health: their main targets, their diversity, and their future directions. *Bulletin of the World Health Organization,* 79(8).
[2] Buse, K. & Walt, G. (2000a). Global public-private partnerships: part I – a new development in health? *Bulletin of the World Health Organization,* 78(4).
[3] Asian Development Bank Institute (ADBI) (2000). Public Private Partnerships in the social sector: issues and country experiences in Asia and the Pacific. Asian Development Bank Institute Policy Paper 1.

negotiating contracts, award of bids, and monitoring implementation of contractual obligations by the private party. The sustainability of the PPP model in many cases may depend substantially upon the adoption of proper cost recovery policies.

As one of the fundamental rights of the citizen, Articles 15 & 18 of the Constitution of Bangladesh provide the mandate to the government for ensuring basic healthcare; improving the nutritional level of the population and enhancing the overall health scenario of the country. Being the focal point, the Ministry of Health & Family Welfare (MOHFW) comprising of two divisions, i.e., Health Services Division (HSG) & Medical Education and Family Welfare Division (MEFWD), is responsible for ensuring the implementation of health policy throughout the country. For primary healthcare, City corporations are responsible in the urban areas and the Ministry of Local Government Rural Development and Cooperatives (MOLGRDC) for rural areas.

In Bangladesh, the majority of the health facilities (46%) are privately owned which mostly provides care at the secondary level and above[4]. The services provided by both private and public sectors are highly concentrated in urban areas. In primary healthcare, the public sector plays the most significant role in modern family planning while the private sector plays an important role in providing key maternal child health (MCH) and in childhood services. On the other hand, the private sector is also the most dominant actor in the Pharma sector and plays a significant role in the medical education of the country. Most of the Private Medical Training Institutes (PMTIs) in Bangladesh are from the private sector. But as a result of migration, retirement, and underproduction, there is a vast Human Resources for Health (HRH) shortage in this sector. In addition to that, the Majority of the healthcare services providers in the urban slum areas are from the private sector, but they are mostly informal.

Currently, the health sector development budget is being implemented under the Fourth Health, Population, and Nutrition Sector Program 2017-2022 (4th HPNSP). Though the overall spending of the government on health increases every year, it decreases in comparison to the percentage of the GDP, and which is one of the lowest in SAARC countries. The government and donor's contribution to the health sector of Bangladesh is declining day by day; therefore, consumers have to bear this burden of the expenditure. However, both the government and donors invest more for rural people rather than that of the urban. Surprisingly, the household OOP expenditure is higher in rural areas compared to that of urban areas. Nationally, more than 2/3 of the out-of-pocket (OOP) expense of urban and rural people is spent at pharmacies or drug stores and it is mostly spent on drugs. Although the urban population in Bangladesh is composed of 23% of the total population, they bear around 33% of total health expenditure[5]. The estimation reveals that the largest healthcare finance in Bangladesh comes from household expenditure (63%) which is followed by MOHFW Development Budget (18%), 13% MOHFW Revenue Budget, 3% Non-Profit NGOs and Donors and 3% Other Public Revenues[6]. In Bangladesh, the healthcare expenditure of the government is lower than the average spending of the lower

[4]World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.

[5]World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.

[6]Sajani TT, Alo K, Aktaruzzaman SA. Public Private Partnership (PPP) in Health Sector of Bangladesh. Anwer Khan Modern Medical College Journal. 2014 May 8;5(1):42-5.

and middle-income countries as well as South Asian countries in terms of both percentage of GDP and per capita[7].

To maximize the strengths of both public and private sectors of the country, the Government of Bangladesh enacted a law on PPP in 2015. It envisages a breakthrough opportunity to welcome and accommodate private sector participation. However, since then, though there have been a few PPP projects in health care sector of the country, there is a lack of understanding on how best the public and private sectors interacts with each other, what impact the partnerships can bring to improve access and quality of health services, and how effective the challenges of health need can be met. To facilitate understanding of these issues, this study was conducted.

1.2 Rationale

This study is aimed to generate evidence-based and contextualized supportive documents that will help policy planners to develop strategies which will provide health more efficiently, effectively and equitably. An appropriate strategic guideline may help the partners to utilize and explore their combined strengths when involved in PPP. The study stems from the GNSPU, on behalf of the Ministry of Health and Family Welfare (MOHFW) and pursues initiatives to develop a PPP strategy in health sector. It will involve explorative studies, surveys, researches to identify potential scopes, opportunities and challenges in taking PPP into health sector. The need of a PPP strategy in health care is central to carry forward government plans to improve access and utilization of services both at central and local level. It is also crucial to harmonize activities among the key public and private sector stakeholders.

1.3 Methodology

Study Design

We followed a mixed method approach focusing on the exploratory design for the study. We also conducted a desk review and two case studies. For the exploratory part of the study, we used three data collection methods: In-depth Interviews (IDI), Focus Group Discussions (FGD) and Key Informant Interviews (KII). For the case studies we used IDIs and observation checklist.

Study Tools

Each of the methods for exploratory part of the study had their own tool (See Annexure) namely the topic guideline. Each guideline had questions that would explore participant's thoughts about potential PPP domains in health, it's benefits, scopes and challenges, current scenario, own experience, examples, expectations and recommendations.

The observation checklist used for the case study includes sections which focused on details of the setting, actors in the institution and behavior of them.

[7]Asian Development Bank. PPP Rapid Scoping for Dialysis and Diagnostics. Dhaka; 2019.

Sampling

A non-probability sampling method called 'snowball sampling method' was used to identify the samples for KII, IDI and FGDs. In this method, research participants recruit or suggest to recruit other participants for the study. This was used because the potential participants able to share views on PPP in health were hard to find within the short period of time. For case study, we selected the existing PPP projects running in two hospitals in the country: 1) National Institute of Kidney Diseases and Urology (NIKDU) and 2) Chittagong Medical College.

Setting

The study setting was mainly Dhaka and Chittagong because most of the stakeholders were from Dhaka city and some of the participants were from Chittagong where one of our case study unit was located. However, there were two participants from Narayanganj and Narsingdi who were service recipients in the case study unit located in Dhaka city.

Data collection

For the exploratory part of the study, we conducted a total of 16 in-depth interviews (IDI) (ten with service providers and six with service recipients), 8 key informant interviews (KII) and two focus group discussions (one with service providers (n=8) and one with service recipients (n=10)). Thus, qualitative data has been collected from a total of 42 participants from diverse background and roles in the health system in objective to identify their perception, thoughts, experience and recommendations on implementing PPP in health sector.

Six of the IDIs provided data for the case studies and the observation checklist were applied to one of case study units namely Chittagong Medical College Dialysis Centre in objective to quantify the service components implemented in the PPP project and assess their motivation, experience and challenges while working in the project.

The desk review consisted of reviewing a total of 29 documents: 20 journal articles, seven grey literatures, one policy document and one newspaper article. The review was done in objective to gather current evidence at international, regional and national level by analyzing data from secondary sources.

We also conducted two workshops in the Health Economics Unit of the Ministry of health and family Welfare (MOHFW) in order to validate and gather high level feedback on our methodology and findings from the study.

The data collection started at the end of February and continued till the outbreak of the new Coronavirus in the country and resulting closure of offices and public facilities in March 26, 2020. The data collection resumed in July and continued till the end of July when most of the participants were interviewed over phone to ensure health safety for both the interviewees and interviewers.

The following flowchart portrays the methodology by presenting the project steps, data sources and outputs:

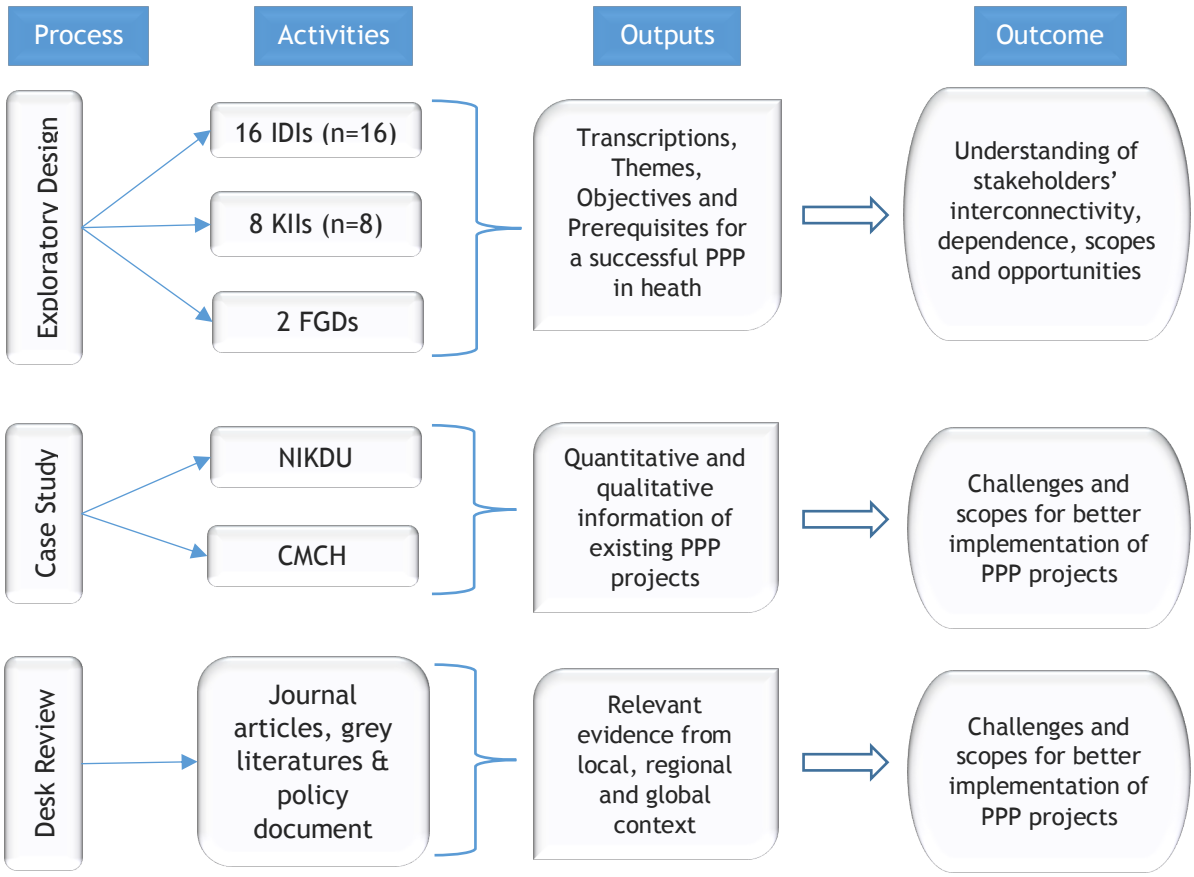

***Figure 1**: Overview of the study methodology, outputs and outcome*

Data analysis

The interviews and focus group discussions were recorded and transcribed in English. All qualitative data were analyzed using a framework matrix by identifying themes and sub-themes emerged from the data. Also, quantitative information was extracted from desk review and case studies to be presented in tabular format.

Ethical considerations

All study tools were developed in consultation with the Health Economics Unit of the MOHFW and validated by the wider stakeholder group working in the health system to implement PPP in health. The participants in the IDIs, KIIs and FGDs were approached with a written consent form where possible or verbal consent over phone after explaining the objectives of the study. All records of the interviews were stored in a password protected computer and accessible to the researchers who were involved in data collection, transcription and analysis.

1.4 Limitations of the Study

The study was limited by the following aspects:

Duration of the study limited its scope to extensively explore the reasons of existing bottlenecks in the system, implementation of the policies and complexities of interactions among different stakeholders.

The effect of the pandemic in the country, health concern and limited movement after 2 months of the commencement of the study also limited the scope to explore one of the two case study units selected for the study in person and reaching out to a few potential interviewees in the Directorate General of Health Services (DGHS).

We did not explore the demand side except in the case study units specially the need, expectation and challenges at the local level such as Community clinics, Upazila Health Complexes and district hospitals where end users of healthcare services, the primary beneficiaries of a PPP project, are most abundant.

The study also did not conduct any survey that could help understand the knowledge and perception of PPP in people working at different tiers of the health system and thus portraying and confirming the scope and challenges emerged from the qualitative data obtained from the interviews.

1. A Moment during the case study in CMCH

2. A moment from the focus group discussion

2. PPP IN HEALTH – GLOBAL, REGIONAL AND LOCAL EVIDENCES

2.1 The scenario of PPPs in the Health Sector: Global Evidence

The World Health Organization (WHO) promotes universal health coverage (UHC) - aiming at meeting health service demand without suffering financial hardship. UHC is essential for the sustenance of a community and curbing poverty as well as social inequalities. In achieving UHC, PPPs bring together public and private entity, including private for-profit and non-profit to achieve a commonly-agreed social goal through pooling resources – financial, human, and technical. Health PPPs can be categorized into two: Public-Private Investment Partnerships (PPIPs) and Public-Private Interactions (PPIs)[8]. PPIPs involve a broader functional area along with a greater impact than PPIs.

PPPs must encompass two essential approaches: an integrated service approach and a community-centred approach. The integrated service approach involves health care with social care, support services, financial protection, and even a continuum of care from the primary level to that of tertiary hospital care while the community-centred approach shifts the focus from hospital to home, family, and community. PPIPs are more pervasive to overcome those two challenges or approaches as it follows the Design, Build, Operate and Deliver (DBOD) Model which involves a holistic approach with a mandate for integrated quality clinical and non-clinical services. In DBOD model, the private partner designs, co-finances, builds, operates, and delivers healthcare services without transferring the ownership of the facility. As a comprehensive tool, PPIPs focus on all the aspects of a system rather than its parts and subsequently, create an enabling environment for achieving UHC. Considering three tiers of health delivery options, i.e., primary care, hospital care, and an integrated system, are necessary for the country to prioritize PPIPs.

Primary healthcare PPIPs would be suitable to meet the demand of a community with high demand and lack of supply. Hospital-based PPIPs flourish where there exist superfluous public facilities and the potential to generate further incomes or inefficient management harmful for the sustainability of the public hospitals. Integrated healthcare systems are a comprehensive set-up for any community as it incorporates both hospitals and primary care. Several cases were narrowed down to develop models following the focus and scale of these three tiers - primary care, hospital care, and an integrated healthcare system [9].

Public-private interactions (PPIs) are considered as minor PPPs compared to PPIPs since they deal with smaller segments of health service delivery system like infrastructure, service, management, or concession type contracts. Though PPIs can be developed for long-term like PPIPs, don't require exchanging of ownership, allocate risk appropriately, allow the government to play the role of reviewer, and monitor. PPIs are usually initiated as stopgap measures that address the problem partially due to its small-scale nature.

[8] Banzon EP, Lucero JA, Ho BL, Puyat ME, Quibod EJ, Factor PA. Public-private partnership options toward achieving universal health coverage in the Philippine setting. PIDS Discussion Paper Series; 2014.
[9] Banzon EP, Lucero JA, Ho BL, Puyat ME, Quibod EJ, Factor PA. Public-private partnership options toward achieving universal health coverage in the Philippine setting. PIDS Discussion Paper Series; 2014.

The Primary Care Model: Cambodia and Costa Rica

Cambodia experimented for four years from 1999 to 2003 to measure the effectiveness of Contracting in and Contracting out of health services. In the *contract-out model*, private contractors had to provide all the services mandated by the Ministry of Health, including preventive, promotional, and simple curative health care. The contract-in model employed in maintaining government health systems at the district level. Eight indicators were set focusing on maternal and child health. The result of the experiment revealed that the contract-out model performed better than the contract-in model in all districts. At the same time, it brought about striking improvement from several dimensions such as improved the quality of health services with greater access for the poor people and minimized disability time and reduced out-of-pocket expenses[10].

Costa Rica also signed a performance contract with the private sector to improve quality and efficiency in health services delivery. A total of twenty-three indicators were developed, and the private sector required to achieve 85% of the targets or failure to reach the target would have been duly penalized[11]. The contracted provider had been successful in meeting the standards for coverage and quality while lowering the cost of care. It has increased general practitioner visits per capita and significantly minimized unnecessary diagnostic and therapeutic costs.

The Hospital Model: São Paulo

In the late 1990s, São Paulo had constructed several hospitals in underserved low-income areas, and of which, sixteen facilities, all general hospitals, averaging 200 beds were maintained by the private sector through a five years renewable operational contract. The payments were linked with performance specifications and a performance-based global budget was allocated in two categories: 90% for meeting service provision targets and 10% for maintaining compliance with reporting and quality indicators. It demonstrated a positive outcome in providing quality and efficient health care in a radically altered system of structure, governance, and financing in the hospital set-up[12].

The Integrated Healthcare Model: Alzira and Lesotho

In 1990, the health management company Ribera Salud designed an integrated healthcare model in the department of Alzira in the region of Valencia, Spain, through a management concession contract. This model developed a health system integrated with the existing National Health System for a university hospital, four integrated health centres, and 46 primary health centres. A unified and comprehensive database management system was developed for maintaining clinical and drug history and diagnostic data records to ensure proper treatment avoiding any duplications and ensuring a trail of accountability. The ownership of the facilities remains with the government. The private provider was paid a fixed price for each inhabitant following a capitation model. Physicians were provided with incentives for reaching the targeted outcomes and patients volumes. Following the "money follows the patient" incentives, this four-pronged approach – public control, public property, public funding, and private

[10] Banzon EP, Lucero JA, Ho BL, Puyat ME, Quibod EJ, Factor PA. Public-private partnership options toward achieving universal health coverage in the Philippine setting. PIDS Discussion Paper Series; 2014.
[11] Banzon EP, Lucero JA, Ho BL, Puyat ME, Quibod EJ, Factor PA. Public-private partnership options toward achieving universal health coverage in the Philippine setting. PIDS Discussion Paper Series; 2014.
[12] Banzon EP, Lucero JA, Ho BL, Puyat ME, Quibod EJ, Factor PA. Public-private partnership options toward achieving universal health coverage in the Philippine setting. PIDS Discussion Paper Series; 2014.

management was successful in ensuring quality and patient satisfaction and this success led the government of Valencia for replication of the PPIP model to another four hospitals[13].

In 2006, Lesotho developed an integrated health delivery model replacing its main public hospitals. Through a management and operation contract, this model involves several facilities including a new hospital, adjacent gateway clinic, three filter clinics. The scope of operations of this contract covered a complete health service delivery from health professionals to medical equipment and pharmaceuticals. The private partner was responsible for providing treatment to all patients visiting the hospital and filter clinics regardless of their condition which is up to 20,000 inpatients and 310,000 outpatients annually[14]. The private operator was paid a fixed service payment annually for the delivery of all services. This partnership model could be considered as a true PPIP model since it allocates substantial risk sharing to both partners.

Contracting Primary Health Care Networks in New Zealand

District health authorities made a service contract with private family medicine doctors to increase access to primary care where the government has subsidized 100% of the capitation fee through the district health budget. It increased the accessibility of people to primary health[15].

Managing Equipment Service (MES) in Kenya

The National Government of Kenya signed a leasing contract for 7 years with medical equipment manufacturers to upgrade service delivery capacity of public hospitals by installing modern equipment and technology where the government made a quarterly payment to the manufacturers form government budget based on equipment uptime. Particularly, the manufacturer was responsible for providing & maintaining imaging, ICU, Nephrology & Theatre equipment[16].

Improving Diagnostics Services in Kenya

Under this model, the co-location contract was made between Moi Regional Referral Hospital and Lancet about increasing access to quality and advanced diagnostic services. The hospital rented space to the Lancet and referred all patients to on-site lancet lab. Lancet remodelled and upgraded the lab by training staff, maintaining equipment and resupplying commodities. Wildlife Works Carbon (WWC) Foundation made a one-off contribution to the rehabilitation of the lab. In other cases, the County Govt. was responsible for funds[17].

Upgrading Hospital Management in United Arab Emirates (UAE)

Three public hospitals and John's Hopkins Medicine International developed a partnership model through a management contract for ten years where the government channels funds

[13] Banzon EP, Lucero JA, Ho BL, Puyat ME, Quibod EJ, Factor PA. Public-private partnership options toward achieving universal health coverage in the Philippine setting. PIDS Discussion Paper Series; 2014.
[14] Banzon EP, Lucero JA, Ho BL, Puyat ME, Quibod EJ, Factor PA. Public-private partnership options toward achieving universal health coverage in the Philippine setting. PIDS Discussion Paper Series; 2014.
[15] World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.
[16] World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.
[17] World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.

through the Ministry of Health. The government pays for all health services for its citizens while Private health insurance bears all others. As an outcome of the partnership, it was recognized as an internationally accredited facility throughout the world that attracted regional medical tourism[18].

Rationalizing Public Hospital Network in Italy

An institutional partnership, namely Joint-Provision-Form Experiments (JPFE) involving local health authorities (LHA), private health care providers, and local municipalities was developed to provide direct health care services. The strategic goal behind this partnership was to rationalize the public hospital network and subsequent dismissal of a small general hospital while the policy goal was to maintain the local political consensus through transforming an existing hospital into a special healthcare facility. Along with that, developing a politically viable solution for minimizing health expenses was the main reason for the institutional partnership. In this partnership, four different types of cases were taken for the experiment, those are: (i) an intensive-rehabilitation hospital (Case A), (ii) an orthopaedic centre (Case B), (iii) a primary-care and outpatient facility (Case C), and (iv) a community care facility (Case D). Those cases of the partnership were formed following different legal configurations, including stock companies, limited companies, foundations, and associations.

The public sector partner (i.e., LHA) held the control over the PPP through its ownership of the company (51% shareholding) and the purchasing authority (almost 100% of revenues in all cases[19]). Only in case of A, the ownership of the facility was transferred to the new companies, but in other cases, the ownership remained to LHA and rented to the JPFEs. The findings of the study demonstrate that transferring the assets to new companies served as an incentive in achieving strategic goals through enhancing managerial autonomy. Thus, the ownership of shares and the degree of capitalization played a pivotal role in determining the degree of autonomy in the partnership. As a result of the partnership, between 2004-2008, the number of discharges increased up to 18% annually in case A for having a strong network with the Cardiology and Cardiac-surgery department within the area and activities, as well as revenues expanded significantly as agreed by the board[20].

In case of B, on the contrary, they partially achieved the activity target and predetermined infrastructural renovation. Likewise, the other two JPFEs report a breakeven over the entire contract period. The study identified four important issues relating to governance and management, which are critical in determining the positive outcome of the case examined: (1) a strategic market orientation to a specialized service area with sufficient potential demand, (2) Public capital allocation and seamless financial support of the private sector, (3) The application of private sector management principles in a regulated setting without undermining public administration principles, and (4) robust workforce management ensuring congruency to the contract with the organizational culture and principles.

[18] World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.
[19] Cappellaro G, Longo F. Institutional public private partnerships for core health services: evidence from Italy. BMC health services research. 2011 Dec;11(1):82.
[20] Cappellaro G, Longo F. Institutional public private partnerships for core health services: evidence from Italy. BMC health services research. 2011 Dec;11(1):82.

Weekly Iron-Folic Acid Supplementation and Multi-Drug Resistance Tuberculosis Control in Philippine

In Philippine, Iron deficiency was one of the most common forms of micronutrient malnutrition and the most common cause of anaemia. In 1998, a survey conducted by national nutrition found that 50.7% of pregnant women and 45.6% and lactating women suffered from anaemia[21]. Therefore, the weekly iron-folic acid supplementation project was developed and implemented in three selected municipalities between November 1998 and December 1999 by the Department of Health (DOH) in partnership with the United Laboratories (UNILAB) of the Philippines which is the largest privately-owned local pharmaceutical company in the country. All Women of reproductive age (WRA), both non-pregnant and pregnant in the three selected municipalities, were participants in the project.

In the project, four surveys were conducted in four different periods to measure the effectiveness of the approach in improving knowledge, attitudes, and practices (KAP) and iron status participating in a total of 2158 WRA. Initially, though only half of participating women were aware of the efficacy of weekly supplementation in anaemia prevention, it increased by over 80% as a result of social marketing and mobilization activities throughout the 12 months of intervention[22]. At the same time, the rate of awareness significantly increased among women about the need for iron-folic acid supplements during their reproductive years. By the course of time, women's knowledge of iron and iron-folic acid supplementation and food sources of iron other than horseradish increased profoundly.

The overall findings of the KAP survey reflect the positive attitudes of the respondents to iron-folic acid supplementation. In the fourth survey, more than 95% of participants expressed that they were taking the medication and compliance towards weekly iron-folic acid supplementation progressively improved. It also reveals that, in a non-controlled setting and right environment, women are interested to buy iron supplements which were created by providing adequate knowledge about iron deficiency and anaemia to the target population and health workers and by making the tablet available at an affordable price. Through effective social marketing and mobilization, taking iron supplements weekly is a suitable strategy to control anaemia among women. Thus, the weekly iron-folic acid supplementation can be an alternative to a daily iron supplement approach[23].

In another case, a nationwide drug resistance survey conducted in 2004 revealed that 21% of MDR-TB are previously treated patients and 4% new[24]. To combat this situation, the government undertook an initiative, namely Programmatic Management of Drug-Resistant TB (PMDT) in 17

[21] Paulino LS, Angeles-Agdeppa I, Etorma UM, Ramos AC, Cavalli-Sforza T. Weekly iron-folic acid supplementation to improve iron status and prevent pregnancy anemia in Filipino women of reproductive age: the Philippine experience through government and private partnership. Nutrition reviews. 2005 Dec 1;63(suppl_2):S109-15.

[22] Paulino LS, Angeles-Agdeppa I, Etorma UM, Ramos AC, Cavalli-Sforza T. Weekly iron-folic acid supplementation to improve iron status and prevent pregnancy anemia in Filipino women of reproductive age: the Philippine experience through government and private partnership. Nutrition reviews. 2005 Dec 1;63(suppl_2):S109-15.

[23] Paulino LS, Angeles-Agdeppa I, Etorma UM, Ramos AC, Cavalli-Sforza T. Weekly iron-folic acid supplementation to improve iron status and prevent pregnancy anemia in Filipino women of reproductive age: the Philippine experience through government and private partnership. Nutrition reviews. 2005 Dec 1;63(suppl_2):S109-15.

[24] Quelapio MI, Mira NR, Orillaza-Chi RB, Belen V, Munez N, Belchez R, Egos GE, Evangelista M, Vianzon R, Tupasi TE. Responding to the multidrug-resistant tuberculosis crisis: mainstreaming programmatic management to the Philippine National Tuberculosis Programme. The International Journal of Tuberculosis and Lung Disease. 2010 Jun 1;14(6):751-7.

cities and municipalities of Metro Manila. For the sake of increasing access to MDR-TB care, the satellite MDR-TB treatment centres (MTCs) were installed in strategic locations with the support of Global Fund to Fight AIDS and Tuberculosis and Malaria (Global Fund). Now, the MDR-TB management program has strong political support and government funds in the Philippines. In 2008, National guidelines for PMDT implementation were issued as an administrative order. A total of 1294 patients enrolled for PMDT in 2008, though it is a very small number compared to the estimated MDRTB burden. A noticeable shift was observed in the type of drug-resistant suspects referred and enrolled were mostly from private practising physicians in the first few years of implementation. Between 1999 & 2005, the annual cohort outcome reportedly increased the success rate from 65% to 75%, and an increasing death rate was attributed to more advanced chronic diseases[25].

Initially, the MDR-TB management program encountered many challenges during implementation for not having enough evidence to support its application, benchmark indicators for better performance, particular funds, and no official mandates in support of the program. A multi-agency PMDT task force was formed headed by NTP to develop a regional approach in selecting MTCs from existing DOTs facilities, especially PPMD units. Thus, it has been adopted as a national strategic plan to stop TB, though it was initiated privately. In the partnership, strong leadership of the NTP along with efficient infrastructure, human resources, drug management, proper monitoring, and evaluation system played pivotal roles in the success and sustainability of the strategy[26].

Installation of Primary Care Centers (PCCs) in Ireland

In 2001, Ireland took an initiative of installing primary care centres (PCCs) across the country underpinning its Primary Care strategy. A total of 140 PCCs in three modes were supposed to be operationalized by the end of 2019. Of which 49 PCCs are owned and developed by the government; 77 are leased with private landlords; 14 are developed under public-private partnerships[27]. Since 2009, the government has been emphasizing on private delivery rather than the public. Except for public PCCs, the others are built through private finance. The public delivery model was developed following the traditional public procurement system. In the lease model, the ownership of PCCs belongs to a private landlord, and the landlord leases PCCs to both health service executives (HSE) and private health companies typically through a 25 years contract. The PPP model is designed, built, financed, maintained, and operated by a private company through 25 years of the contract. HSE pays a unitary charge for the contract period to the private company as compensation for the construction and maintenance of the facility. General practitioners (GPs) privately provide services in all the PCCs. This strategy of the Irish

[25] Quelapio MI, Mira NR, Orillaza-Chi RB, Belen V, Munez N, Belchez R, Egos GE, Evangelista M, Vianzon R, Tupasi TE. Responding to the multidrug-resistant tuberculosis crisis: mainstreaming programmatic management to the Philippine National Tuberculosis Programme. The International Journal of Tuberculosis and Lung Disease. 2010 Jun 1;14(6):751-7.

[26] Quelapio MI, Mira NR, Orillaza-Chi RB, Belen V, Munez N, Belchez R, Egos GE, Evangelista M, Vianzon R, Tupasi TE. Responding to the multidrug-resistant tuberculosis crisis: mainstreaming programmatic management to the Philippine National Tuberculosis Programme. The International Journal of Tuberculosis and Lung Disease. 2010 Jun 1;14(6):751-7.

[27] Mercille J. The Public–Private Mix in Primary Care Development: The Case of Ireland. International Journal of Health Services. 2019 Jul;49(3):412-30.

government was useful to overcome the fiscal challenge. But the cumulative annual payments to the private sector made by the government exceed the direct public procurement costs.

Creation of Renal Dialysis Unit in South Africa

The Limpopo Provincial Department of Health (LDoH) of South Africa established the Pietersburg renal dialysis unit through a partnership agreement with a private partner for 10 years (2006-2016). As per the terms of the contract, the LDoH made a monthly basis payment to the private partner for the capital cost and services. The renal dialysis unit provided two types of dialysis to public sector patients from the province: in-center hemodialysis (HD) and peritoneal dialysis (PD). The number of dialysis patients increased from 77 in 2007 to 182 in 2012. Of which more than 60% of patients took HD[28]. Though the number of patients increased, access to dialysis service in Limpopo remained limited. However, during the study, the annual unit cost for HD and PD was significantly higher than the average annual cost per patient-day equivalent at Pietersburg Hospital as well as the annual unit cost of HIV treatment in a public sector hospital. The cost of dialysis could be reduced by curbing the main cost drivers which include Personnel cost, PD supplies, HD supplies, the outsourcing fee, and pharmaceutical supplies. These main cost drivers account for 81% of total dialysis costs[29]. The PPP approached was introduced to expand access to dialysis. Therefore, the risk and benefits of the PPP should be assessed beforehand to ensure the value of the partnership.

Strengthening Laboratory Medicine Systems and Clinical Practice in Africa

In response to fighting diseases like AIDS, Tuberculosis, and Malaria, government agencies and NGOs including the US President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund developed many innovative funding mechanisms to ensure access to medicines. Therefore, the Office of the US Global AIDS Coordinator of the US Department of State, the Centers for Disease Control and Prevention (CDC), and the global medical technology company Becton, Dickinson and Company (BD) developed a public-private partnership in 2007. Between 2007 and 2012, this PPP accumulated the competencies and resources of both the public and private sector to develop sustainable laboratory systems and human resources in Kenya, Uganda, Ethiopia, and Mozambique[30]. These countries were selected based on their political support and preparedness to lead the PPP.

This partnership made a significant impact in revitalizing the lagging world of the medical industry with limited resources by gathering individual strengths and competencies of the public and private sector. Besides strengthening the health and laboratory system, it provided treatment support to 7.7 million patients living with HIV/AIDS[31]. It greatly transformed patient care, especially providing laboratory results to physicians and patients. As a result of this

[28] Malatji TA, Wamukuo JT, Hyera FL. An analysis of the direct cost of renal dialysis provided through a public-private partnership at a tertiary hospital in Limpopo Province, South Africa. SAMJ: South African Medical Journal. 2019 Aug;109(8):577-81.
[29] Malatji TA, Wamukuo JT, Hyera FL. An analysis of the direct cost of renal dialysis provided through a public-private partnership at a tertiary hospital in Limpopo Province, South Africa. SAMJ: South African Medical Journal. 2019 Aug;109(8):577-81.
[30] Shrivastava R, Gadde R, Nkengasong JN. Importance of public-private partnerships: Strengthening laboratory medicine systems and clinical practice in Africa. The Journal of infectious diseases. 2016 Apr 15;213(suppl_2):S35-40.
[31] Shrivastava R, Gadde R, Nkengasong JN. Importance of public-private partnerships: Strengthening laboratory medicine systems and clinical practice in Africa. The Journal of infectious diseases. 2016 Apr 15;213(suppl_2):S35-40.

partnership, In Addis Ababa, the turnaround time for antiretroviral therapy (ART) specimens reduced from 7 to 2 days and the Amhara region decreased from 10 to 5 days[32]. It significantly contributed to minimizing the costs incurred by the patients and the government. In South Africa, the PPP initiated innovative training programs for tuberculosis to human resource crises and eventually replicated to 16 countries. In Mozambique, the partnership initiative was useful in building local capacity and curbing the costs of audits and the need for technical assistance from foreign labs[33].

The above evidence from the global context reflects a variety of PPPs in the health sector. From Installing new health facilities to managing existing facilities and developing laboratory and diagnostic system, a spectrum of PPPs was made addressing different issues of the health sector. Most of those partnership models focused on a certain segment of the health sector rather than the whole system. However, the integrated health care model of Alzira and Lesotho was a wholistic approach which incorporates all the services from primary to tertiary level. The payment of these partnerships was made based on the performance of the private partner which was measured through some certain indicators set at the beginning of the contract. Some common criteria are present in most of the successful cases which triggered the partnership to sustainability. The presence of the strong legal framework, measurement of the performance through effective indicators, proper allocation of risks, effective monitoring, and strong leadership played a key role in the success in majority PPP initiatives. In the institutional partnership model of Italy, they found four issues critical in the success of the partnership which includes strategic market orientation, seamless financial support, presence of private sector management regulation, and robust workforce management system.

2.2 Scenario of PPPs in the Health Sector: Regional Evidence

The evidence from South Asian countries demonstrates that PPP enhanced the capacity, quality of care, and rate of success in Tuberculosis (TB) control in Bangladesh; minimized waiting hours in treatment and cost of the services as well as improved quality of care in India. It also contributed greatly to national capacity building, policy formulation, and services provision of Bangladesh, India, Nepal, Sri Lanka and Pakistan. However, most of the partnerships were made between the government and NGOs rather than the private providers which delimit the true scope of the partnership with the private sector. In South Asian Countries, the partnership models have been mostly utilized in combating TB and HIV.

A study in Sri Lanka reveals that 72% of the population suggested for introducing PPPs in the health sector of the country while half of them assume that the PPP is appropriate for clinical as well as non-clinical services[34]. For this sake, most of the participants (90.12%) prescribed for having a strong political leadership as well as having knowledge of PPP of the healthcare officials to facilitate the PPP arrangements in the country. In another response narrowing down to the PPP model, 67.23% of them suggested for transferring the investment and management

[32] Shrivastava R, Gadde R, Nkengasong JN. Importance of public-private partnerships: Strengthening laboratory medicine systems and clinical practice in Africa. The Journal of infectious diseases. 2016 Apr 15;213(suppl_2):S35-40.

[33] Shrivastava R, Gadde R, Nkengasong JN. Importance of public-private partnerships: Strengthening laboratory medicine systems and clinical practice in Africa. The Journal of infectious diseases. 2016 Apr 15;213(suppl_2):S35-40.

[34] HIMALIKA NB, Khathibi A. Public private partnership in healthcare industry in Sri Lanka as an alternative to privatization. 2014.

aspect of the healthcare services to the private sector with set quality targets[35]. On the other hand, some of the participants consented to hand over mainly the non-clinical services like cleaning, dietary services, ambulance services, security, and maintenance of the property to the private sector. A large number of them believe that the quality and the standards of the health services will improve upon introducing PPPs. The participating officials recognized that some functions including maintenance, dietary, security, cleaning, and laundry could be better performed by the private sector entities. They also consider the DBOF (Design Build Operate and Finance) model as an appropriate one for the health sector as all the facilities/resources will be owned by the government at the end of the contract. In the study, it is found that the biggest underlying challenge in introducing PPPs would be to convince the Trade Unions and the mass people. People might fear that the government is moving towards the privatization of public services. The following section depicts some of the winning pieces of evidence of PPPs in the South Asian region.

Increasing Accessibility to TB & HIV Treatment

In TB control, PPP models in Bangladesh, Nepal, and Pakistan played an effective role in increasing case notification as well as the success rate of treatment.

In 1994, Bangladesh government signed a Memorandum of Understanding (MOU) with several NGOs including BRAC; Damien Foundation (DF); and Health, Education, and Economic Development (HEED) for implementing the TB control project in rural areas of the country. In 2001, it signed another MOU to replicate the project in urban areas. During July 2009-2010, the partnership between the government and NGOs engaging 703 Private Medical Practitioners (PMPs) in urban areas of Bangladesh yielded significant success in TB case detection and treatment.

Likewise, India adopted an intensified large-scale Public Private Mix (PPM) DOTs initiative covering 50 million people and 14 major cities under the Revised National Tuberculosis Control Program (RNTCP) which increased 12% smear-positive pulmonary TB cases notifications. In India, the RNTCP and a large-scale HIV prevention project made partnership and later, was transformed into a national policy through public sector funding to enhance TB screening services for HIV high-risk groups. From July 2007 to September 2008, it screened 124,371 high-risk individuals and referred to 3749 cases (3%) for TB diagnosis[36]. Of those, 849 (23%) were diagnosed with TB. In 2004, India initiated six projects for expanding DOTs to different states and it resulted in increasing the sputum positive case detection.

In Lalitpur municipality, Nepal, a partnership project was developed by the local working group involving the public sector, NGOs, and private practitioners in 2001 for TB control. Within three years of operation, it increased the case notification from 54% to 102 % and the successful treatment rate to over 90%[37]. In Bangladesh, Nepal, and Pakistan, the PPP initiatives involving

[35] HIMALIKA NB, Khathibi A. Public private partnership in healthcare industry in Sri Lanka as an alternative to privatization. 2014.
[36] e Khuda B, Huque R, Siddiquee M, Barkat S. Public-Private Partnerships in the Health Sector: Some Evidence from South Asia. Dhaka.
[37] e Khuda B, Huque R, Siddiquee M, Barkat S. Public-Private Partnerships in the Health Sector: Some Evidence from South Asia. Dhaka.

private practitioners and NGOs expanded the area of coverage and increased the quality of TB care in urban areas.

Reduction of Maternal and Infant Mortality Rate in India

In India, the Chiranjeevi Yojana Scheme in Gujarat is one of the most successful health PPPs. The government initiated this Scheme in 2005 on a pilot basis to minimize maternal mortality ratio from 389 to less than 100 per 100,000 live births, total fertility rate from 3.0 to 2.1 per woman, the infant mortality rate from 53 (SRS 2004) to 30 per 1,000 live births[38]. The scheme was designed targeting all non-tax paying families living below the poverty line and tribal families. The scheme involved gynecologists and obstetricians from the private sector in providing services related to safe delivery. Health officers identified eligible expectant mothers and decided the place of delivery in advance. As per the MOU, the doctors provided treatment to targeted patients under the scheme at their nursing homes/hospitals. For the package of 100 deliveries, initially, the obstetricians were paid Rs 1,79,500 (Rs 1795 per delivery) and which was revised to Rs 2,80,000 in 2010[39]. The patients didn't have to pay any charge for the services rather they were provided with Rs 200 as transport allowance[40].

Since the inception of this scheme, there had been a substantial change in maternal and infant mortality rate in Gujarat. Post-implementation assessment of the scheme revealed that the maternal mortality rate decreased by 20 times than the expected base of mortality rate[41]. The shortfalls of the scheme were that only half or less than half of gynaecologists and obstetricians of the state were registered and of which, only a handful number actively participated. On the other hand, though the doctors were paid for all kinds of normal and complex cases including cesarean, they used to transfer complicated patients to public hospitals.

Combating Prevalence of Malaria in Sri Lanka

In Sri Lanka, a dedicated government body called Anti Malaria Campaign (AMC) under the Ministry of Health in partnership with the Tropical and Environmental Diseases and Health Associates Private Limited (TEDHA), a private sector partner, adopted an initiative to eliminate malaria by 2014 through enhancing prevention, and intensify surveillance and controlling of malaria. The case study was an attempt to examine the success of PPP in combating malaria in war-torn five districts from two states of Sri Lanka during 2010-2014. In the project, two types of surveillance i.e. parasitological & entomological surveillance were carried out.

For the sake of entomological surveillance, a total Seventeen sentinel sites were set up in the five districts based on different ecological settings, population density, and area and it covered four localities in each site. There was a proper communication channel between AMC & TEDHA. For sharing data and ensuring smooth operations, a monthly review meeting in the Regional Malaria Offices (RMOs) was organized regularly. By the end of 2014, the TEDHA-AMC partnership

[38] Thadani KB. Public private partnership in the health sector: Boon or bane. Procedia-Social and Behavioral Sciences. 2014 Nov 27;157:307-16.
[39] Thadani KB. Public private partnership in the health sector: Boon or bane. Procedia-Social and Behavioral Sciences. 2014 Nov 27;157:307-16.
[40] Thadani KB. Public private partnership in the health sector: Boon or bane. Procedia-Social and Behavioral Sciences. 2014 Nov 27;157:307-16.
[41] Thadani KB. Public private partnership in the health sector: Boon or bane. Procedia-Social and Behavioral Sciences. 2014 Nov 27;157:307-16.

funded by the Global Fund was successful in achieving its goal in eliminating malaria, and consequently, Sri Lanka has been declared as "malaria-free" by the WHO. All activities to fulfil the mandates of TEDHA were carried out as per the concurrence of the AMC and the Country Coordinating Mechanism of Sri Lanka (CCMSL). All the infrastructures and facilities (MDLs established in rural hospitals)) established by TEDHA under this program remain functional and run by the different institutions of the Ministry of Health, some of those remain for malaria diagnosis.

Several factors facilitated the successful implementation of this program. Some of these major factors – recruitment of the people proficient in local language and from host communities; engagement & education of the local communities was an advantage; TEDHA's concentration on capacity building and sustainable development; Development of infrastructures including Hospitals with laboratory facility; Recruitment of highly skilled professionals for managerial tasks and scientific tasks at the executive level; continuous collaborations and discussions with all government and non-governmental stakeholders. Initially, there were some complexities concerning collaboration and data collection between the parties due to having concern about propriety and nature of collaboration, but those issues were addressed through developing a commonly agreed monitoring and evaluation plan[42].

Increasing Access to Diagnostic Services in India

The state government of Jharkhand & SRL/Medall Healthcare agreed to increase poor's access to comprehensive pathology diagnostic services in all 24 hospitals and 3 state-owned medical colleges. To this end, the private partner was awarded a clinical support-concession contract for ten years of period. For the sake of covering the subsidized cost of the low-income patients, a fund was formed with $12 million private investment and $360,000 concession fees. This partnership reached 3.5 million residents per year[43].

Setting Emergency Medical System EMS) in Andhra Pradesh, India

The State Government of Andhra Pradesh and GVK Foundation/EMRI developed Design-Build-Finance-Operate (DBFO) PPP model to introduce a non-existent emergency care services. GVK/EMRI developed a hotline service with 24/7 call centre; A vehicle, Driver, emergency medical technician (EMT) were hired; EMT delivered pre-hospital care supervised by a call centre doctor; they developed dispatch technology, ambulance tracker, call centres clinical guidelines; established EMT training institute. The service reaches 750 million people per annum. It operates 9,000 ambulances and serves 22,300 emergency patients per day[44].

Optimizing Utilization of Maternal and Child Care Services in Pakistan

The PPP enhanced the utilization of maternal and child health services, especially family planning services and maternal & child immunization in Abbottabad, Pakistan. The partnership

[42] Fernando D, Wijeyaratne P, Wickremasinghe R, Abeyasinghe RR, Galappaththy GN, Wickremasinghe R, Hapugoda M, Abeywickrema WA, Rodrigo C. Use of a public-private partnership in malaria elimination efforts in Sri Lanka; a case study. BMC health services research. 2018 Dec 1;18(1):202.
[43] World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.
[44] World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.

increased in targeted children's' vaccination to 127% and women's' vaccination to 42%[45]. The pre and post evaluation of the PPP demonstrates a notable improvement in the family planning services utilization (60%), antenatal care (9%), and post-natal care [46](38%). Besides, the PPP model also had been successful in introducing and enhancing services in rural areas with absence or lacking those services in the pre-PPP era.

However, despite having many successful cases across this region, there remain some key issues to be taken into cognizance in PPPs implementation. A study conducted in Pakistan to explore the perception of the relevant stakeholders regarding the adoption of PPP policy and barriers to its implementation demonstrates some concerning issues. The study found that the level of understanding of PPP among the participating stakeholders was very limited. They mostly perceive PPP as the privatization. They presume that lack of accountability, the prevalence of corruption, inefficiency, and malpractices among public sector employees are the key driving forces for adopting PPP policy in the health sector in the Sindh province of Pakistan. The participating stakeholders consider the resistance from healthcare staff as one of the most dominant barriers to the implementation of the PPP. The study also revealed that fear of losing their job and status quo could prompt healthcare staff to resist the adoption of the PPP. The stakeholder also expressed their concerns regarding the capacity of the public sector employees in regulating and monitoring the private sector[47].

In South Asian countries, PPPs have been making an enormous impact in changing the landscape of health service delivery system. PPPs have been able to create its urgency in transforming the health sector of the developing countries like Bangladesh. PPPs enhanced the capacity and quality of care in the treatment of several Non-Communicable Diseases (NCDs) like TB and HIV in South Asian countries. Lessons from South Asian Countries suggest that strong political leadership as well as having knowledge of PPP of the healthcare officials to facilitate the PPP arrangements is a notable precondition for the partnership. A study refers to transferring the investment and management aspect of the healthcare services to the private sector with set quality targets. It also found that some functions including maintenance, dietary, security, cleaning, and laundry could be better performed by the private sector entities. Findings of the study also suggest that the DBOF (Design Build Operate and Finance) model is one of the appropriate models for the health sector as the government achieve the ownership of all the facilities/resources with the end of the contract. Lesson from Malaria combating partnership project in Sri Lanka prescribes that recruiting of people from host communities and strong collaboration among the participating partners are also essential for the success. To ensure the effectiveness of the project, a constant monitoring system should be in place to assess the effects of the PPP initiatives on the most vulnerable population groups, and strategy/ies should be designed to ensure that the target group is effectively reached. In designing PPP and selecting partners, sustainable criteria or indicators should be incorporated properly to ensure

[45] Imtiaz A, Farooq G, Haq ZU, Ahmed A, Anwer S. Public Private Partnership and Utilization of Maternal and Child Health Services in District Abbottabad, Pakistan. Journal of Ayub Medical College Abbottabad. 2017 Apr 8;29(2):275-9.

[46] Imtiaz A, Farooq G, Haq ZU, Ahmed A, Anwer S. Public Private Partnership and Utilization of Maternal and Child Health Services in District Abbottabad, Pakistan. Journal of Ayub Medical College Abbottabad. 2017 Apr 8;29(2):275-9.

[47] Khan NN, Puthussery S. Stakeholder perspectives on public-private partnership in health service delivery in Sindh province of Pakistan: a qualitative study. Public health. 2019 May 1;170:1-9.

the efficiency and accuracy of the program or project in achieving its previously agreed-upon goal.

2.3 PPP Cases in the Health Sector: Bangladesh Context

Since independence, several partnerships initiatives have been adopted in the health sector which is mostly donor-funded and have not been replicated. There exist a myriad of partnership models, formally or informally, between public-private or GO-NGOs in the health sector; some of those partnerships have been greatly successful and some partnerships, for some reasons, have failed to generate satisfactory results.

Outreaching of Immunization Services

One of the remarkable and successful cases of the government of Bangladesh is the Expanded Program of Immunization (EPI) which was initiated in 1974 and still operational throughout the country in collaboration with several NGOs (20-25) and donor agencies. Bangladesh government has made stunning achievements in immunization throughout the country by adopting the (EPI). Technical as well as financial assistance of international donors and collaboration in implementation with NGOs facilitated the success of the program. In this partnership, NGOs came up with extensive support in providing training to vaccinators and immunization services in remote areas where government services hardly could reach. The government played a key role by providing vaccines, human resources, infrastructure, logistics, and the cold chain. Local government authorities coordinated with all the partners at the ground. Though the private sector for-profit didn't involve with the program directly, they indirectly supported the program by raising awareness and disseminating information as well as mobilizing local communities across the country. Many factors paved the way to the success of the EPI such as strong commitment at all levels of the government; the smooth flow of necessary resources; active involvement of the local government; free flow of information and communication among the partners; clearly defined roles of each partner; strong supervision and monitoring by all partners[48].

Downsizing the Rate of Low Birth Weight & Malnutrition

In 1995, the Bangladesh government took another program namely the Nutrition Program of Bangladeshi response to high rates of low birth weight and malnutrition. It was supported by the World Bank and implemented through a partnership with NGOs and the community. Under the umbrella of this program, two large-scale programs were implemented in two phases known as the Bangladesh Integrated Nutrition Program (1995-2002) and the National Nutrition Program (2002-2010). In contrast to the EPI program, these partnerships deemed to be less successful for a myriad of reasons. Initially, the government failed to develop the program outline properly as a result of undue compliance pressure from the donors. Frequent diversion of the program direction along with the inadequate flow of funds is also a notable reason for failure[49]. Excessive domination of the government and faulty selection of the partner NGOs were another two shortcomings of the program.

[48] Osman FA. Public-private partnership in health service delivery: lessons from Bangladesh;2008.
[49] Osman FA. Public-private partnership in health service delivery: lessons from Bangladesh;2008.

Increasing Primary Care Services

In primary healthcare, the Local Government Division with the support of the donors initiated two projects named Urban Primary Health Care Services Delivery Project (UPHCSDP) and Urban Public and Environment Health Sector Development Project (UPEHSDP). In 1998, the Local Government Division through a project management unit launched the UPHCSDP program in collaboration with several NGOs for providing health care services in City Corporations and Municipalities areas. It is still successfully operational in ten City Corporations and four Municipalities and to be replicated to another four Municipalities and another City Corporation[50]. It has been recognized as an effective and innovative approach providing primary health care to urban people especially women and children. Likewise, the UPEHSDP program has been another success in solid waste management and medical waste disposal and operation of Short Transfer Station and Landfill through engaging private partners.

Enhancing Accessibility to Dialysis Services

In Kidney dialysis, a World Bank's report says that both public and private healthcare providers can provide dialysis services only to less than 10% of patients across the country[51]. The private sector plays the dominant role in providing dialysis services which are limited in the public sector. Even the standard of dialysis services in those public hospitals is not up to the mark. To increase the accessibility to the dialysis services, the government made a partnership with the Indian company Sandor and installed two dialysis centres; one at NIKDU and another at Chittagong Medical College Hospital (CMCH). In the Sandor-NIKDU project, hospital authority bears water and electricity bills, and Nephrologists are also from NIKDU. The lease is free of charge. Patients pay the pharmaceutical costs and Sandor bears all other costs. Nonetheless, Sandor expressed their dissatisfaction for not having the necessary support from the government, especially in tax exemptions and import of consumables. Consequently, the centre has been making losses for the last 3 years due to underutilization of the services, and yet the breakeven requires 50-60% utilization of sessions[52].

Controlling of Tuberculosis (TB) & Increasing Access to its Treatment

In tuberculosis (TB) controlling, the government adopted a pilot program to measure the effectiveness and suitability of a PPP model by engaging the private medical sector. It was carried out between 2004 and 2008 in urban areas to assess to what extent the outcomes of the partnership facilitate the accessibility and the quality of TB care. It was initiated and implemented by National Tuberculosis Control Program (NTP) in collaboration with the Society for Empowerment, Education and Development (SEED) and three other NGOs; Bangladesh Rural Advancement Committee (BRAC), Progoti Samaj Kallyan Protisthan (PSKP) and Population Services Training Centre (PSTC). In this partnership, NTP played a role in providing an overall policy environment in organizing and managing of the research activities and SEED served as the lead research partner; BRAC, PSKP, and PSTC were responsible for the diagnosis, treatment, and follow-up of the patients through designated health centers. Based on the results of the piloting, NTP started replicating this model in other metropolitan cities including Chittagong (from 2007), Sylhet (2008), and other areas of Dhaka (2009) covering more than 15 million people. The partnership brought about a landslide change in identifying SS+ TB cases. From the

[50]Nath D. Unlocking Potentials of PPP in Health Sector. Daily Sun. 2017.

[51] Asian Development Bank. PPP Rapid Scoping for Dialysis and Diagnostics. Dhaka; 2019.

[52]Asian Development Bank. PPP Rapid Scoping for Dialysis and Diagnostics. Dhaka; 2019.

inception in 2004 to 2010, 703 Private Medical Practitioners (PMPs) referred about 19000 TB suspects & 3959 SS+ TB cases to the designated centres whereas overall 36% of all SS+ cases reported to have involvement of the private sector partner[53].

Behind this success, the participatory decision-making approach in every stage played a significant role in ensuring commitment and ownership from all relevant stakeholders. Along with that, participating PMPs perceived that the monthly field visits as a part of the monitoring and support mechanism of the project were keys to the success of the implementation and paved the way for replication. The initial underlying challenge in adopting and managing PPP was to accommodate all the parties from diverse fields of interest. Continuing the progress of partnership and ensuring collective ownership of decisions and responsibilities were the other key challenges faced during implementation. The dynamic partnership and close collaboration with the PMPs boosted up their confidence and trust in the public sector.

In another case, following a systematic approach, the Society for Empowerment, Education and Development (SEED), National Tuberculosis Control Program (NTP), BGMEA along with the three NGOs and the garment factories came to a partnership for sustainable workplace TB DOTS program. In this model, local private medical practitioners (PMPs) were engaged as they were well known to TB patients in urban areas of the country. As an outcome of the project, a notable change was observed in behaviour, knowledge, and practice of the manager, healthcare providers as well as workers in TB care and control[54]. The attitude of the management towards the workers with TB was changed positively. The management committed to allowing the workers to take TB treatment during working hours and allow up to 30 days paid leave for treatment. During the intervention period 2008-2010, a total of 3372 TB suspected workers were referred to the designated DOTS centres and of which 598 were found smear-positive TB[55]. Of those, 145 patients were provided with treatment at the participating factories.

Though, at the outset, the factory authorities were reluctant to be engaged in the partnership for having concern regarding their role and the level of participation during implementation. Therefore, all the stakeholders were engaged at every stage of the project. As managers were reluctant to allocate a dedicated time during working hours, providing orientation and training to a large number of workers was very difficult. Managers also were not interested to allow workers with TB positive to continue work at the factories. In changing the attitude and mindset of the managers and workers, proper planning and orientation and training played a key role. In addressing challenges, continuous and joint monitoring and supervision by SEED, the NTP and BGMEA was a crucial factor. Above all, the engagement of all stakeholders developing tools, guidelines, and communication materials played a dominant role in its success. In addition to that, the NTP, BGMEA, and manufacturers demonstrated their interest in expanding this

[53]Ullah AN, Huque R, Husain A, Akter S, Islam A, Newell JN. Effectiveness of involving the private medical sector in the National TB Control Programme in Bangladesh: evidence from mixed methods. BMJ open. 2012 Jan 1;2(6):e001534.

[54] Zafar Ullah AN, Huque R, Husain A, Akter S, Akter H, Newell JN. Tuberculosis in the workplace: developing partnerships with the garment industries in Bangladesh. The International journal of tuberculosis and lung disease. 2012 Dec 1;16(12):1637-42.

[55] Zafar Ullah AN, Huque R, Husain A, Akter S, Akter H, Newell JN. Tuberculosis in the workplace: developing partnerships with the garment industries in Bangladesh. The International journal of tuberculosis and lung disease. 2012 Dec 1;16(12):1637-42.

program and recently signed a memorandum of understanding (MoU) between the NTP and BGMEA to continue the TB control program in garment factories.

Expanding Contraceptive Choice

During 2015-16, a partnership program was developed to expand the choice of a contraceptive mix of the clients with unmet contraceptive needs, especially in urban slum areas. Under this program, the Directorate General of Family Planning (DGFP) designed a referral system through which private practitioners refer clients mostly poor to not-for-profit clinics. A government clinic, an NGO-led primary health care clinic, and an international NGO clinic were selected in partnership with DGFP which offered free short-acting, long-acting and permanent contraceptive methods. By referring clients to one of those three hospitals, participating practitioners received financial payment. Though two of those clinics charged a fee for the service, they provided service to urban and slum dwellers, and simultaneously provided monetary incentives to women for accepting the contraceptive method.

3. SCOPES, OPPORTUNITIES AND CHALLENGES OF DEVELOPING PPP IN HEALTH IN BANGLADESH

3.1 Potential Roles of PPP in Expanding Service Coverage and Improving Quality of Health in Bangladesh

One of the unique features of the 4th HPNSP is the flexibility in using various innovative approach, as specified in the Program Implementation Plan (PIP) of 4th HPNSP - diversification of service provision, inclusive of public private partnership, particularly for hard-to-reach areas[56]. The PIP opined two specific roles of PPP in reducing expenses of citizens in seeking care from non-public Health, Nutrition and Population (HNP) service providers, and improving quality of services. Policy advisors, interviewed in the study, also expressed significant role of PPP in the health sector of Bangladesh. Policy advisors interviewed emphasized on the high demand for healthcare services in the country and the gap in public health service coverage unable to address that demand. They mentioned the quality improvement that could be materialized through PPP. Policy advisors also identified PPP as a mean to address shortage in government efforts in providing healthcare services for the citizens.

"…it (PPP) has importance because our public sector in a word is not in a position to deliver or to fulfill the demand of the service, this the number one reason. And secondly, the quality health service which should be made available, it's not being possible as well from the public sector. For this, if any innovative mechanism can be identified by which it's being possible to make available the required services through the public-private partnership. Then, it can be possible to address the demand they have, the necessity they have and the state obligations as well and for this it can be addressed by giving a try."

KII with one of the policy advisors (KII03 10_03_2020)

"the benefits of using PPP model is increasing the access or increasing coverage (of public health service). From the two sides.is that case service coverage will also increase. In the district hospital, we are providing many services now, which will increase. Now we don't have diagnostic facilities, we cannot provide city scan or MRI. When I will do PPP, I would increase the service provision. That I have many things now. The access will also increase. Main problem is the access. So that I would get access to all the essential services. You can say access and expense service coverage. I have evidence that service coverage will be increased than the surplus. I have everything. And when we have everything then people will come."

KII with one of the policy advisors (KII02 05_03_2020)

"We will try to seek help according to the shortages. Meaning that, I have a govt. but there's lack of something in my govt. So, I will try to get support of that shortage which my govt. has from the private partner."

KII with one of the policy advisors (KII04 12_03_2020)

[56] MOHFW. 2016. *Program Implementation Plan (PIP) of 4th Health, Population and Nutrition Sector Program (4th HPNSP), 2017-22*. Ministry of Health and Family Welfare. Dhaka, Bangladesh.

From discussions with the service providers working in different PPP health facilities, it seemed that the model enabled expansion of physical facilities in government hospitals, which in turn increased the service coverage, along with round the clock service provision. These decreased the necessity of patients' going to private providers, which reduced their healthcare expenses.

"One advantage is, the patient's expense is lessened. Another thing is, this center remains open for 24 hours. Whenever there is any emergency, they can come and get treatment, if the machine remains free. Sometimes, emergency cases come in the middle of the night."

IDI with a service provider working in a PPP facility (*IDISP_01 13_03_2020*)

The dialysis unit (before the implementation of PPP model) was of 10 bed, it was a 10-unit dialysis. And it was a very busy unit. Sometimes, we were not able to provide this service because of overload of patients; because there is limitation. Only ten machines are there. So, how many patients can be served in a day? Isn't it? So, sometimes, if the patient's condition is less serious then we kept them. *"But if the patient's condition was very serious then we advised them to receive immediate dialysis service from somewhere else, from private. But now, we don't have to do it, as here is a big center of 31 bed, that means in there and here, total 40 machines are available. So now we can serve more patients. So, if there is no scope to get the service from here, we send the patients there. Now we don't have to turn any patient back."*

IDI with a service provider working in a PPP facility (*IDISP_03 15_03_2020*)

"Patients are getting a lot of facilities. Bangladesh's government did enough/ Patients got benefited, this is the main idea. Patients can do dialysis at a lower cost. They are also having other benefits. But the cost reduction is an important issue. Since it is a lengthy and expensive process of treatment. So that we have to prioritize the expanse issues. Such an advantage was given by this public-private partnership and that is a great success."
IDI with a service provider working in a PPP facility (*IDISP_04 05_07_2020*)

"Most importantly, when it ran by the government, we could not execute it in such a large scale. Since government provided separate budget for this and since it is happening at a large scale/ for example, we could provide dialysis to 150 to 200 patients a month. So over the year the number used to reach 1300 to 1400. But now we can provide dialysis facilities to four thousand to five thousand patients a month. From this point of view, I think that PPP is established for a good reason."

IDI with a service provider working in a PPP facility (*IDISP_08 04_07_2020*)

The service recipients echoed with the service providers regarding decreased cost of services due to the PPP in health facilities. They also acknowledged the increased service facility of the government hospitals after the PPP model. They also acknowledged the better skills of the providers at PPP facilities vis-à-vis the private facilities.

"Beforehand, we received the service from private clinic. The first thing is, at that time, this service center was not there in this hospital. At that time, we had no option other than taking the service from private clinic. The fee was huge, plus, they had inadequate number

of machines. In each clinic, the number of machines was not more than 6 or 7. So, we were unable to receive the service according to the time we needed it. And, when this center was established, the rate was cheaper here. We, the kidney-patients are spending huge amount of money. Since I am receiving dialysis, I think that I spent more than 0.5 million taka here. This center is comparatively cheaper, but still 0.5 million taka is spent out. It would be much more if I went to the private facility. So, we came here for the cheaper rate. Moreover, when we came here, we saw that the service provided here is much better than those clinics. This is why we are here."

One of the service recipients in a PPP facility during FGD (FGD_PT 14_03_2020)

"if we would take it from the outside/ after buying them the necessary medicine, it would cost three thousand, three thousand and five hundred or it would not possible at less than two thousand. But from here, I have taken the schedule with 29 thousand taka, we were assured for six months. Then, when "XXX (name of private entity in PPP model)" came, you got benefited in a way that they take 463 taka from us and they provide all the things. For the financially unstable person like us, it is really great help, you know? And the rest money is given by the government. It is running well; their facilities are good."

One of the service recipients in a PPP facility during IDI (IDI_SR_07 06_07_2020)

3.2 Potential Domains for PPP in HNP Services

As it was seen from the global and regional examples, there are diverse areas within HNP sector with potentials for implementation of PPP. The experience of PPP is quite new and very limited in health sector of Bangladesh, and are predominantly in hemodialysis area. However, there has been growing consensus on expansion of the areas within the HNP sector for initiation of PPP initiatives. In a stakeholder consultation in Bangladesh, in 2012, stakeholders suggested for utilizing PPP opportunities in different potential domains including providing training, capacity building of the health educational institutes; Developing of mid-level secondary hospitals managed by the private sector that provide specific services free of charge to poor patients; Installing diagnostic clinics at Upazila health complexes; Minimizing drugs cost and improving quality in generic drug production; partnership for training and development of local contraceptive production; Helping fresh physicians for private practice by creating a business incubator[57]. However, not all of these recommended initiatives were directly relevant to expansion of the public health coverage. Later, in 2015, in a workshop of PPPO, titled "Expanding Public health Services through PPP" arranged with support from DGHS, we saw further refining of service domains of PPP – ambulance services; diagnostic centers including Radiology imaging laboratory; medical equipment supply and operation at various government facilities; ICU/emergency medical services; and social insurance[58]. The PIP of 4th HPNSP, in 2016, mentioned other areas, including facility based newborn care through provision of services, including Newborn Stabilization Unit (NSU) and SCANU, contracting out non-functional government facilities for provision of highly specialize services, expanding services in the hard-

[57]Concept note on Public Private Partnerships in Health in Bangladesh in Health in Bangladesh. Stakeholder Consultation. Dhaka; 2012.

[58] https://www.pppo.gov.bd/events2015_expanding-public-health-services-through-ppp.php, online material from PPPO website, accessed on 29 August, 2020

to-reach areas and medical waste management[59]. Furthermore, a recent presentation of World Bank recommended three options: Encouraging the private sector to expand the services and to increase access of people in health facilities; Hiring private actors from the health sector to deliver a certain service; outsourcing or purchasing services from the private sector[60].The recently concluded MTR of 4th HPNSP further included the potential inclusion of private hospitals within SSK, contracting doctors under the GP models (in rural and urban areas), and contracting private obstetricians/gynaecologists to provide PPFP and LARC/PM services[61].

Key informants during KIIs also agreed to majority of these service domains, while adding a few others, including regular cleaning/maintenance of hospital facilities. A key informant mentioned a different issue with regarding the unavailability of primary healthcare services from government facility in urban areas and mentioned the potential scope of PPP to resolve this issue. According to the key informant, there challenge of provision of primary healthcare services from government sector at urban areas could be resolved through PPP partnerships with GPs for provision of services at community level and referring those needing additional services to referral hospitals, which could be from private sector but having PPP contract with government. Another respondent mentioned complementing government health facilities with human resources to resolve the gap in public sector in terms of number of personnel and required technical skills. Among others, medical waste management was also recommended by some of the key informant. Other recommended scopes of PPP in HNP included drug supply, immunization, health insurance, etc.

You mean to ask, in which sectors? ……That is diagnosis services, that is lab services, ICCU services, kidney dialysis services, then there is ambulance services

KII with one of the policy advisors (KII_01 19_02_2020)

"… we have room indifferent places where we just do X-rays, but we do not have ultra-sonogram, do not have city scan which is high tech. These high-tech technicians are not available in district hospital. For these people are going to Dhaka, though city scan (machine) has reached everywhere. But we lack dialysis facilities which is a bigger problem in many places. People spend a lot of money abroad… …… another thing is cleaning and maintenance... Most of our hospitals are unclean or there are lack of people to maintain this. In two or three places, few community people come forward. They collected money from the businessman to hire a security guard. It is private company so they made them a contract. Otherwise the gatekeeper, the security agency or the cleaner are getting their salary from the private sector. They are not the government stuff."

KII with one of the policy advisors (*KII02 05_03_2020*)

"It [PPP] can be functional in case of "manpower", it can also be functional in case of "instrument or equipment" and another thing can be related to "infrastructure". Suppose, I might provide financial support or infrastructure as a partner and rest the private

[59] MOHFW. 2016. *Program Implementation Plan (PIP) of 4th Health, Population and Nutrition Sector Program (4th HPNSP), 2017-22*. Ministry of Health and Family Welfare. Dhaka, Bangladesh.

[60]World Bank, Global Financing Facility. Private Sector Engagement for Health in Bangladesh. Presentation; 2019; Bangladesh.

[61] Independent Review Team. 2020. Midterm Review (MTR), 2020: 4th HPNSP. Ministry of Health and Family Welfare. Dhaka, Bangladesh

organization will take over and will be managed by them. Or, I may provide infrastructure and manpower and they will manage the service by using their capacity and technical skills. There can be many areas like this."

KII with one of the policy advisors (*KII04 12_03_2020*)

One of the participants proposed a model of referral mechanism for the primary health care system which would allow creating a position of General Practitioner (GP) for the private practitioners holding MBBS. The appointed GP would primarily function under the rules and regulations set by the government and refer patients to hospitals for further care. Also, their fees would be fixed by the government and their positions would be promoted by the government. This will help minimizing the patient load in the hospitals, increase accessibility of public healthcare service and utilize private facilities for universal health coverage.

"If we need to create primary health care system then we will need a system for that, I mean that arrangement is needed. So, we firstly need a qualified provider for this. So, the amount qualified provider needed; according to my counting we need one qualified provider for 10 thousand people. At least a MBBS doctor is needed whom we can call GP- general practitioner… there will be self-employment of the doctors, they will have recognition, they will have branding. … And that doctor will also function under regulation of the govt. S/he can't fix the fees according to their wish. There should be discount service or free service for the poor people, s/he will have a guideline like this. Although s/he is self-employed but still the doctors have to function under the regulation of the govt. For this, the doctor will have recognition, a branding that s/he is a GP doctor. In spite the biggest authority s/he will have that is referral authority. Those people who'll need to be hospitalized or will need inpatient care or if anyone needs referral consultancy then s/he will have the authority to refer them… in the long run, nobody will be able to access in higher level authority without the referral of the doctors. So, another PPP can be created in this case. There're 10 zones in Dhaka city. There're 5 zones in the south and 5 in north. So, the govt. can sign a MOU with hospital of each zone or with some of the private hospitals and they can purchase the service by making the MOU. This can also be the model of PPP."

KII with one of the policy advisors (KII03 10_03_2020)

"Medical waste management, clinical pathology, ambulance services at district and sub-district level, laundry services and canteen services can be introduced as PPP project."

KII with one of the key respondents (*KII-5)*

"Maintenance of the medical equipment, medical waste management, cleaning service, and a few specialized clinical services such as ambulance service can be potential domain where we can invite private funding."

KII with one of the key respondents (*KII-6)*

"Existing infrastructures at different levels (from Upazila to Divisional level) can be utilized. Emergency services such as ICU, CCU, diagnostic services, drug supply, monitoring and evaluation can be focused on for PPP."

KII with one of the key respondents (KII-7)

"Proposals are being developed on immunization, health insurance, health waste management, specialized services and urban health."
(KII-8)

So, in purview of the above discussion, potential scopes of PPP in HNP sector of Bangladesh can be found in major three service domains of HNP sector – expanding service coverage, improving service quality and increasing equity and access to the services. These are shown in the figure below.

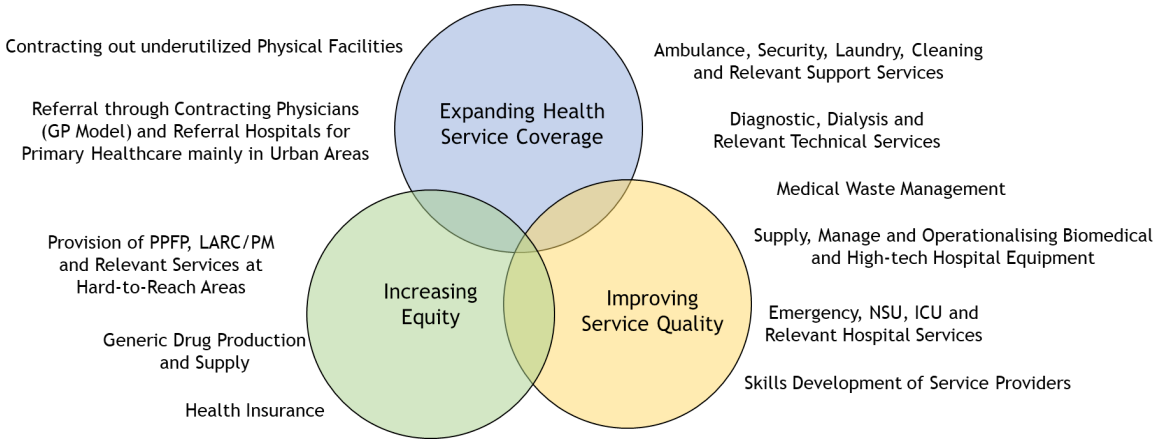

Figure 2: Potential Scopes of Public Private Partnership in HNP Service Domains in Bangladesh

3.3 Challenges and Risks for PPP in HNP Sector of Bangladesh

3.3.1 Policy and Legal Framework

PPPs usually require new approaches, policies and capabilities to support the preparation, design, delivery and management of projects and public services. A common criticism of PPPs is that they can be more complex and time consuming to procure and manage than conventional forms of procurement. In some cases, this criticism can be misplaced as it may be important to recognise that the existing conventional approaches may need improvement. However, in other cases, it may reflect genuine constraints in the policy, legal and institutional framework.

Unlike other countries, PPP policies and guidelines in Bangladesh do not provide enough room for the development of the health sectors rather it promotes infrastructure intensive projects. The PPP Act 2015 sheds light upon promoting investment and strengthening infrastructure through engaging the private sector. Delimiting the scope of the PPPs, it's Statement of Objects and Reasons (SOR) only allows local and foreign investments following some prescribed models including 'Concessions', 'Build Operate and Transfer', 'Design Build and Operate', 'Joint Ventures' and 'Divestiture of Public Assets'[62]. On the contrary, given definition of the 'project',

[62] Bangladesh European Commission (EU). Adequacy of Existing PPP Laws for Health PPP Project - Are existing legislations enabling for Health PPPs?. Dhaka; 2017.

'public goods' and 'public service' in the PPP Act 2015 stipulates its relevance to any kind of projects in the health sector which creates an ambiguity regarding the engagement of the private sector in health without any investments. Along with that, section 16 of the PPP Act 2015 provides the provision 'Financial Participation of the Government in PPP Projects' in five ways which encompass any kind of PPP in the health sector; The fifth category of financing delegates the discretionary power solely to the PPP Authority. But service delivery partnership usually happens without any kind of investment which is left to the arbitrary powers of the PPP Authority. It could be a demotivating reason for interested private partners to be involved with any government projects in the health sector.

Furthermore, the provision of SOR of the PPP Act 2015 (Section 18(1) curtails the power of the PPP Authority or Contracting Authority to make the partnership with a private partner except for construction and/or reconstruction of infrastructure which undermines a range of another type of PPP projects in the health sector. Coupled with that, section 20 of the PPP Act 2015 allows the unsolicited proposal only for the development of new or existing infrastructures and thereby ignores the service or management-focused partnership projects. Section 22 of the PPP Act 2015 provides a mandatory provision that the selected private partner has to create a project company based on the shares after or before signing the contract. But in the health sector, it may not be necessary to form a separate company for the project. Broadly, the policies and guidelines of the Bangladesh government do not provide any special incentive mechanisms to encourage private partners to invest in the remote and inaccessible areas for making the health services available.

3.3.2 Alignment of Values between Public and Private Sector

If public- and private-sector values are not aligned, the PPP will fail to deliver on its objectives. Successful partnerships are those in which partners are incentivized to work towards aligned goals in aligned ways. Typically, the public sector is focused on maximizing social benefits and welfare from a HNP PPP project, in the form of increased service coverage, increased access for service recipients, improved quality of services, etc. all at the lowest possible financial burden on its citizens. Private sector, on the other hand, is more focused on the economic benefits and incentives of its shareholders in the form of adequate return on capital investments, sufficient cash flow, and fair compensation for the services delivered. Shifting towards any extreme without a proper balance may result in unwillingness of private sector in participation or discontinuation of the project.

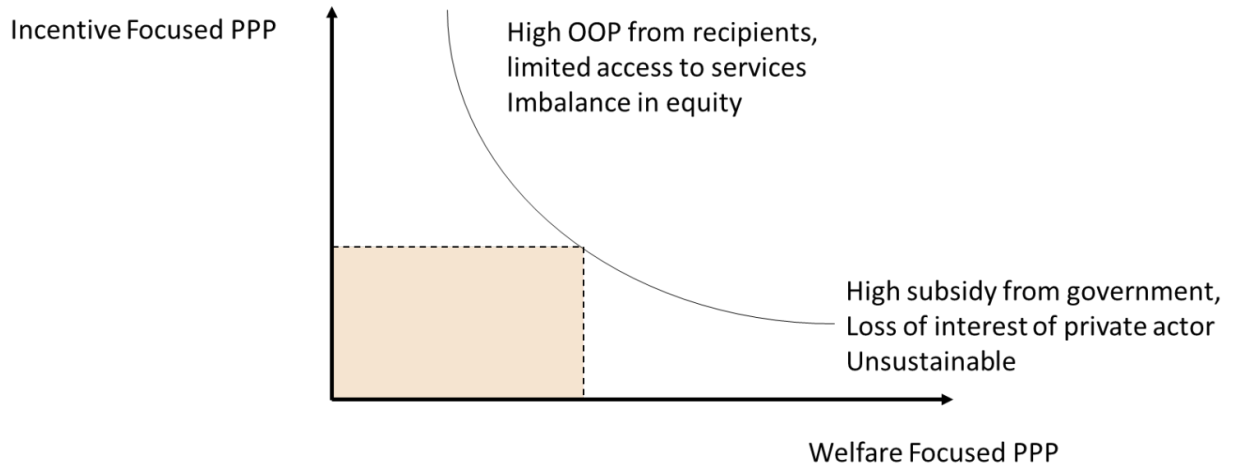

Figure 3: Getting right balance between incentive and welfare - a key challenge for PPP in HNP sector

Already there are evidences of such risks, as one of the policy advisors mentioned private sector not being participating in PPP, which was, otherwise, beneficial for the recipients. Getting the balance between profit and welfare was also mentioned by other policy advisors interviewed in the study.

"…they are the private sector; they will think about the profit and loss. "what will be our profit, we did a voucher scheme, they came there. Then what happened, when we told them there is no profit, just come, make paper work. They left this and went away. So, if there are no incentives, then they will not come…… In fifty-three sub-district, we have worked with the voucher scheme/ public sector was there. I have tried PPP, but private sector doesn't come. In poor areas like Kishorganj or Sunamganj, there is no private sector. Why? Because most of the people are poor there. They cannot afford to go the private sector. So why would they want to do business there? Why there are so many private sectors in Sylhet? Because people can afford in Sylhet, People can afford in Chittagong. They can spend millions taka in hospital. Which you will not find in Mymensingh or Rangpur. So, if I want to shift Private sector there, we need to hold the incentives for them."

KII with one of the policy advisors (KII02 05_03_2020)

*"health sector is a service-related sector. In that sector the structure of PPP model is conventional where there's profit generation by the partnership of public-private sector. There's investment first and then profit generation. So, this "investment" can be possible in the case of health [sector] through a combined investment mechanism of public-private [sector]; a service delivery provision can be created. But since health is a sort of…sort of… what it can be called…. it's a care, it's not a commodity in real sense. So, in that case I think profit making is a critical issue. The profit making and then the sharing of that profit in terms of investment, here's the challenge, I think. Otherwise, if the sector can be any sector from where the profit can be generated. Suppose, you're providing any service such as any bridge, any road or any metro system from where you can generate profit by ticket system, by raising toll. But, how would you gain this return in case of health- I find this as a biggest challenge……..*As I said earlier, health sector isn't like other commodities; you have understood this right? And in our context people thinks that, Health care is a responsibility of

the state. In many cases, here the out of pocket expenditure (OOPE) is huge. It's about 2/3 of the health expenditure which comes from the pocket. But if you make the costing in real sense then I think it won't be realistic to sell the service to the general people in that costing; not likely to be realistic in our context. So, govt. has to provide subsidy there. The reason is, it won't be possible to reduce the costing if govt. doesn't provide subsidy and the private sector who will invest there they will not provide subsidy. The party (Private sector) will focus on profit. So, public sector has to provide subsidy again there to generate profit for them [private sector]. If you do not provide the subsidy, in one hand you are unable to sell the commodity to people in real price because of some sort of obligations; as you can't bring it in the open market economy. …. They can't sell the life-saving which health care service at huge price due to their obligation. So, they have to reduce the price and to reduce the price, the public sector have to purchase it again from the private sector; have to purchase from the private investor- so that's a challenge."

KII with one of the policy advisors (KII3_10.03.2020)

3.3.3 Institutional Capacity, Including Human Resources

PPP is a relatively new concept in the country. Moreover, by nature, PPP projects are complex, involving multisectoral skills, particularly during project screening and development phase. PPPs require strong contract management from the public sector. This represents a major shift for many Ministries of Health—transitioning from a role of managing facilities and delivering care directly, to one of holding others accountable for delivery, via contract performance management. This shift requires a range of new ministry skill sets, including contract management, legal, finance, risk management and monitoring and evaluation. These skills are not available, unfortunately, across departments and wings of MOHFW.

By policy, the respective department/division/unit/wing under MOHFW was supposed initiate the process of PPP, including development of concept and identification of potential private partners. At present, this responsibility lies with HEU of MOHFW, instead of individual entities under the minstry. However, according to the policy advisors, even HEU lacks the proper human resources and institutional capacity to perform these activities.

"When we bring private sector through public-private partnership then we need to do a contract. They will not come if we just ask them to. ... From selecting them, from ensuring their quality to managing/ because we are talking for so many days/ even in the ministry that there is no unit for the private sector. In health economics unit, they provided something called CELL. Those who are in cell they have running duty and those who are in the deputy secretary are given the additional duties but his hundred percent duty was not that. For example, XXX (naming a person). He has a lot to do. But he has given the additional post in PPP. The health economics unit should have an active PPP unit…. We need manpower who support them."

KII with one of the policy advisors (KII2_05.03.2020)

Even the PPPA lacks the human resources to extend the services required to MOHFW and the entities under the ministry in design and development of PPP projects.

"…we cannot assemble everything because of the lack of manpower and time. We had three projects in 2012. The manpower we had then, remain unchanged in 2020 but now he has 74 projects at our hand. The manpower rather has decreased."

KII with one of the policy advisors (KII1_19.02.2020)

The gap in institutional capacities, particularly human resources also affect the monitoring of PPP contract and private partner, which, according to the stakeholders, vital for success of PPP projects in HNP sector. At present, there seems to the lack in institutional capacity in MOHFW for monitoring of PPP projects.

"Suppose I gave them 1-year contract then they took 5 lakh taka advance for that. Then who will monitor this? Who will ensure its quality? They give the work of 5 lakh; I might not do it. Suppose I did nothing. Suppose thirty patients came to me but I gave 10 patients but claiming money for the 30 patients. There should be the administration for the accountability administration monitoring. Leaving the private sector is not that easy."

KII with one of the policy advisors (KII2_05.03.2020)

"…there should be a monitoring cell to follow up this thing (PPP implementation). Monitoring cell is important…. It's important to have the monitoring cell then they'll have the transparency as well as there will be good progress."

KII with one of the policy advisors (KII4_12.03.2020)

"I think importance (of PPP) is a different thing. PPP is important. Why is it important? Because we have lack of manpower, there is no optimal management in Government level. This is why, the Government thought that by involving the private partner, we will be able to provide a good service by adding their attitude and our attitude. But, actually, we are ignoring the public side. The participation of public partner, the intensive monitoring is totally lacking, I think. And from last few months, it is going on."

FGD with Service Providers (FGD-SP-CMCH-14.3.20)

3.3.4 Conflict of Interest

Total compatibility between partners is difficult to achieve. Large multinational corporations and governments have many divisions and ministries working towards numerous different goals. In many cases, some of those goals will be in direct conflict with the goals of the partnership, creating Conflicts of Interest. Conflicts of interest was defined as involving a set of conditions in which professional judgments concerning a primary interest (such as a patient's welfare or validity of research) tends to be unduly influenced by a secondary interest (such as financial gain)[63]. Such conflicts may be of different natures, and may concern both private actors and public operators. In respect of public officials, conflicts of interest may arise between their individual private interests and their public duties in three cases: (a) When granting oneself or others unjustified direct or indirect advantages. Typically, such conflicts arise when preference is given to national tenderers or applicants whenever a contract is awarded by the public contracting authorities. Growing attention has been given in recent years to the issue of

[63] Thompson D. Understanding Financial Conflicts of Interest. The New England Journal of Medicine. 1993;329:573-576. doi: 10.1056/NEJM199308193290812.

'revolving doors' through which individuals move from political or administrative posts to the private sector or vice versa, which is particularly problematic when the firm concerned has contractual relationships with the administration. (b) When refusing to grant a beneficiary the rights or advantages to which that beneficiary is entitled. This is the case when weaker actors (e.g. consumer groups, which usually have fewer resources) may be excluded from participating in PPPs because of the preference given a priori to stronger actors (e.g. international non-governmental organisations). (c) When committing undue or wrongful acts or failing to carry out acts that are mandatory. Stakeholder interviewed already mentioned examples of risks of conflict of interest in PPPs in HNP sector of Bangladesh.

> "(Discussing about a PPP model in a district hospital in Bangladesh) Pharmaceutical company has provided money. Now if a pharmaceutical company provides money then they want their medicine to be sold there. So, there is a conflict of interest."
>
> *KII with one of the policy advisors (KII2_05.03.2020)*

However, presence of conflicts of interest does not necessary infer unviable or avoidable public private partnership. While it should be avoided, if possible, however, it is more important to disclose and manage conflicts of interest. Many conflicts can be mitigated by allocating incentives thoughtfully. A structure that incentivizes partners to act in the best interests of the partnership can help to overcome an apparent conflict of interest. When handling public sector-related conflict of interest, the biggest issue is not the actual or potential conflict of interest, but the risk of adverse public perception. Approaching conflict of interest in this way, as required by government's auditor, can lead to quite different outcomes.

3.3.5 Market Distortion of Private Commercial Actors

Being a pluralistic health system with the public sector unable to cover the entire population with quality services, the role of private sector cannot be ignored. Because of the commercialization, the services from private and commercial actors are sustainable and targeted towards expansion to gain more profit. A potential risk of PPP is distortion of a viable commercial health services market, resulting in less sustainability or efficiency in the delivery of health care. This can happen when the public sector chooses to grant a special arrangement to a private sector company that gives the company an unfair advantage in a competitive health market[64]. This risk exists even if the private partner is not for profit. For example, supplying health commodities to NGOs for free of charge distribution among target population, may discourage private investment in the commodity, particularly in enhancing quality, decreasing cost and increasing supply. Eventually, these may lead to increased investments from government, or worse, disrupted supply chain in future.

[64] Barnes, J. 2011. Designing Public-Private Partnerships in Health. Abt Associates. Strengthening Health Outcomes through the Private Sector. Funded by USAID

4. RECOMMENDED STRATEGY FOR HNP PPP PROJECTS

4.1 Need for a Strategy for HNP PPP in Bangladesh

PPP strategy for HNP PPP project in Bangladesh can be defined as the recommended procedures, rules and institutional responsibilities that determine how government, more specifically MOHFW, selects, implements and manages PPP projects. This has the effect of limiting and managing government risk and ensuring consistency. By defining institutional responsibilities, the PPP strategy makes institutions accountable for their role in the PPP process. PPPs are technically complex, involving numerous stakeholders, each with conflicting objectives. PPP strategy is important in ensuring that the objectives of the public and private sector are aligned. The strategy has the purpose of establishing rules that avoid impropriety and promote the public interest in getting quality projects done efficiently.

The aim of this PPP strategy is to ensure that the right projects are selected as PPPs, and that they are developed, delivered and managed in a structured, transparent and efficient way, and minimises the risks of not delivering Value for Public Money. PPPs involve multiple conflicting interests. If risks are not allocated appropriately, the public sector may incur costs that it cannot control. If the procurement process fails to consider market conditions, the tender process may not be competitive. If contingent liabilities are not monitored, there may be unexpected fiscal obligations incurred by the government. Minimising these risks, as mentioned before, is also an integral part of the aim of the strategy.

4.2 Objective of the Recommended PPP Strategy

The recommended PPP strategy has the following objectives:

- To increase coverage, improve quality and enhance equity in government HNP services by harnessing the potentials of private sector
- Creating opportunities to attract innovation and technological improvements
- Ensuring Value for Money from invested public funds
- Facilitating services for recipients in a responsible and sustainable manner

4.2 Stakeholders and Their Roles in the Recommended HNP PPP Strategy

According to the Procurement Guidelines for PPP Projects, 2018, the "Contracting Authority" is primarily responsible for initiation of any PPP project (including project identification) and delivery of the project. The "Contracting Authority" has been defined as following-

> *"Contracting Authority" means a line ministry or division; or any office or directorate or corporation or statutory organization or local government or any similar organization under the line ministry or its division; or the PPP Authority, in the event that the PPP Authority is given the duty to carry out the functions from the time of taking up/initiating a PPP Project up until the execution of the PPP Contract and which proposes to enter into a PPP Contract or other contractual agreement with the Preferred Bidder and/or the Project Company.*

Article 4, sub-clause 4.1 (xvii), Procurement Guidelines for PPP Projects, 2018, 31, January, 2018

From this definition, MOHFW, its two divisions, i.e. HSD and ME&FWD, Directorate Generals (e.g. DGHS, DGFP, DGME, DGNM, DG-HEU, DG-NIPORT, etc.), and other entities under the ministry would be the primary stakeholders of PPP in HNP sector in Bangladesh. A policy advisor from PPPA supported this during KII.

"the project will be initiated by organization not ministry. Project of that organization/ because as I know, there are twenty, twenty-five to thirty organizations under health ministry. Each has its own mandate. Right? So, they, at first, have to show the interest. They should ask for help saying, "we cannot provide this particular service or we can, but that remains half-done which might not be satisfactory, then what we need? We need more. Then how do we meet that extra need? We can get this done by private partners." And when we can do that, then they should submit proper proposal to the PPP authority through the ministry. Then PPP authority will help them by considering whether it would happen there or how it would be done."

KII with one of the policy advisors (KII1_19.02.2020)

The Procurement Guidelines for PPP Projects, 2018 also states that the Contracting Authority would submit the proposal for identified project fir endorsement by their applicable line ministry. This entails that MOHFW and its two divisions, HSD and ME&FWD have dual roles in PPP projects – (a) Contracting Authority with the role of identification of projects and implementation; and (b) Endorsement of PPP projects, in case any entity under the ministry/division is the Contracting Authority. One of the key respondents delegated the responsibility to Joint Chief Planning, however, considering the skills required, the responsibility of endorsement can be delegated to a technical committee for short-run or a cell in long run.

"firstly, is the health ministry in which there's only our joint-chief planning. But it won't be okay to rely only on the joint-chief planning, as how much pressure s/he has. There're some directorate who can take the leadership but they're depended on the ministry. So, the ministry in at the top, then the joint-chief planning and the 4 or 5 directorates are there. But, they can't do anything without the permission of the ministry….. but if they take initiative like if the DGs take the initiative then it's possible to do so."

KII with one of the policy advisors (KII3 10_03_2020)

Noteworthy is that there is a PPP cell in DG-HEU, which is, however, mostly run by current officials with additional responsibilities, and has its own shortcomings, as discussed in the previous section. DG-HEU still should continue with the PPP cell, however, it should be equipped with appropriate personnel with specific responsibilities and fulltime involvement. However, considering the large scope and limited skills within the ministry, both divisions should have its own PPP cells with fulltime staff. Planning wing and Planning branch of the respective divisions will be associated with the PPP cells, along with directorate of planning and research of DGHS and DGFP. Initially, consultants or experts can be engaged with these PPP cells to train ministry's staff, as well as assist the cell in carrying out its designated responsibilities. However, there should be preparation to gradually replace the consultants with fulltime staff of ministry. Recommended role of these PPP cells in HSD and ME&FWD will be:

- Generate project ideas for public private partnership considering the need to increase HNP service coverage and improve service quality, in discussion/liaison with respective directorate, department, wing or agency under respective division of the ministry
- Screen and refine the project concept, in liaison with PPPA
- Determine the feasibility of implementing the Project in liaison with PPPA
- Liaison with Cabinet Committee on Economic Affairs (CCEA) and other relevant stakeholders for in principle approval and final approval of the project
- Develop and issue bid documents and process and approve the Applications, Proposals or Bids to select the Private Partner who shall implement the Project on a PPP basis.
- Issue the Letter of Award (LoA) to the Preferred Bidder, upon receipt of final approval from CCEA
- Monitor the implementation process of the PPP project and ensure the adherence of the contract clause.

PPPA is a vital entity in operationalizing any PPP in The Office for Public-Private Partnership was established in September 2010 to act as a catalyst to proactively realize PPP projects. Later, upon enactment of the PPP Law, 2015, the PPPA was established as a statutory body. This authority has the responsibility to support the relevant ministry with project identification/screening, development, contracting and monitoring during implementation, as specified by a policy advisor working in PPPA.

> "…they should submit proper proposal to the PPP authority through the ministry. Then PPP authority will help them by considering whether it would happen there or how it would be done. Or they will confirm them one way or another. ….Then PPP authority will make it feasible for them. If they do not get the assistance by themselves then we have funds for that. We will make feasibility, will make bid documents, will make contracts, we will be there with them until they sign those documents. Even after signing the contract, PPP will monitor whether the works are being done according to the contract or not. PPP will help them till this stage."
>
> *KII with one of the policy advisors (KII1_19.02.2020)*

The non-government actors (private and NGOs) are very important stakeholders in the proposed PPP strategy in HNP. Their principle role would be to address the gap in public health service delivery, quality or equity for which MOHFW would require the PPP option. Non-government actors, as per the Guidelines for Unsolicited Proposals, 2018, can come up with innovative solutions and approach MOHFW or its entities for a potential PPP project. Non-government actors have multiple roles in the PPP in HNP sector, which include but not limited to the following:

- Generate innovative project ideas to improve quality, extend coverage and ensure equity
- Bring technical skills, expertise and global experience in service delivery
- Bridge the number and skill gap of government health workforce
- Enhance capacities of government health workforce
- Sharing risks and resources with government

- Create enabling environment for implementation of PPP project (in case of professional bodies of the private sector entities)

The last role has further been described by a policy advisor during KIIs. Professional bodies like BMDC can be involved in monitoring quality of service in the PPP service delivery, in addition to the Contracting Authority and PPPA. They also are informal and indirect guarantor of the private actor's professional competences.

"Private sector association (in Bangladesh), those who works here (in PPP projects). …. Then another thing is, professional association. Because, if I want to bring a private doctor to the government hospital, the government doctor will be opposing it. They might thing that their role is minimizing, they will lose the job and they will not get enough importance. Here the main actor are the stakeholder, ministry, private sector association etc. individual sectors."

KII with one of the policy advisors (*KII02 05_03_2020*)

Originally, the Procurement Guidelines for PPP Projects, 2018 only allowed private actor participation after development of the project, during the bidding phase. However, to provide flexible options for the delivery of different types of PPP Projects, the Guidelines for Unsolicited Proposals, 2018, allowing private partners to participate in PPP projects from identification phase. This is a vital opportunity for non-government actors in HNP sector, as, historically, significant innovation and systemic changes have been initiated by these actors in the HNP sector of Bangladesh. So, it is expected that the recommended strategy will take the opportunities of these guidelines and encourage non-government actors to come up with innovative unsolicited proposals to bring the required systemic change in the sector.

As per the guidelines, CCEA will be involved for in-principle and final approval. Planning commission, at present develops the macro-level policies based on which MOHFW develops/updates the sector programme and other policy and strategy instruments. Ministry of Finance also provides the regulations and guidance to MOHFW. These regulatory and policy actors are expected to assume the same role in the proposed PPP strategy.

Figure below summarizes the actors and their roles in the recommended HNP PPP strategy.

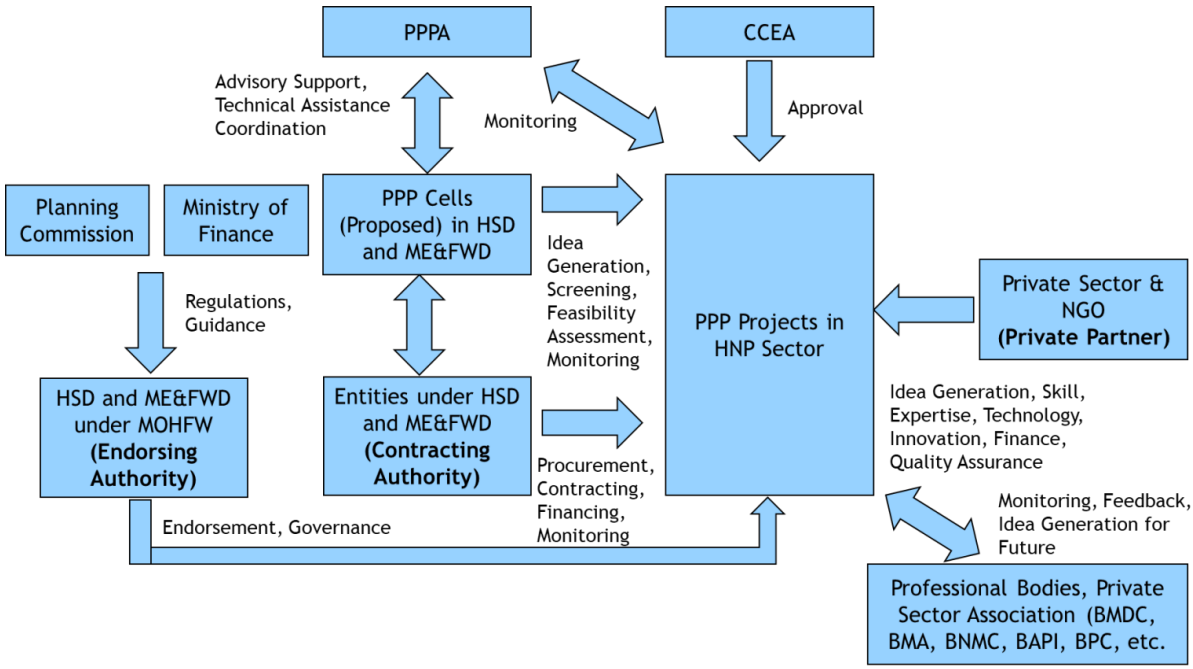

Figure 4: Stakeholders and Expected Roles in the Proposed PPP Strategy

4.3 Required Regulatory Guideline for HNP PPPs

While the PPP Law, 2015 and the subsequent guidelines offer ample regulatory guidelines for designing and implementing PPPs in almost all sectors, the dynamics of HNP sector demand a specific regulatory guideline for PPPs in this sector. For example, there is a strong presence of NGOs in complementing Government of Bangladesh (GoB) initiatives of HNP services, particularly for primary healthcare, and by nature, the formation, management and working principles of NGOs differ from private commercial entities. Hence, the guideline should allow inclusion of NGOs as private partners. At the same time, present PPP guidelines require Special Purpose/Project Vehicles (SPV), in majority of cases which is recommended to be a private company. While this is ideal for large infrastructure PPP projects, the HNP PPP projects, in many cases would be smaller in terms of investments, with requirements of rapid deployment in hard-to-reach areas or underprivileged population. Conditions of developing SPVs might hinder these requirements in HNP sector. Considering these unique dynamics of HNP sector, it is advised that there should be a separate regulatory guideline for PPP projects in this sector. Among others, the guideline should develop the formation and jurisdiction of the PPP cells (mentioned above), processes of identification and development of PPP projects in HNP sector, including processing of unsolicited proposals from non-government (private) sector, implementation of PPP projects and monitoring. A technical committee is recommended for formulate this guideline in this regard, to be formed with representation from Legal Wing of both HSD and ME&FWD; Development Wing of both HSD and ME&FWD; Planning Wing, HSD; Planning Branch, ME&FWD; Budget Wing of HSD and ME&FWD; representatives from DGHS, DGFP, and DG-HEU; and representatives from PPPA.

4.4 Scopes for HNP PPP Strategy

While PPP enables tremendous opportunities and opens up new avenues for service delivery, this cannot be considered as solution for all issues associated with the HNP sector. Particularly, considering the risks and challenges, critical thoughts and assessments are required for determining scopes of PPP in HNP sector. The relevant entity of MOHFW need to assess the specific gaps in the service delivery that cannot be covered with the conventional approach. Alternative options need to be derived to check if an improved modality of service delivery would enable filling up the gap while working with the public sector actors. If that is not possible then the contracting authority should think about potential non-government actors. However, even in this regard, one needs to consider the challenges in engaging non-government actors, including the regulatory issues, political issues, potential conflict of interest, alignment of values into a common goal, economic conditions, etc. A PPP model with the identified non-government actors can only be approached if these issues are positioned/resolved in favour of such a public private relationship.

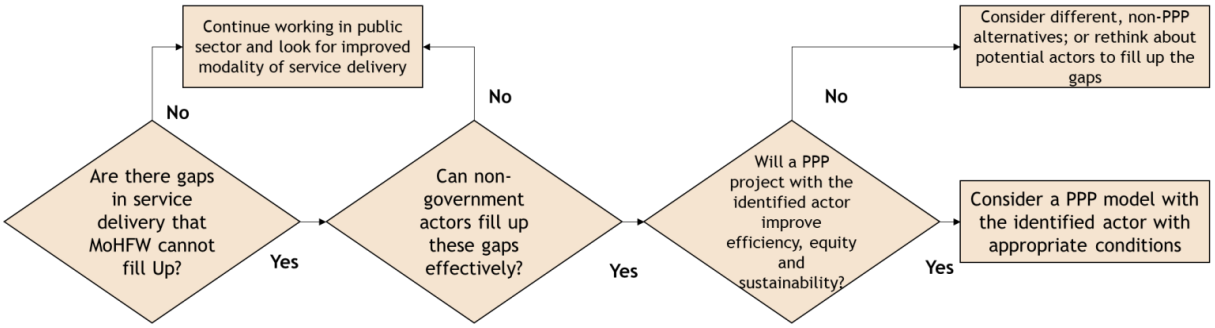

Figure 5: Conditions for Consideration of PPP with Private Sector Actors under the Proposed Strategy

4.5 Selection of Partners under the Recommended Strategy

Private-sector partners typically operate in the pursuit of value. This value may not necessarily come in the form of profit, but while companies may be inclined to participate in public projects as a show of goodwill or brand-building, the PPP model is contingent on providing both partners with tangible value. The accrual of tangible value doesn't necessarily mean that private-sector partners are operating in opposition to public-sector health goals. It does, however, mean that private-sector partners must, in some way, stand to eventually make a profit from a PPP. It is crucial when engaging a private-sector partner to give that partner the latitude to assert on behalf of their bottom line. Private-sector partners cannot be expected to take on losses in the long run—though in the short run, depending on the scope of the project, PPPs can start out in unprofitable circumstances. To that end, private-sector partners must be authorised and capable of analyzing PPPs on an appropriately long timeline. Hence, the idea private-sector partners in HNP PPP are those who are accept the viability of the project on a longer timeframe. At the same time, ideal private-partners in HNP PPPs, along with the concerns about profit, should also be concerned about their strategic goals, brand image and ethical engagement with various stakeholders. These should be considered while selecting the private-sector partners for PPP in HNP sector. Such partners should bring the following capacities into the partnership with government:

- Innovation
- Technology
- Human resources
- Process management
- Funding/financial capacity
- Operational capacity
- Efficient decision-making capability

4.6 Safeguarding Interests of Partners

The key to success in PPP initiatives lies in effective management of the public sector and private player interests across different stakeholder roles. Some key implementation aspects of PPP are needed upfront clarity and have to be kept in mind by concerned parties before initiating PPP projects in healthcare.

4.6.1 Defining and differentiating scope of free services at PPP health facilities

Free service implies access to healthcare to the beneficiary free of charges. However, there is a cost to the service provider which has to be met either through a global budget or through cross subsidy out of revenue from paying patients. While the qualitative aspect of the core service of the patient's medical care must be equitable irrespective of the socio-economic background of the beneficiary, there could be difference in catering to the patient's personal conveniences for those who are able to and willing to pay for such services. The quantitative aspect of free service can be determined on the basis of the built-up facilities with maximum capacity utilization, or alternatively on the basis of the actual service provided. In order to establish clarity of objectives upfront in any PPP project, it is recommended that the contract define the complete scope of "Free Services" and include the following:

- Determination of "Free Services" to be provided at the PPP facility
- Definition of the scope of "Free Services" to be provided at the PPP facility
- Definition of the eligibility of recipients to avail the "Free Services"
- The Quality charter of "Free Services"
- Differentiation of facility's infrastructure for "Free" & "Paid" Services

4.6.2. Determination of service charge

It is essential that pricing strategies and service charge of the 'free services' are determined on mutually agreeable platforms. The government is the third-party payer covering the cost of services for the private sector service provider, on all 'free services. But the government generally does not have a mechanism to administer financing and provision of care through pre authorization of rendered services as is the case of insurance or employee benefits. Hence it is invariably a matter of conflict to estimate and compensate the quantitative aspect of care. Therefore, in most successful PPP models, tariff determination actually works top downwards from a global budget based on built up capacity and capacity utilization. Global budget on utilization is also auditable and therefore fits into the public accountability. Based on mutual understanding this global budget figure can be determined, based on the cost of reimbursement or on a cost-plus basis should there be an incentive provided in the PPP model. It can also lower

than cost of operation if cross subsidy is part of agreement. The value of assets provided by the government could be considered as contribution in which the government can expect certain returns in the form of return on capital employed or dividend on equity. In general, the service charge should be determined on the basis of the following criterion while entering into the partnership agreement between government and private sector:

- Inflation (current & projected)
- Project Operational Expense
- Project Capital Expense
- Project Profitability
- Public Sector partner's obligation
- Periodicity of tariff change
- Agreeability by both partners

4.6.3 Recipients' right protection

PPP facilities should have the equal rights for all patients, regardless of their economic status. One of the most important aspects of the PPP facility should be to ensure that the poor are not worse off if PPPs are set up to serve at the remotest of areas. A clear policy on rights of recipients in a PPP-type of arrangement, and patient rights in case of a PPP failure need to be incorporated into the policy framework. There needs to be a specific citizen charter for the recipients in each PPP facility, along with a grievances redress mechanism to redress any grievances that might be caused to the recipients in the facility.

4.6.4 Litigation issues

Litigation has been a source of concern to both the public and private sector in any PPP project. One of the key instruments used by governments to encourage PPPs is subsidizing inputs (e.g. land/facility), and the common property element of such inputs makes them vulnerable to scrutiny and litigation, which can be detrimental. While there is clearly a case for opening such decisions to public litigation, correct procedures are needed to be identified and laid out in a proper guideline to ensure protection to both the public private partners so that they can be assured of the continuation of PPPs unhindered by the constant threat of litigation. Keeping these in mind, it is necessary that a "Scope of Protection" of both the partners is clearly documented in the contract of the PPP. The contracting authority from MOHFW should take this into consideration while drafting the contract. The "Scope of Protection" of the partners' and partnership's interests (both financial and brand image) need to be clearly specified in the agreement. Moreover, litigations arising out of public outcry need to be fundamentally cleared at inception to avoid any debate in the future.

4.6.5 Timely decisions

PPP projects are complex in nature and time consuming. On top of that, in some of the cases the delays in decision making from the side of the government has been a significant challenge in the successful execution of the PPP model. MOHFW, as the regulatory body, and the contracting authority under ministry (i.e. the entity initiating the PPP on behalf of the ministry) should be well empowered to take decisions and act as a speedy channel to address the various issues. This is another justification for setting up the PPP Cell in each divisions of the ministry and making them as empowered as possible.

4.6.6 Exit options for the partners

In deciding on a PPP, private providers not only look for attractive economic returns but also look for a hassle-free exit strategy in case a partnership does not go in the intended way. Penalties and compensation issues must be clearly outlined in the contract whether the public sector or the private party wants to exit it. It must clearly and objectively define the necessary exit options that can be exercised by the partner along with the rights of the partner at the time of exercising such rights. The PPP contract should clearly provide for necessary exit clauses and exit events which can be exercised by the partners any time after an agreed-upon period. The exit clause should also clearly define the necessary conditions which will deem and affect the expiry of an existing partnership. The contract should also provide scope, in case of any financial fall-outs, the rights of the partners, to seek regulatory intervention and to appoint an "arbitrator" towards resolution of issues and concerns before seeking legal recourse.

4.7 Suggested Modalities for PPPs in the Recommended Strategy

4.7.1 Infrastructure Development and Management

This modality requires development or contracting out of healthcare infrastructure to private sector with the expectation that the participation of private sector would to bring innovation strategies thereby quickly bridging the resource gap in infrastructure for healthcare. Some of the potential areas of this type of PPP may include, but not limited to the following:

- Establishment of specialized or purposefully-built healthcare facilities (e.g. specialized diabetes hospitals, kidney disease hospitals)
- Establishment of specialized units in existing public health facilities (e.g. establishment of dialysis units in specialized GOB hospitals)
- Contracting out public health facilities to private sector for provision of HNP services (e.g. contracting out 10 bed hospitals to NGOs for Maternal, Neonatal, Child and Adolescent Health (MNCAH) services
- Introduction of specialized services in existing public health facilities (e.g. introduction of NICU or SCANU services in district hospitals)

Fortunately, PPPs in this area follow the conventional PPP approaches of infrastructure sector, for which, there are considerable successful models in Bangladesh. Each model has its own extent of responsibility requirement from both public and private partners and involve certain degrees of risks for government, as shown in the figure below. The strategy strongly suggests consideration of these criteria before selection of a specific model under this type of PPP in HNP sector

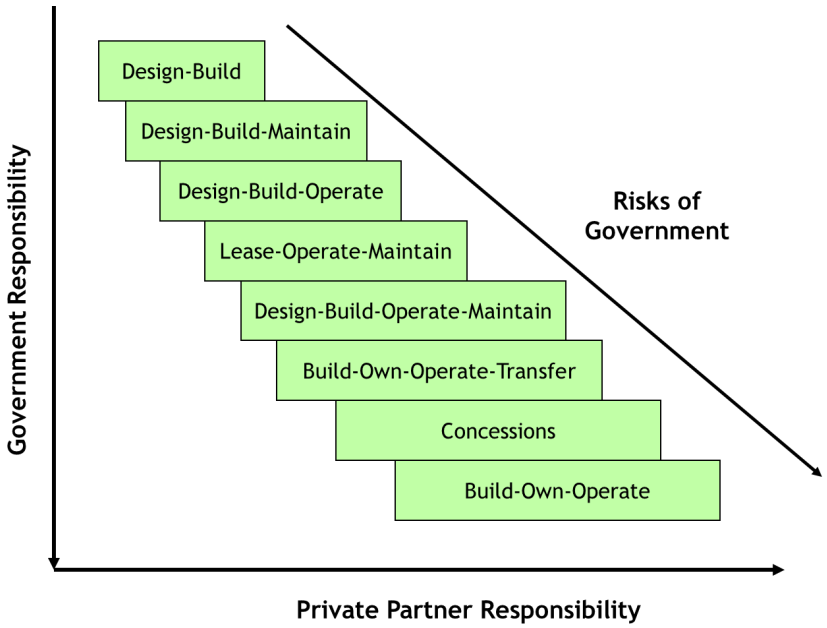

Figure 6: Infrastructure PPP in HNP Sector

A drawback of infrastructure PPP is that the investment requirement from private partner becomes more than other areas (discussed later), which affects the subsidy rates of government or the service charge of the service recipients. To minimise this, the following strategies can be adopted by MOHFW, in discussion with other ministries and departments of the government:

- Provision of land at a subsidised rate or as part of MOHFW equity for building the health infrastructure
- Facilitating loan from public finance institutes like Investment Corporation of Bangladesh to reduce the loan for the private partners, as such interest is quite high and in shorter duration in case of loan from commercial banks
- Provision of budgetary grants for capital and operating expenses from sector programme budget of respective operational plans
- Facilitate duty exemption in case of import of biomedical equipment and other capital goods

4.7.2 Management and Operations

Quite a number of public health infrastructure of MOHFW are underutilized, partly due to lack of human resources, particularly technical and skilled resources, and partly due to short of budgetary provisions. In this context, PPP can help in contracting-in models which involves the hiring of one or more agencies to provide a multitude of services, including infrastructure maintenance and upkeep, key service delivery of medical treatment (e.g. diagnosis and dialysis), medical equipment supply and maintenance, particularly for high-tech and costly equipment, ambulance services, security, cleaning, laundry and relevant support services, medical waste management, etc.

A specific type of management and operations model of PPP can be the medical waste management. Traditionally, medical waste in Bangladesh used to be mixed with municipal

wastes from the bins and disposed of, using the conventional disposal methods like burying or incineration. The issue of medical waste management is becoming important gradually as the amounts of hazardous/ infected waste is increasing This has necessitated more attention to blood safety, disposal of needles, syringes and other infectious wastes. Currently, medical waste management has been delegated to the Hospital Management Services (HSM) OP for district facilities and above and to Community Based Health Care (CBHC) OP for upazila facilities and below. However, this requires specific skills and technology, which both the OPs lack. PPP can provide solutions in this regard, as there are global examples. Under this model, the private partner would establish a medical waste treatment and management facility, collect waste from health facilities, particularly in urban areas where the concentration of facilities are higher, and treat/manage the waste for which government would compensate the private partner. This would reduce the biohazards resulted from the medical waste, reduce workload from the already stretched public health workers and create employment opportunities in the waste management center to be built by the private partner. PPP models presented in figure 5 can be utilized in this regard.

A buy back arrangement on capacity (percentage of beds) or throughput (percentage of patients treated) must be considered in management and operations contracts where MOHFW hands over a facility to private parties. The incentive for private parties can be structured on any of the following lines for operating that share of total capacity which falls under the buyback arrangement from government:

- Government pays cost BDT XXX per bed under buy back portion plus a defined margin on costs while the remaining capacity is operated by private parties at market rates
- Government pays costs BDT XXX per bed under buy back portion while allowing the private party to operate the remaining capacity at market determined rates
- Government pays a percentage of costs BDT XXX per bed under buy back portion which will be cross subsidized by the private parties using profits from the remaining capacity managed at market rates

The public sector and private parties may decide on any of the above schemes at the time of structuring the PPP depending on factors like the geographical location where the structure is setup and also based on the allied market demand in that location.

4.7.3 Capacity Building

Almost all the operational plans of 4th HPNSP have particular budgets for capacity building and training. In addition, there are specific OPs (e.g. TRD), almost entirely dedicated for capacity building. However, numerous internal and external monitoring and reviews have indicated the quality effectiveness of such trainings. In this context, private players can play a key role in capacity building and training through PPP modes by working with the public sector to better utilize the infrastructure of government hospitals. Upazila Health Complexes (UHC) and District Hospitals (DH) will be appropriate in terms of size and availability of clinical material (for in-patient and out-patient care), for providing training to nurses and other auxiliary medical staff. Such an arrangement integrates well with other PPP arrangements like on management and operations contracts to private parties, since private party offering management services will be able to tightly integrate the training program to the service delivery. Though such an

integrated arrangement between management and training would not be mandatory, it would help in increasing the efficiency and quality of training.

In addition to the formal training segment, there is also a large requirement for informal programs in the form of continuing healthcare education. There are a large number of para-professional and auxiliary staff and other healthcare functionaries (e.g. village doctors, birth attendants, medicine store workers, community health workers) to whom a large portion of citizens, particularly rural citizens are depended. They are needed to be trained on a continuing basis to improve the quality of healthcare. Private players can contribute to this segment too, by utilizing the UHCs and DH infrastructure to run continuing skill development programs for these professionals.

Dynamics of different modalities of PPP in HNP sector are illustrated below.

Type of PPP Collaboration	Specific Areas within HNP Sector	Level of Care	Type of Non-GOB Partners	Focal GOB Entity	Non-GOB Partner	Priority	Time Range of Commitment	Contribution of Private Partner	Contribution of Public Partner	Exit Strategy
Infrastructure Development and Management	Specialized healthcare facilities	Tertiary	Private sector	DGHS	Hospital service providers	Medium	Long term	Finance, Expertise, Technology, HR, Innovation	Land, policy support, buy-back services	Potential take over by government after project completion
	Specialized unit in existing public facilities	Tertiary, Secondary	Private sector	DGHS	Hospital service providers	High	Long Term	Finance, Expertise, Technology, HR, Innovation	Infrastructure, policy support, buy-back services	Potential takeover by government after project completion
	Contracting out underutilized public facilities	Secondary, Primary	NGOs	DGHS, DGFP	Primary healthcare providers	High	Medium Term	Expertise, HR, Innovation	Infrastructure	New contract upon completion of contract period or take over by government
	Specialized services (ICU, NICU, SCANU, etc.) in existing public facilities	Secondary	Private sector actors	DGHS	Hospital service providers	Medium	Long Term	Finance, Expertise, Technology, HR, Innovation	Infrastructure, policy support, buy-back services	Potential take over by government after project completion
Management and Operations	Infrastructure maintenance and upkeep	Tertiary, Secondary, Primary	Private sector	DGHS	Civil construction service providers	Medium to Low	Short Term	Technology, Expertise	Finance	New service contract upon completion
	Key service delivery (Diagnosis, Dialysis, etc.)	Tertiary	Private sector	DGHS	Hospital service providers	High	Medium to Long Term	Finance, Expertise, HR	Infrastructure, policy support, buy-back services	New contract upon completion or take over by government
	Medical equipment	Tertiary, Secondary	Private sector	DGHS	Bio-medical Equipment Suppliers;	High	Medium Term	Expertise, Technology, HR,	Buy-back services,	New service contract upon completion of the

Type of PPP Collaboration	Specific Areas within HNP Sector	Level of Care	Type of Non-GOB Partners	Focal GOB Entity	Non-GOB Partner	Priority	Time Range of Commitment	Contribution of Private Partner	Contribution of Public Partner	Exit Strategy
	supply and maintenance				Engineering Service Providers			Innovation, Finance	infrastructure, policy support	effective lifetime of equipment
	Ambulance services	Tertiary, Secondary	Private sector, NGOs	DGHS	Transportation service providers	Medium	Short	Finance, Expertise, HR	Buy-back services	New service contract upon completion of contract
	Security, cleaning, laundry and relevant support services	Tertiary, Secondary, Primary	Private sector, NGOs	DGHS	Hospitality service providers Community organizations	Medium to Low	Short	Finance, Expertise, HR	Buy-back services	New service contract upon completion of contract
	Medical waste management	Tertiary, Secondary	Private sector, NGOs	DGHS	Medical waste disposal companies	High	Medium	Finance, Expertise, HR, Technology	Buy-back services, policy support	Potential take over by government after project completion
	Referral services, mainly at urban areas	Primary	Private sector, NGOs	DGHS, DGFP	GPs, private/NGO hospitals	High	Medium	Expertise, HR, Technology	Buy-back services	New service contract upon completion of contract
	Services at HTR Areas	Primary	NGOs	DGHS, DGFP	Primary healthcare providers	High	Medium	Expertise, HR, Technology	Buy-back services	New service contract upon completion of contract
	Generic drug production & supply	Tertiary, Secondary, Primary	Private sector	DGDA	Pharmaceuticals companies	High	Medium	Finance, Innovation, Expertise, HR, Technology	Buy-back services	Open market policy for production of generic drugs

Type of PPP Collaboration	Specific Areas within HNP Sector	Level of Care	Type of Non-GOB Partners	Focal GOB Entity	Non-GOB Partner	Priority	Time Range of Commitment	Contribution of Private Partner	Contribution of Public Partner	Exit Strategy
Capacity Building	In-service training of GOB providers	Primary, Secondary	Private sector, NGOs	DGHS, DGME	Medical training service providers	Medium	Short	Expertise, HR, Technology	Buy-back services	New service contract upon completion of contract
	Continuous training of private providers	Primary	Private sector, NGOs	DGHS, DGME	Medical training service providers	Medium to Low	Short	Expertise, HR, Technology	Buy-back services	New service contract upon completion of contract

4.8 Screening Framework for Selection of HNP PPP Projects

A vital issue in selecting HNP PPP projects is to screen for the effectiveness, efficiency, sustainability and equity aspects. In this regard, a framework has been suggested in the table below. These are a series of screening questions that the evaluator (e.g. PPP Cell of HSD and ME&FWD) should ask before selecting any HNP PPP models.

Table 1: Screening Framework for Selection of HNP PPP Projects

Screening Area	Screening Questions for HNP PPP Project
Effectiveness	• Do the outcomes of the project address the need for HNP sector and the address the gap that MOHFW cannot mitigate? • Does the project detail service provision in clear, objective, measurable output-based terms? • Can the service provision be assessed against an agreed standard and are there mechanisms to evaluate the same on a regular basis? • Is the payment linked to the extent and quality of outputs to be provided by the private sector partner? • Is the private sector responsible for achieving the improvement in outcomes? • Can the project replicable in other geographical areas under the similar conditions? • Does the project provide an economic return to the private sector while delivering health and social returns for the community?
Efficiency	• Does the project provide an effective way of risk transfer to the private sector, particularly for time and cost overrun risks? • How does the project compare with other options available to the public sector? • Is there enough operational flexibility (at an acceptable cost) in the contractual structure over the lifetime of the contract? • Is the project within the contracting authority's spending allocation and expected future allocations from the sector programme? • Does the MOHFW require a wider monitoring mechanism outside the contract to be able to monitor progress under the program?
Equity	• Does the project benefit underprivileged, poor and those living in the hard-to-reach areas? • Does the project have the mechanism to allow access of women, persons-with-disability, and marginalized population groups (e.g. transgender, nomadic population, small ethnic population groups, etc.) • Is there a risk of subsidizing to higher income groups and thereby crowding out the availability of the service to the poor population? • Are they any regulatory or legal restrictions that affect the service provision under the contract? • Does the project require wider sectoral reforms related to finance and accounting, transfer of personnel, and introduction of user charges?
Sustainability	• Do the revenues accruing to the private sector allow for economic return on its capital invested? • Is there the financial return to the private sector commensurate with the risk transfer proposed in the project? • Is it possible for the private sector to raise financing for participation in the project? • Is there adequate financial, technical and management capability within the private sector to deliver the services envisaged under the program?

4.9 Risk Allocation and Sharing

One of the key parameters for evaluating PPP programs is the degree of risk transfer they achieve through the contractual structure. The basis of the risk transfer is that the risk is borne by the party that is best able to manage the risk. Following are some of the key risks involved in any PPP arrangement.

- Design risks
- Construction and development risks
- Performance risks
- Design risks
- Construction and development risks
- Performance risks

The transfer of risks to the private partner brings, in general, an increase in the price of the project, so it is essential to ensure that the public benefit of such transfers is greater than that increase in financial costs. This additional cost derives from the risk premium that is required by the private sector to support it. The risks should be assigned to the right parties and carefully defined ex ante before the signed contract. A risk matrix should be defined for each project where all the risks are identified and allocated, their probability evaluated and their impact quantified. Finally, mitigation measures should be established for each type of risk. The process is described below.

- **Identification and allocation of risks:** In the design of a contract, it is crucial to identify and allocate risks before the procurement stage. The bidding documents should limit ex ante situations that may lead to ex post opportunism and, in particular, to the renegotiation of the contract. Renegotiation should be restricted to the aspects that the private sector does not control (public authority risk) and is not able to predict (e.g. extreme events or changes in public policy). The allocation of each type of risk between private and public sector should occur according to the minimisation of economic costs and maximisation the effectiveness and efficiency of the partnership.
- **Probability and impact quantification:** During the contract preparation, each type of risk should be described, establishing and enumerating the different causes that may lead to its occurrence. The probability of each development occurring should be estimated. The probability and the corresponding impact of risks depend on their nature and on the particular project under consideration.
- **Identification and minimisation measures:** For each type of risk, the contracting parties should develop strategies for mitigating that risk. These measures should be taken before the assignment of the contract. For instance, for inflation risk, minimization measures include indexing revenues to inflation, or forward contracts; both procedures (strategies), reduce the potential impacts of a negative event occurring.

A sample of risk matrix is shown in the table below.

Table 2: Risk Matrix for HNP PPP Projects

Risk Type	Specific Risk	Allocated Partner for Risk (Public or Private Partner)	Probability of Risk (E.g. High Probability, Low Probability)	Potential Impact of Risk (E.g. High Impact, Low Impact)	Potential Mitigation Measure

4.10 Process Flow for Project Screening and In-Principle Approval

The processed that are needed for developing PPP HNP projects aligning with the vision of the health sector involve a series of steps taken by different public bodies in the government. Some of the processes are iterative and based upon the outcome of its successor process. Different authorities of the government will be involved in the process for reviewing, approving and implementing the processes.

Details of the required processes are presented as a flow chart below:

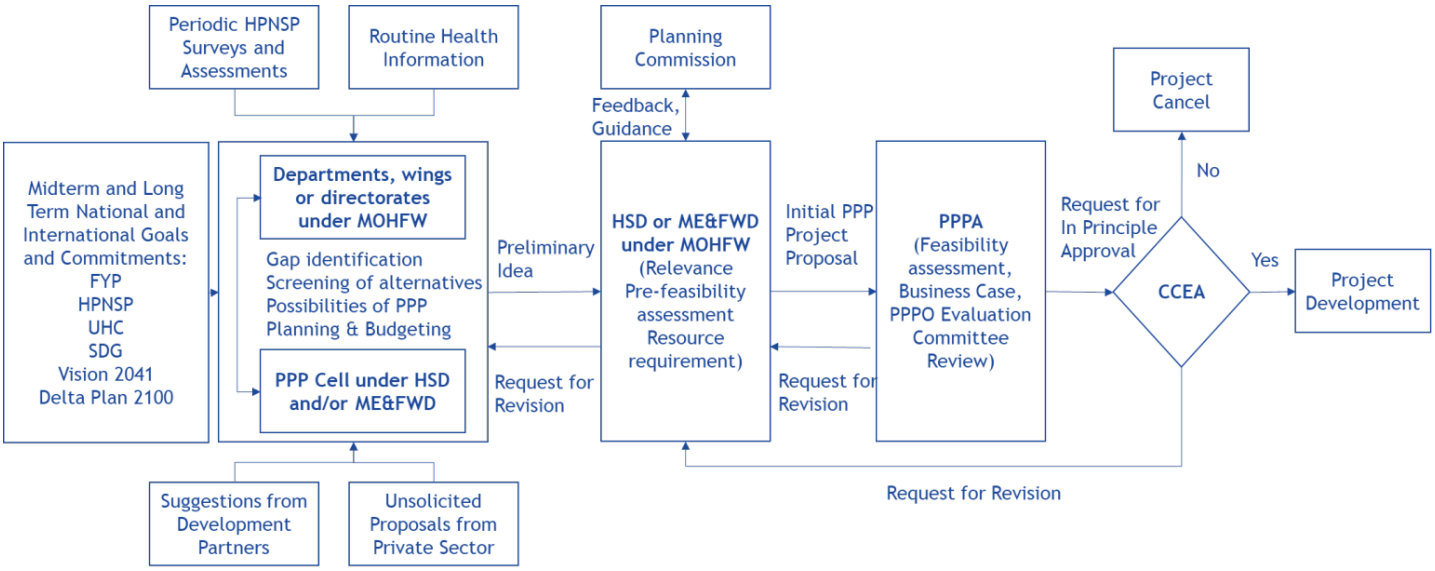

Figure 7: Process flow of a PPP HNP Project

5. CONCLUSION

In spite of being one of the most populous countries in the World, the improvement of Bangladesh in Health, Population and Nutrition (HPN) sector is quite remarkable. The country achieved its Millennium Development Goals (MDGs) related to HNP well ahead of the stipulated time and now aiming towards achieving Universal Health Coverage (UHC) by 2030. Under 5 child mortality dropped from 49.4 in 2010 to 34.2 in 2016 (per 1,000) and infant mortality reduced from 37.4 percent to 30.5 percent in the same period. Life expectancy increased to 72 years, which is higher than the world average. Guided by policies, including Health Policy, 2011, Population Policy, 2012 and National Nutrition Policy, 2015, interventions in HNP sector are primarily being implemented through Sector Wide Approach Programs (SWAp), although there are discrete projects under Ministry of Health and Family Welfare (MOHFW) as well. Resources allocation in HPN sector from government sources, unfortunately, is still at subpar level. Two third of the total health expenditure in the country still comes from the recipients as Out of Pocket Expenditure, with government contribution is only one third. Only 2.64 percent of GDP is spent for healthcare, which is one of the lowest in South Asia. Under this scenario, the contribution of private sector in terms of increasing coverage of health services is commendable, as evident from the fact that availability of hospitals beds in private sector (87,610 in 2017) is almost twice than that of public sector (49,414 in 2017), as specified in Health Bulletin, 2018.

Private sector, similar to other countries, brings technology, innovation, financing, and most importantly, additional health workforce - areas that public sector has always been struggling. However, issues including high cost and centralized/urban location raised concerns regarding equity in access to private healthcare services by the poor and underprivileged service recipients in the country. A combination of the positive aspects of both private and public sector could address the situation by expanding the service coverage and increasing equity, which could be brought in through approaches like Public PPP. Realizing the importance, recent planning documents for HPN sector, including the PIP of 4th HPNSP, emphasized on introduction of PPP in HPN sector in Bangladesh.

While there has been quite a number of successful PPP examples in HPN sector globally, and a few in the country, there is no specific strategy to operationalize the potential public private relationships in HPN sector. Particularly, the scope of services for introduction of PPP, the roles of different public and private stakeholders, boundaries of service provision and financing modalities are not defined in HPN sector. Moreover, PPP itself is quite a new concept in the country and requires significant sensitization and awareness building for both government and non-government actors to result in a complementary relationship. From this aspect, there needs to be specific strategy and guidelines for effective PPP implementation in HPN sector in the country. In this regard, the recommendations furnished in this document may be useful.

ANNEXURE:

DATA COLLECTION TOOLS

Key Informant Interview (KII) Guideline)

1. What do you think about using Public Private Partnership (PPP) model in health sector?
    a. How do you see the potential of PPP in health sector?
    b. Who are the main actors for establishing and implementing PPP in health?
2. Do you think the PPP model is necessary in health sector?
    a. [If yes/no] Why do you think so?
    b. [if yes] What are the domains of healthcare services that can be best functional by PPP?
    c. How much is it accepted in the health sector (to service provider, to service recipient, to the administration and management?
3. What are the benefits of using PPP model in health sector?
    a. How the service provider can be beneficial from implementing PPP model?
    b. How the service recipient can be beneficial from implementing PPP model?
    c. How public and private party can be beneficial from implementing this model?
4. What are the challenges of using PPP model in health sector? (Existing PPP strategies, type of concept among key stakeholders, cost sharing, coordination, etc.)
    a. What could be challenging for public party?
    b. What could be challenging for private party?
    c. What and how best can the challenges be overcome?
5. What are the aspects that can ensure successful implementation of PPP model in health sector?
    a. What are the prerequisites for a successful PPP model? (Concept, willingness, institutional capacities, working relationship between partners, political influence and practice, etc.)
    b. How the initiative of using PPP model should be taken?
    c. What should be incentives, skill mix, monitoring and supervision of PPP model?
    d. Coordination among different units: who are they key stakeholders? How PPP can be implemented in a coordinated way?
6. How can it be sustainable?
    a. Who should play the primary role to make it sustainable?
    b. What can be the roles of the partners to make it sustainable?

c. How cost sharing will be decided?

7. How the public and private sector can be encouraged to implement PPP model in health sector?
    a. What would be the motivating factor of public sector?
    b. What would be the motivating factor of private sector?
8. Are there any difference between the expectation of public and private party?
    a. What would be the expectation of public sector?
    b. What would be the expectation of private sector?
9. How would you decide the potential partner (public/private) to implement PPP?
    a. Which private sector organizations do you see eligible for PPP in health?
10. Would you please share one example of PPP model in health sector you know about?
    a. Why it was needed?
    b. How the initiative was taken? How the scope was identified?
    c. How successful it is?
    d. What are the challenges?
    e. What are the learnings from implementing the PPP model in your example?
11. What would be your recommendation to use PPP model successfully in health sector?
    a. What changes in the current system would be needed for PPP in health? (Concept, willingness, institutional capacities, working relationship between partners, political influence and practice, etc.

Focus Group Discussion Guideline for Patients

1) What services have you taken from this hospital?

- ***a)*** How do you feel about it?
- ***b)*** Why have you chosen this hospital to take this service?
- ***c)*** Usually, where do you go to take health care services? Do you use public and private both health care?

2) What differences do you see between public and private health care services? (Quality of services, service providers, time, cost, etc.)

- ***a)*** What do you like about public health services? What are the challenges?
- ***b)*** What do you like about private health services? What are the challenges?
- ***c)*** Which one do you prefer? Why?

3) Now, imagine if there is a partnership between public and private and together, they offer a health care service, how do you feel about it?

- ***a)*** At this point I would like to talk about this partnership which is called public-private partnership (PPP) which refers to service or business venture which is funded and operated through a partnership between government and one or more private sector entities.

4) Would you like to have health services from such a venture? Why?

- ***a)*** What benefits would you expect from this kind of partnership?
- ***b)*** What challenges might arise?
- ***c)*** How do you think the challenges can be overcome?

5) How can PPP help to meet your need in health?

- ***a)*** What services would you like to avail which you could pay for?
- ***b)*** What do you expect for cost-sharing? Who needs to bear the service charge-public/private?
- ***c)*** Do you think the cost will be higher in comparison to public or private service?

6) What would you expect from a PPP model health service? (Cost of services, number of staff, types of the service provider, infrastructure, etc.)

- ***a)*** What would be your concern in this kind of partnership?

7) Do you think this hospital should be operated in PPP model?

- ***a)*** Why do you think so?
- ***b)*** What changes would you expect to see in the services delivery process if they are under PPP model?

8) Which department from the following lists should be under public sector or private sector and Why?

- ***a)*** Hospital management
- ***b)*** Service providers
- ***c)*** Diagnosis procedure
- ***d)*** Treatment equipment

9) What would be your recommendation to use PPP model successfully in the health sector.

Focus Group Discussion Guideline for Providers

1. As you work in a public/private hospital, what differences do you see between public and private health care services?
    - ***a***. How is the difference in hospital management?
    - ***b***. How is the difference in income? Cost?
    - ***c***. How is the difference in service delivery method?
2. Have you heard of the Public-Private Partnership (PPP)?
    - ***a***. [If yes] what do you know about it?
    - ***b***. [for both yes and no] PPP refers to service or business venture which is funded and operated through a partnership between government and one or more private sector entities.
3. What do you think about using Public-Private Partnership (PPP) model in health sector?
    - ***a***. How do you see the potential of PPP in the health sector? How can this partnership enhance health service?
    - ***b***. Who could be the main actors for establishing and implementing PPP in health?
    - ***c***. Which services can be provided through PPP?
    - ***d***. Which departments in GoB need to be involved in the process?
4. Do you think the PPP model is necessary for health sector?
    - ***a***. [If yes/no]Why do you think so?
    - ***b***. [if yes] What are the domains of healthcare services that can be best functional by PPP?
    - ***c***. How much would it be accepted in the health sector (to the service provider, to service recipient, the administration and management?
5. Would you prefer PPP in your work setting?
    - ***a***. [yes/no] why do you think you so?
    - ***b***. [if yes] in which department/area would you like to implement PPP model?
    - ***c***. What benefit would you expect from implementing PPP in your working area?

d. What challenges would you expect before, during and after implementing the PPP model?

e. What and how best can the challenges be overcome?

6. What are the aspects that can ensure successful implementation of the PPP model in health sector?

a. What are the prerequisites for a successful PPP model? (Concept, willingness, institutional capacities, working relationship between partners, political influence and practice, etc.)

b. How should the initiative of using PPP model be taken?

c. What should be incentives, skill mix, monitoring and supervision of PPP model?

d. Coordination among different units: who are the key stakeholders? How can PPP be implemented in a coordinated way?

7. How can it be sustainable?

a. Who should play the primary role to make it sustainable?

b. What can be the roles of the partners to make it sustainable?

c. How will cost-sharing be decided?

8. What would make you motivated to implement PPP model in your working area/health sector?

a. What would be the motivating factor of the public sector?

b. What would be the motivating factor of the private sector?

9. What would you expect from this partnership?

a. What would be the expectation of the public sector?

b. What would be the expectation of the private sector?

10. How would you decide the potential partner (public/private) to implement PPP?

a. Which private sector organisations do you see eligible for PPP in health?

11. What would be your recommendation to use PPP model successfully in the health sector?

a. What changes in the current system would be needed for PPP in health? (Concept, willingness, institutional capacities, working relationship between partners, political influence and practice, etc.)

12. Do you know any example of existing PPP model in the health sector? [if yes] Please can you explain-

a. Why was it needed?

b. How was the initiative taken? How was the scope identified?

c. How successful is it?

d. What are the challenges?

e. What are the learnings from implementing the PPP model in your example?

Case Study: In-depth Interview (IDI) Guideline for Patient

1. What services have you received from this hospital?
    - *a*. For how long you are visiting this hospital?
    - *b*. How frequently do you visit this hospital?
    - *c*. Have you visited any other hospital for the same problem?
    - *d*. Do you visit any other hospital for other problems?
2. Why do you choose this hospital for your problem?
    - *a*. Quality of service, quality of service providers, waiting time, appointment, cost, distance, infrastructure, etc.
3. Do you know this hospital run by both public and private sector?
    - *a*. [if yes] when did you know about it?
    - *b*. [if yes] how did you know about it?
    - *c*. [if yes] did you take service before this change takes place (introducing PPP model)?
4. How was the service before introducing PPP in this hospital?
    - *a*. Quality of service, variety of service providers, waiting time, appointment, cost, infrastructure, hospital management, etc.
5. What was the best part of your experience before introducing PPP in this hospital?
6. How was the service after introducing PPP in this hospital?
    - *a*. Quality of service, quality of service providers, waiting time, appointment, cost, infrastructure, hospital management, etc.
7. What is the best part of your experience after introducing PPP in this hospital?
8. What changes are most significant after introducing PPP in this hospital?
9. Which service would you prefer- before PPP or after PPP?
    - *a*. Why?
10. What would be your expectation in case of such public and private partnership in the health sector?
    - *a*. How can it improve service delivery?
    - *b*. How can it improve patients' satisfaction?
11. Would you like to take service in such kind of partnership arrangement?
    - *a*. Why?
    - *b*. What should we consider before approaching to such kind of arrangement?
12. How can we motivate patients to take service from such kind of arrangements?

Case Study: In-depth Interview (IDI) Guideline for Provider

1. How long are you working in this hospital?
    - ***a***. What is your role in this hospital?
    - ***b***. How do you feel about working here?
    - ***c***. What do you like most in this hospital?
2. Do you know the term public-private partnership in health sector?
    - ***a***. Public-Private Partnership (PPP) refers to service or business venture that is funded and operated through a partnership between government and one or more private sector entities.
    - ***b***. Your hospital is one of the examples where PPP is working, and I would like to ask about your experience working in this modality.
3. How was the health service before introducing PPP in your hospital?
    - ***a***. How was the infrastructure?
    - ***b***. How was the quality of service providers?
    - ***c***. What is the number of service providers?
    - ***d***. How was patient flow?
    - ***e***. How did the hospital management run?
    - ***f***. How was the patients' satisfaction?
    - ***g***. How was the service providers' satisfaction?
4. When did you/your authority feel that they want to introduce a PPP model in this hospital?
    - ***a***. What happened before taking this decision?
    - ***b***. Why did they decide to introduce the PPP model here?
    - ***c***. How the decision was taken?
    - ***d***. Who was involved in this decision-making procedure?
    - ***e***. What was the expected outcome of this decision?
5. What was the first step after deciding to undertake PPP model in this hospital?
    - ***a***. How long did it take to introduce the PPP model?

b. Who was involved in the process of implementing the model?

c. How did the procedure go from the beginning to the end?

d. How did you decide about risk and cost-sharing?

6. What are the changes you have observed after implementing PPP model?

a. Infrastructure, quality of service providers, number of service providers, patient flow, hospital management, patients' satisfaction, service providers' satisfaction, etc.

b. Where have you seen the most significant changes?

c. Where have you seen minimal change?

d. Where have you seen no changes?

7. What is the impact of introducing the PPP model in the quality of service of this hospital?

a. What are the benefits you have experienced after implementing PPP model?

b. What are the challenges you have experienced after implementing PPP model?

8. How sustainable is the PPP model in your hospital?

9. How do you feel about the necessity of the PPP model in the health sector?

a. Is it necessary? Why?

b. How would it be beneficial for service recipient?

c. How would it be beneficial for service provider and hospital management?

d. In which area/department, the PPP model should be introduced? Where would it be most effective?

10. What recommendations would you provide to someone who wants to introduce PPP model in the health sector?

a. In which case, someone should think about introducing PPP?

b. What resources must you have before introducing PPP?

c. What should you consider before making the decision?

d. How should you decide about the risk, cost and profit-sharing?

Observation checklist

* You can choose multiple options where applicable

Case Study Unit: **Date:** **Time: ……. to …….** **Filled by:**

A. Setting	1. At the entry point/s of the facility	**a. Reception/Registration system of the facility**	☐ Primary contact …… ☐ Electronic registration system ☐ Using Registration book ☐ Receptionist available ☐ Any guideline or flowchart present ☐ Complaint or suggestion box ☐ No Registration processes ☐ Others	
		b. Waiting place and its amenities	☐ Open Sitting arrangement ☐ Closed Sitting arrangement ☐ Enough Seats for patients and caregivers ☐ Number of chairs available …… ☐ Relevant posters or flyers ☐ Reading materials for patients ☐ Television on ☐ Air conditioned ☐ Ceiling Fans available ☐ Stand Fans available ☐ Wall clock available ☐ Enough daylight available ☐ Enough lights for night ☐ Waste bin available ☐ Drinking water available ☐ Opening time: …… ☐ Closing time: …… ☐ Others	
		c. Crowd management system	☐ Waiting time per patient ☐ Service time ☐ Patients are called by name ☐ Patients are called by serial number	

			☐ Number of patients present at a time …… ☐ Others	
		d. Hygiene and environment	☐ Ventilation ☐ Cleaning staffs are seen ☐ Cleanliness (Mark one below) ☐ Very Clean ☐ Clean ☐ Less Clean ☐ Not Clean ☐ Not Clean at all ☐ Toilet available ☐ Toilet is in another place ☐ Basin Available ☐ Basin is in another place ☐ Others	
	2. At service delivery point of the unit	**a. Maintenance of the tools and apparatus**	☐ Primary contact …….. ☐ Name and Number of tools …… …… …… …… …… ☐ Disposal system visible ☐ Service provider available ☐ Number of patients at a time …… ☐ Number of providers at a time …… ☐ Inspection visible ☐ Protocol or guideline visible ☐ Others	
		b. Management of patients and caregivers	☐ Diagnosis / diagnostic facilities available …….. …… …….. …….. ☐ Treatment available	

			…….. …… …….. ☐ Nurses available (write the number ……..) ☐ Doctors available (write the number ……..) ☐ Technicians available (number ……..) ☐ Follow-up system visible ☐ Seats available for caregivers ☐ Wall clock available ☐ Reading materials for patients ☐ TV ☐ Total time given per patient …… ☐ Others	
		c. Hygiene and control	☐ Sterilization facility visible ☐ Visible use of mask and gloves by the staffs ☐ Waste management ☐ Cleanliness (Mark one below) ☐ Very Clean ☐ Clean ☐ Less Clean ☐ Not Clean ☐ Not Clean at all	
		d. Privacy and security	☐ Curtain or barrier available ☐ Number of Separate rooms / cabins ….…… ☐ Entry restrictions are there ☐ Restriction of the number of visitors, attendants	
		e. Documentation process	☐ Electronic documentation ☐ Papers / files (category) ☐ Who are responsible? …… ……	
	3. Others	**a. Patient feedback system / Complaint management system**	☐ Dedicated manpower ☐ Box to drop complaint ☐ Available helpline number	

			☐ Staffs involved with it …… …… ……	
		b. Sanitary system	☐ Availability of hand wash ☐ Water supply / availability ☐ Number of toilets …… ☐ Number of washrooms …… ☐ Number of wash basins ……	
		c. Waste management system	☐ Number of bins …… ☐ Color-coding of bins ☐ Segregation	
		d. Communication and referral system	☐ Health Assistants to nurse ☐ Nurse to doctors ☐ Doctors to consultants ☐ Referral to other facilities	
		e. Duration recording at each service point	……	
		f. Frequency recording at each service point	…….. (per ……	
B. Actors	1. Actors at the point of reception or registration		☐ Male: Female …… ☐ Number of staffs …… ☐ Number of staff per activity ……..	
	2. Actors at the point of service delivery point		☐ Male: Female …… ☐ Number of staffs …… ☐ Number of staff per activity ……..	
	3. Any other actors		☐ Male: Female …… ☐ Number of staffs …… ☐ Number of staff per activity ……..	
C. Behavior	Roles of the observed actors at the facility		☐ Well behaved ☐ Smiling face / welcoming / friendly ☐ Respectful ☐ Empathetic	