Third Social Insurance Forum on

Development of a Framework for Establishing Maternity Insurance in Bangladesh

Presented by-

Dr Khondaker Golam Moazzem, Research Director, CPD

Prof. Dr. Rumana Huque, Executive Director, ARK Foundation

17 March, 2025

Study Team

- **Dr Khondaker Golam Moazzem**, Research Director, CPD
- **Prof. Dr. Rumana Huque**, Executive Director, ARK Foundation
- **ASM Shamim Alam Shibly**, Senior Research Associate, CPD
- **Fahmidur Rahman**, Senior Research Associate, ARK Foundation
- **Jebunnesa**, Programme Associate, CPD
- **Audrika Shabnam**, Consultant (Actuarist), ARK Foundation

Contents

1. Introduction

- The GoB has committed to introducing maternity Insurance by 2026
  - Under the National Social Insurance Scheme (NSIS) within the National Social Security Strategy (NSSS) framework
  - Aims to reduce financial barriers, increase institutional births, and improve maternal & newborn health
  - High maternity care costs limit access to medical institutions, increasing risks for mothers and newborns, especially in low- and middle-income countries
  - Demand-side financing, including maternity insurance, has been used globally to improve institutional births and financial protection
  - Bangladesh faces limited financial resources, high maternal mortality, and healthcare access disparities
- NSSS acknowledges the financial burden of maternity care and seeks to ensure financial protection and medical support for expectant mothers
  - The introduction of Maternity insurance has been suggested as a key reform under the Health Services Division, Ministry of Health & Family Welfare
  - Implementation modality is still under development

1. Introduction

- Against this backdrop, this study aims to formulate a framework for a maternity insurance scheme in Bangladesh
  - The framework can be considered an actionable guideline for all relevant stakeholders involved in the whole insurance supply chain
  - More specifically, this study will review to what extent maternity insurance can be implemented, which methods of intervention are possible, who will benefit, what will be the outcomes, and what types of organisational, operational, and regulatory issues should be considered at the micro-level
  - Key aspects to be explored include a comprehensive review of case studies from countries that have successfully implemented maternity insurance schemes with a particular focus on their diverse healthcare systems, socio-economic contexts, financing mechanisms of maternity schemes, coverage and benefits provided, provider networks, strategies for quality assurance, and government involvement
  - The findings of this paper are expected to contribute to the ongoing discourse on improving maternal healthcare in Bangladesh and provide insightful recommendations to policymakers, healthcare professionals, and other stakeholders

2. Literature Review: International Best Practices on Maternity Insurance

Overview

- Few countries have dedicated maternity insurance at the national level, except China.
- Seven countries reviewed: India, Vietnam, Chile, Thailand, Philippines, Germany, Japan, China.
- Dual healthcare system across these countries (public and private sectors).

Healthcare System Features

- **China, India, Thailand, Philippines**: Public healthcare systems financed by taxes and government subsidies, providing essential services.
- **Private sectors**: Offer additional services for higher-income individuals or those with supplementary insurance.

Key Goals

- **Equitable healthcare access**: China, India, Vietnam focus on providing affordable healthcare services to all citizens.
- **China's Social Insurance**: Covers healthcare services for all citizens.
- **India's Ayushman Bharat**: Focuses on vulnerable populations via Health and Wellness Centres (HWCs) and PM-JAY scheme.
- **Vietnam's Universal Health Coverage (UHC)**: Extensive network of commune health centres to promote accessibility and affordability.

2. Literature Review: International Best Practices on Maternity Insurance

Governance and Organizational Aspects

- **Government Oversight**: Vietnam, Thailand, Philippines, China, and India all have government bodies overseeing healthcare
- **Thailand's NHSO**: Manages the universal coverage scheme (UCS), ensuring transparency and accountability
- **Vietnam's Ministry of Health**: Oversees health services with local authorities' involvement
- **Philippines' PhilHealth**: Regulates health insurance, promoting universal coverage

Healthcare Delivery Structure

- Hierarchical system across China, India, Vietnam, with national hospitals and local health centres
- **China**: Ministry of Health coordinates healthcare at national and local levels
- **India**: Ministry of Health and Family Welfare, with state-level implementation
- **Vietnam**: Ministry of Health, with provincial and district-level management

2. Literature Review: International Best Practices on Maternity Insurance

Contributions and Premiums

- **China**: Employer-employee contributions based on income and insurance categories.
- **India**: PM-JAY scheme relies on tax-funded contributions and premiums based on income.
- **Vietnam**: Combination of government subsidies, employer contributions, and individual premiums, adjusted by income.

Beneficiaries and Coverage

- Focus on vulnerable populations: workers, retirees, low-income households, marginalized groups.
- **Coverage Package**: Includes preventive, curative, rehabilitative care, high-cost medical treatments, emergency care, and essential drugs.

Funding Mechanisms

- **China**: Public funds, social insurance schemes, sin taxes (tobacco, alcohol).
- **India**: Tax-funded contributions, employer-employee premiums, government subsidies, international donor support.
- **Vietnam**: Mix of government subsidies, employer contributions, and individual premiums, supplemented by sin taxes and municipal funding.

3. Overview of the Healthcare System in Bangladesh

Governance & Legal Framework

- Healthcare is a **constitutional obligation** (Article 15)
- Ministry of Health and Family Welfare (MOHFW) oversees policy & implementation
  - National Health Policy (2000, revised 2011): Primary healthcare, maternal health, family planning
  - National Population Policy (2012): Focus on reducing maternal & child mortality
  - Healthcare Financing Strategy (2012–2032): Financial risk protection, resource efficiency
  - Five-Year Plans: Strategic health investment framework

Health Insurance & Financial Protection

- **Healthcare Financing Strategy (2012–2032)**
  - Reduce **out-of-pocket (OOP) expenditure** (64% → 32%)
  - Increase **government health expenditure** (26% → 30%)
  - Expand **social health protection** (1% → 32%)
  - Reduce **dependence on foreign aid** (8% → 5%)
- **Challenges**
  - No clear **health insurance model** for informal workers
  - Lack of **detailed funding mechanisms**

3. Overview of the Healthcare System in Bangladesh

Healthcare Service Delivery

- **Public sector:** MOHFW oversees **primary, secondary, and tertiary care**
- **Private sector:** Plays a major role in service provision
- **NGOs & Donours:** Key role in financing & community health programmes
- **Urban-Rural Divide:**
  - Urban health managed by **Ministry of Local Government**
  - Rural health managed by **MOHFW**
- **Regulatory gaps:**
  - No fixed service pricing for private providers
  - Lack of transparency in fees & medical charges

Maternity & Employee Health Benefits

- **Labour Code (2006)**: Maternity benefits for employees in **formal** establishments
- **Maternity leave:** 8 weeks before & after delivery (Section 46, BLA)
- **Gaps in Coverage:**
  - No maternity insurance for **informal sector workers**
  - Limited financial support beyond leave provisions

3. Overview of the Healthcare System in Bangladesh

Revenue Sources & Taxation

- Government revenues come from **tax & non-tax sources**
- Managed by **Ministry of Finance**, with tax collection by **National Board of Revenue**
- No **earmarked taxes** specifically for healthcare

Revenue Pooling & Health Insurance Funds

- Government budget serves as the **primary revenue pool**
- Some **health insurance funds** exist for public & private sector employees

Budgeting Process

- **Medium-Term Macroeconomic Framework (MTMF)** sets resource ceilings & revenue targets
- Ministries prepare **Ministry Budget Frameworks (MBF)** within allocated limits
- **Ministry of Finance & Planning Commission** review and approve budget proposals
- Final budget is **approved by Parliament**

Allocation & Expenditure Management

- Ministries divide funds into **revenue & development budgets**
- **MOHFW Budget Unit & Planning Unit** manage allocations within budget ceilings
- Budgeting follows both **top-down & bottom-up approaches**, but final decisions are **centralized**
- **Key considerations:** Previous expenditure, available resources, policy priorities

4. Analytical Perspective on Identifying the Framework of Maternity Insurance

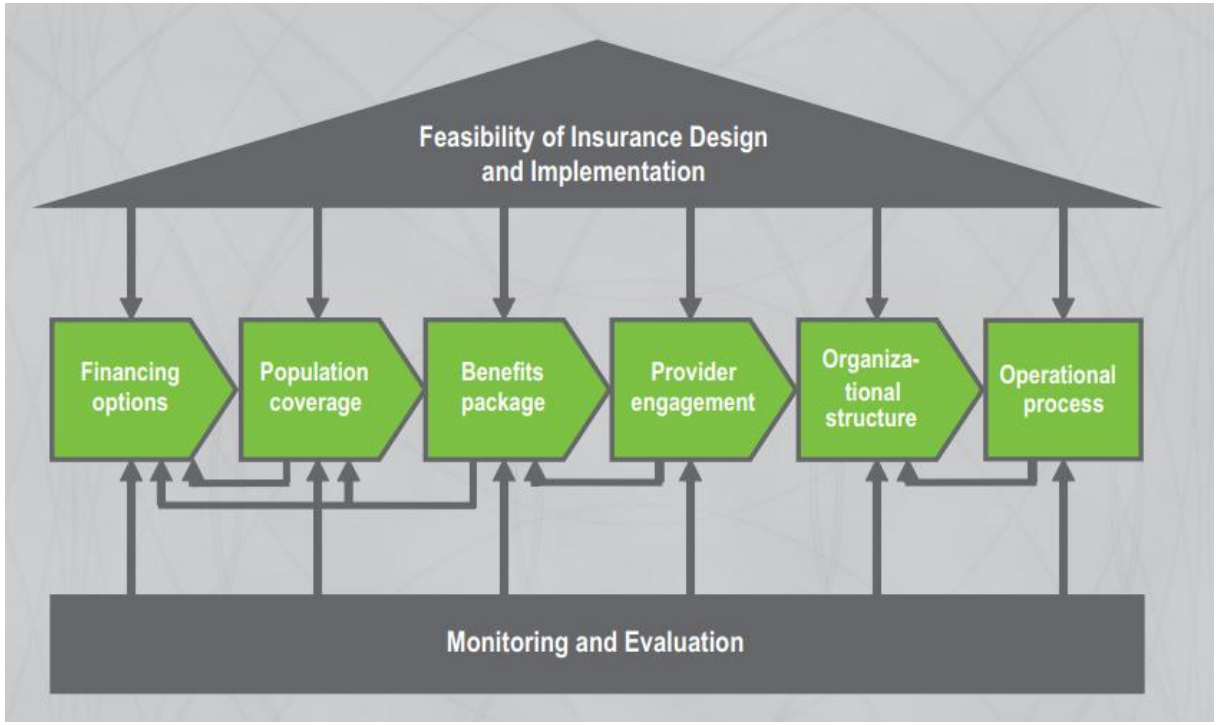
Conceptual Framework for Maternity Health Insurance

- Provides a structured approach to designing maternity health insurance
- Addresses coverage, benefits, financing, and provider networks
- Ensures sustainability, equity, and efficiency in insurance design
- Aims for universal access, minimizing socio-economic disparities
- Optimizes resource allocation to maximize impact

Social Insurance vs. Social Safety Net

- Social Insurance: Contributory, risk-pooling, supports formal sector workers (e.g., pensions, health insurance)
- Social Safety Net: Non-contributory, poverty-targeted, supports vulnerable groups (e.g., cash transfers, food aid)

Figure 1: Design Elements for Maternity Insurance Scheme



Source: The World Bank. (2012)

5. Methodology

- Mixed-method approach: qualitative & quantitative
  - Quantitative includes analysis of **Sample Vital Registration Statistics Database 2020** (micro data) and **Health Bulleting Report** by DGHS
  - Qualitative methods include **15 KIIs** and **2 FGDs** with stakeholders
  - Interview Areas: **Dhaka & Tangail**, covering legal, institutional, and operational aspects
  - **Field Visit to the Tangail district to observe the SSK programme** at upazila level hospitals (four government hospitals and three private hospitals)

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Data Availability & Limitations

- Limited data on **maternity healthcare** in Bangladesh
- **National surveys** provide partial insights into maternal health
- **Sample Vital Registration Statistics (SVRS) 2020** is the primary data source
- **SVRS 2022 online report** was reviewed, but **microdata was unavailable during the study**
- SVRS 2020 covers **301,131 households** (45% urban, 55% rural)
  - **Birth-related data:** 23,090 households
  - **Death-related data:** 6,275 households

Educational Background of Mothers

- **Key determinant** of maternity healthcare decisions
- **Higher education → better maternal health awareness & insurance interest**
- **Over two-thirds** of mothers have not passed SSC (Grade 10)
- **Rural mothers:** 66% have lower education levels
- **Urban mothers:** 42.6% have SSC+ education (vs. 25% in rural areas)
- **Implication:** Rural women have **lower access & awareness** of formal maternity support

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Poor Educational Attainment Among Older Mothers

- **Higher percentage of low education** in aged mothers compared to young mothers
- **37% of mothers (41-50 years)** did not complete level one education
  - Only **3% of mothers (13-17 years & 18-20 years)** failed to complete level one

Primary-Level Education Trends

- **63% of older mothers** (41-50 years) attained only primary education
- In contrast, **only 22% of adolescent mothers** (13-17 years) remained at this level

Higher Education Among Young Mothers

- **11-23% of mothers (18-35 years)** have education above the SSC level
- **Better-educated younger mothers** are more likely to adapt to a **formal maternity system**

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Employment Status of Mothers

- **Over 80% are homemakers** with no formal employment
  - **No major urban-rural difference** in lack of paid jobs
  - **10% work as domestic maids**, reflecting a low-income group
  - **90% have no financial independence**, relying on male family members
  - **Only 3% are students**, giving birth before completing education
- **Formal employment is rare** among mothers
  - Factory workers: **0.8%**
  - Office employees: **0.5%**
  - Teachers: **0.9%**
  - Other services: **0.4%**
- **Urban mothers have more jobs** than rural mothers
- **Limited potential for job-based maternity insurance** due to the dominance of homemakers

This helps to identify the target beneficiaries which the proposed framework considers in its different benefit packages

Professional engagement of the child's mother by area

Mother's Occupation	Rural	Urban	Total
Homemaker	83.3	81.1	82.5
Domestic helping hand	11.2	8.0	10.0
Student	2.3	4.2	3.0
Factory/production worker	0.7	1.1	0.8
Other office employee	0.2	1.1	0.5
Teacher	0.6	1.4	0.9
Engaged to service	0.2	0.7	0.4
Servant/Maid	0.1	0.4	0.2
Looking for work	0.0	0.2	0.1
Unable to work	0.0	0.1	0.1
Others	1.3	1.9	1.5
Total	100	100	100

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Place of Delivery

- **45.5% of mothers deliver at home**, higher in rural areas
- **Urban mothers** use formal services more: Clinics: **32.8%**, Hospitals: **31.6%**
- **Rural mothers**: Hospitals: **23.8%**, Clinics: **21.7%**

Regional and Age Variations

- **Mymensingh (60%)** and **Sylhet (54%)** have the highest home birth rates
- **Khulna (24%)** and **Dhaka (35.8%)** have the lowest, indicating better formal services

Age-Wise Trends

- Teen mothers (13-15 years) mostly deliver at home (52.8%)
- Mothers aged 16-35 years prefer hospitals & clinics
- Mothers over 35 years shift back to home deliveries

Place of childbirth by the mother by area

Where was the child born?	Rural	Urban	Total
Within sample area at sample household	40.3	25.0	34.6
Within sample area at other household	3.2	2.4	2.9
Outside sample area	9.8	5.0	8.0
Hospital	23.8	31.6	26.8
Clinics	21.7	32.8	25.8
Maternity clinic	1.0	2.8	1.7
Other	0.2	0.5	0.3
Total	100	100	100

The place where the child was born, or the delivery took place by the age of the mother

Age of the child's mother	Home (Own home, others' home at the locality & others home outside locality)	Hospitals (hospitals, clinics, maternity, clinics)	Others	Total
13 to 15 Years	52.8	46.6	0.6	100
16 to 20 Years	45.8	54.0	0.3	100
21 to 25 Years	44.2	55.5	0.3	100
26 to 30 Years	43.7	56.1	0.3	100
31 to 35 Years	47.2	52.5	0.2	100
36 to 40 Years	52.7	47.0	0.3	100
41 to 45 Years	59.1	41.0	0.0	100
46 to 50 Years	65.8	34.2	0.0	100
Total	45.5	54.2	0.3	100

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Skilled Professionals in Child Delivery: Rural-Urban and Age-Based Differences

- **Skilled professionals at delivery** ensure safe birth and reduce complications
  - **Doctors** attend **48.4%** of deliveries, with urban areas having a higher share (60.5%) than rural areas (41.1%)
  - **Traditional professionals** like midwives and relatives are more common in rural areas (16.7% and 7.9%)
  - Rural mothers also rely on **trained midwives (16.7%)**, **nurses (11%)**, and other health assistants
  - **Urban areas**: 13.5% use nurses, 11.8% use trained midwives
  - **Urban areas** are more suitable for piloting maternity insurance due to **standardized formal maternity services**
- **Doctors** are more available in **Khulna (64%)**, **Dhaka (57.2%)**, and **Rajshahi (54.5%)**
  - **Mymensingh** relies more on **midwifery services** (24.6% trained midwives, 15% traditional midwives)
  - **Khulna, Dhaka, and Rajshahi** have better access to doctor services, making them more suitable for maternity insurance pilots

*This analysis emphasises on **Healthcare Access & Service Utilization and Skilled Birth Attendance & Quality of Care** that the institutional set up which the proposed framework discusses in the later part*

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

- **Highest use of doctors**: Mothers aged **26-30 years (51.6%)**, followed by **21-25 years (49.5%)**
  - **Young mothers** (under 18) and **older mothers** (over 40) often rely on **traditional midwives, neighbours, and relatives**
  - **Target for maternity insurance**: Mothers aged **21-35 years** who are more likely to use skilled professionals
- **Birth Registration**: Only **1% of births** are registered within **45 days**, both in urban (1.8%) and rural (1%) areas
  - **Death Registration**: Only **5.7% of child deaths** are registered within **60 days**, with urban areas (8.1%) having higher registration rates than rural areas (4%)
  - A **functional registration system** is essential for implementing maternity insurance, especially for **neonatal care**

Attendance of professionals at the place where the child was born or the delivery took place by area

Who attended during the delivery	2020		
	Rural	Urban	Total
Doctor	41.1	60.5	48.4
Nurse/midwife	11.0	13.5	12.0
Trained midwife/midwife	16.7	11.8	14.9
Paramedic/ Family Welfare Inspector (FWV)	1.7	1.2	1.5
Medical Assistant (MA)/Sub-Assistant Community Medical Officer (SACMO)	2.6	1.5	2.2
Health Assistant (HA)/ Family Welfare Assistant (FWA)	0.8	0.5	0.7
Traditional midwife	17.1	7.1	13.4
Quack	1.0	0.3	0.7
Neighbours/relatives	7.9	3.6	6.3
Others	0.0	0.1	0.0
Total	100	100	100

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Types of child delivery system

- Khulna Division has a notably higher caesarean section rate compared to other divisions
- Normal deliveries are more prevalent in Sylhet (73.8%), Chattogram (67.9%), and Mymensingh (67.7%)
- **Rural Areas:** 61.5% normal, 38.5% caesarean
- **City Corporation Areas:** 41.8% normal, 58.2% caesarean
- **Municipal/Urban Areas:** 49% normal, 51% caesarean
- **Average Number of Children Delivered**
  - **Rural mothers** have an average of 2.07 children, with 1.98 alive
  - **Urban mothers** have an average of 1.91 children, with 1.84 alive
  - **Higher mortality rates** are observed in rural areas
- **Child Mortality Rates by Region**
  - **Highest mortality** in rural areas due to limited healthcare access

This helps to understand the Delivery Methods & Cost Regulation for C-section rates, which vary widely across regions. The proposed framework suggests cost regulation to prevent unnecessary procedures

Types of delivery by area in 2022

Division	Normal	C-section	Total
Localities			
Rural	61.5	38.5	100
City corporation	41.8	58.2	100
Municipal and other urban areas	49	51	100
Divisions			
Barishal	65.4	34.6	100
Chattogram	67.9	32.1	100
Dhaka	48.7	51.3	100
Khulna	42.2	57.9	100
Mymensingh	67.7	32.3	100
Rajshahi	55.0	45.0	100
Rangpur	60.3	39.7	100
Sylhet	73.8	26.2	100
Total	58.6	41.4	100

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Living/Death Status of Children After Delivery

- **Mothers aged 21-30 years** have a higher chance of having a **living neonate**
- **Higher mortality rates** are seen in **mothers below 20 and above 36** years
- **Dhaka Division** shows the **lowest mortality (1.8%)**, while **Sylhet (3%)** shows the highest
- **Rural areas** have a **slightly better living status** (97.8%) than urban areas (97.5%)

Stillbirth/Livebirth Status of Children

- Professional attendance (e.g., doctors, trained midwives) significantly **reduces stillbirths**
- **Stillbirth rates** are higher with **unqualified attendants** (e.g., quack doctors)
- **Higher in urban areas** compared to rural areas, with mothers over 40 in urban regions having the **highest stillbirth rates**

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Maternal Mortality During Delivery

- **Maternal deaths** occur at **home** (72.3%), particularly in rural areas
- **Urban hospitals** have a higher maternal mortality rate, which may be due to **higher delivery volumes in urban areas compared to rural area-based hospitals**
- **Maternal Mortality Causes** include **complex deliveries (33.3%)**, **postpartum hemorrhage (23.1%)**, and **complex pregnancies (23.1%)**

Death Place of the Mother during Delivery

Death Place	Rural	Urban	Total
Within sample area at sample household	78.7	63.6	72.3
Within sample area at other household	1.2	2.3	1.7
Outside sample area	2.7	2.6	2.6
Hospital	14.1	25.7	19.1
Clinics	2.4	3.8	3.0
Maternity clinic	0.1	0.0	0.1
Other	0.9	2.0	1.3
Total	100	100	100

Causes of Maternal Mortality in Rural and Urban Areas

Maternal mortality causes	2019			2020		
	Rural	Urban	Total	Rural	Urban	Total
Complex pregnancy	15.4	16.7	15.8	23.1	23.1	23.1
Complex delivery	30.8	50.0	36.8	34.6	30.8	33.3
Bleeding after delivery (postpartum haemorrhage)	26.9	16.7	23.7	23.1	23.1	23.1
Complex abortion	15.4	0.0	10.5	7.7	0.0	5.1
Bleeding at pregnancy	11.5	8.3	10.5	11.5	15.4	12.8
Tetanus	0.0	8.3	2.6	0.0	7.7	2.6
Total	100	100	100	100	100	100

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Case Study: Miscarriage Experience & Lessons for Maternity Healthcare Policy

- This case study presents the real-life experience of a mother who suffered a miscarriage and sought maternity care in both government and private healthcare facilities
- The objective is to highlight differences in healthcare approaches, financial implications, and service ethics between public and private institutions
- **Seeking Antenatal Care: Initial Diagnosis & Uncertainty**
  - A mother visited a government hospital three months into her pregnancy for a routine antenatal check-up
  - The doctors were unable to detect a foetal heartbeat and advised her to return in a few days for further examination
  - The concerned couple sought a second opinion at a private hospital, hoping for a more detailed diagnosis
- **Contrasting Medical Advice: Public vs. Private Hospitals**
  - A **thorough examination** at the private facility confirmed that **the foetus was no longer active**
  - The **doctor immediately recommended surgery**, stating it was the only option to clear the uterus and prevent complications
  - The estimated cost of the surgery was **Tk. 50,000**, posing a financial burden on the couple
  - The couple hesitated due to the **high cost of surgery and c**oncerns over the **painful nature of the procedure**

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Case Study: Miscarriage Experience & Lessons for Maternity Healthcare Policy

- **Government Hospital's Alternative Approach**
  - The couple returned to the government hospital with the private hospital's reports
  - Doctors at the government facility provided two treatment options:
    - **Medication-induced natural delivery**: A non-invasive method that allows the uterus to expel the remaining pregnancy tissue naturally.
    - **Surgical removal (Dilation & Curettage - D&C)**: Only to be performed if the medication failed, provided free of cost.
  - The mother opted for medication and successfully underwent the procedure without requiring surgery
- **Lessons**
  - The private hospital only recommended surgery without considering less invasive and cost-effective alternatives
    - Suggests a financial incentive in private maternity care, where expensive treatments are prioritised over patient well-being
  - Government hospitals offer essential maternity care at no cost, reducing financial burdens for patients
    - Access to multiple treatment options ensures that mothers receive appropriate, cost-effective, and medically justified care

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Maternal and Newborn Health Statistics from DGHS

- Data is sourced from **monthly health bulletins by DGHS**
  - The data compares maternal and newborn health indicators from **2019 (pre-COVID) and 2023**
  - Data was compiled from the **divisional level** due to time constraints

Maternal Health (2019 vs. 2023)

- ANC1 registrations: 1.69M (2019) → 1.51M (2023)
- Deliveries: 0.97M (2019) → 0.92M (2023)
- Caesarean deliveries: 47.9% (2019) → 43.4% (2023)
- Maternal deaths: 1,105 (2019) → 872 (2023)

Newborn Health (2019 vs. 2023)

- Stillbirths: ~2% of total deliveries
- Newborn deaths within 1 minute: 24.4% of live births
- First postnatal care (PNC1): ~90% of mothers
- Second postnatal care (PNC2): ~55% of mothers
- The **drop from ANC1 to ANC4** and final deliveries is linked to **relocations, home births, and miscarriages**

6. Maternity Healthcare in Bangladesh: An Analysis of SVRS

Issues considered in designing the proposed framework

- **Target Beneficiaries –** The analysis shows that most mothers are homemakers with low education levels, requiring an insurance model tailored for non-working women
- **Healthcare Access –** With 45.5% of births occurring at home, the framework proposes benefit mechanisms at institutional deliveries
- **Skilled Birth Attendance –** High reliance on traditional midwives in rural areas highlights the need for insurance coverage tied to skilled professional-assisted deliveries
- **Delivery Methods & Cost Regulation –** Wide variation in C-section rates (Khulna 57.9%, Sylhet 26.2%) suggests the need for cost control and reimbursement policies to discourage unnecessary procedures
- **Financial Sustainability –** High out-of-pocket maternal healthcare costs (64%) underscore the necessity of multi-stakeholder funding involving government, employers, and NGOs
- **Stakeholder Coordination –** Regional differences in access to formal maternity care highlight the need for targeted implementation strategies in collaboration with healthcare providers and insurers

7. Assessment of Existing Maternity Healthcare Related Schemes in Bangladesh

- The GoB has implemented several initiatives to provide social protection and expand coverage, particularly targeting vulnerable groups
  - Among these, maternity benefit schemes play a crucial role within social safety net programs
  - These schemes operate under public and private sector organizations, encompassing legislative provisions, pilot programs, and safety net initiatives
- Key maternity benefit schemes include:
  - Maternal allowance for working women
  - Maternity leave for workers
  - Voucher schemes for maternal healthcare
  - Medical benefits for working women in the Ready-Made Garments (RMG) sector
  - Maternity benefits under the Shasthyo Shuroksha Karmasuchi (SSK) program

Health Protection Scheme (SSK)

- **Targeted Population and Area**
- The SSK is a pilot program run by the MoHFW in thirteen upazilas of Tangail district, covering nearly 4 million people
  - The scheme targets poor individuals living below the poverty line and provides them with free treatment for various medical conditions, including maternal health services
  - Initially, participation in the SSK program was restricted to 50-100 people per upazila, but as of 2024, there are no limits on enrollment
  - To identify eligible beneficiaries, the Health Economics Unit (HEU) hires firms to conduct surveys and interviews
  - These involve a 52-question screening questionnaire to assess eligibility

7. Assessment of Existing Maternity Healthcare Related Schemes in Bangladesh

- **Financial Coverage**
  - The government funds the SSK program, covering an insurance premium of Tk 1,000 per family, which grants medical expense coverage of up to Tk 50,000 per year
  - Unused funds from less expensive treatments are often reallocated to cover costlier treatments
  - If a patient exhausts their limit, unused balances from other patients' packages may be redistributed within the same year
  - Doctors do not initially consider treatment costs; they provide services first, and adjustments are made at the SSK booth
- **Coverage of Health Services**
  - The SSK program covers 110 diseases, with each enrolled family receiving Tk 50,000 worth of healthcare services annually
  - Previously, benefits were accessible to all family members, but now, only those listed in the database as family members can claim coverage
  - During enrollment, the SSK unit collects names and national ID numbers to prevent exclusion
  - Outdoor services are not covered due to their high cost; only indoor services are provided
  - Medication is typically given for 15 days post-discharge, with occasional extensions to 1-2 months
  - Female patients visit hospitals more frequently due to greater health awareness

7. Assessment of Existing Maternity Healthcare Related Schemes in Bangladesh

- **Maternity Issues Under SSK**
  - The SSK program provides maternity services under designated codes (61-79), covering conditions such as eclampsia, ectopic pregnancy, haemorrhoids, and hypertensive disease
    - However, only major complications are covered, limiting overall maternity benefits
  - Local midwives (Dai ma) and private clinics influence pregnant women to seek non-SSK services, leveraging the limited maternity services under SSK
    - Other barriers include lack of awareness, lengthy government procedures, and trust issues
  - Under SSK, C-sections are pre-planned and not performed on an emergency basis
  - Private clinics encourage unnecessary C-sections for financial gain
  - Upazila hospital delivery ratio: 60:40 (normal: C-section) (Madhupur: 90:10), Ghatail: 10-12 deliveries/month)

Maternity Leave for Working Women in the Industrial Sector

- **Targeted Population and Area**
- The Bangladesh Labour Act (2006, amended 2018) outlines maternity benefits in Chapter IV (Sections 45-50), with Section 46 mandating four months of paid maternity leave (eight weeks pre- and post-birth). This applies mainly to industrial sector workers

7. Assessment of Existing Maternity Healthcare Related Schemes in Bangladesh

- **Financial Coverage**
  - Under Section 48, maternity benefits are calculated based on the worker's average daily wage over the last three months before pregnancy notice submission
- **Coverage of Health Services**
  - The law does not mandate pre-medical checkups, postnatal care, or delivery costs
  - Only formal sector workers are covered, though implementation challenges persist

Maternity Leave for Women in the Government Sector

- Government-employed expecting mothers receive six months of paid maternity leave. The same rule applies to non-government teachers (since 2012) and female bank employees (as per Bangladesh Bank's directive)
- Government employees receive full paid maternity leave
- No additional maternal healthcare benefits specified
- **Central Fund (for RMG Workers) e**stablished under Bangladesh Labour Act, 2006, this fund supports 100% export-oriented RMG workers
  - Funding source: 0.03% of LC value from export industries
  - Beneficiaries: 18,000 workers (30% maternity-related cases)
  - Maternity grant: Tk 25,000
  - Additional support: Tk 5,000 - Tk 100,000 for post-delivery complications

7. Assessment of Existing Maternity Healthcare Related Schemes in Bangladesh

- **Bangladesh Labour Welfare Foundation Fund (BLWF)**
  - Covers formal and informal sector workers (excluding RMG workers)
  - Funding source: 5% of net profits from profitable companies
  - Annual revenue: Tk 100 crore
  - Maternity grant: Tk 25,000 (additional funds for complications)
  - Application processed via DIFE and DoL
- **Voucher Scheme for Maternal Healthcare**
  - The voucher scheme supports disadvantaged pregnant women, initially piloted in 21 upazilas and later expanded to 53 upazilas.
- Financial coverage includes Tk 2,000 for general maternal health improvement
  - Tk 2,000 for skilled facility-based delivery
  - Tk 500 for home-based skilled delivery
  - Vouchers redeemable at public/private hospitals

8. Proposed Operational Framework for Maternity Insurance

Rationales for designing an operational framework:

(a) **Ensuring Universal Health Coverage for all** population particularly the poor and vulnerable groups;

(b) **Reducing Out of Pocket Expenses** to protect families from catastrophic healthcare expenses;

(c) **Integrating fragmented government initiatives** into a unified scheme and minimizing targeting error;

(d) Exploring more options for financing and co-contributions for better financial viability and sustainability; and

(e) Promoting community-based risk pools via women's cooperatives or NGO's to enhance participation and sustainability of insurance plans for the informal sector.

8. Proposed Operational Framework for Maternity Insurance

Why maternity insurance is comparatively different from other health insurance?

- **Event-specific coverage -** tied to a specific, predictable life event (pregnancy) covering both expected and unexpected outcomes during pre-natal and post-natal care, does not provide a broad spectrum of coverage like health insurance
- **Limited timespan -** tailored for women of reproductive age (15–49 years) where factors like marital status, the legal age of marriage, the number of children, socio-economic status, education, and contraceptive use, could influence the demand for maternity insurance
- **Beneficiary limitations –** limited to the mother and child, which can make its inclusion in group insurance programs more complex, particularly in male-dominated industries

8. Proposed Operational Framework for Maternity Insurance

Comparison of existing and potential insurance models and health protection schemes of Bangladesh

Point of Comparison	*Shasthyo Shurokhsha Karmasuchi*	*PwC Proposed Model 1*	*PwC Proposed Model 2*	*PwC Proposed Model 3*	*Grameen Kalyan**	*BRAC Micro-health Insurance**
Type of Coverages	Embedded maternal health care in a general family health care protection scheme for BPL.	Universal Health Coverage	Coverage for the working population in the formal sector	Coverage for the entire working population in both formal and informal sector	Preventive and curative family health care	Family health coverage including embedded maternity service
Role of Government in Funding	Entirely borne by the government	The government will bear administrative expenses and will play the role of employer for self-employed and informal sector workers.			Beneficiary/Non-beneficiary pays premium to avail coverages. No government interventions required.	
Benefit Packages	**In-patients:** Up to BDT 50,000 per year on travel costs to referred hospital, diagnosis, medicine expenditure	Per day BDT 346 (2/3rd of Salary as per ILO Convention) up to 16 Weeks/112 Days. This rate was calculated based on the average wage of females. (BDT 15,568 as per FY 2016-17).			**In-patients:** Up to BDT 2,000 Discounted service at specified health care center Consultation Fees (25%), Pathological Tests (25%), Medicines (10%), Regular Blood Sugar Tests (20%), Free quarterly health check-ups for all members	**In-patient:** up to BDT 10,000 **Out-patient:** up to BDT 1,500 **Normal Childbirth:** up to BDT 2,200 **C-section:** up to BDT 6,500 **Life Coverage:** up of BDT 10,000
Contributions	Yearly BDT 1,000	Monthly Employee: BDT 121.45, Employer: BDT 121.45. For the informal sector, in the absence of an employer, the government will play the role and will contribute to the pooled fund			Yearly ~BDT 250 to ~BDT 400 which is paid by policy holder	Yearly BDT 650 to BDT 1220 which is paid by policy holder

Source: Compiled by authors. Note: Star (*) marked means micro-health insurance.

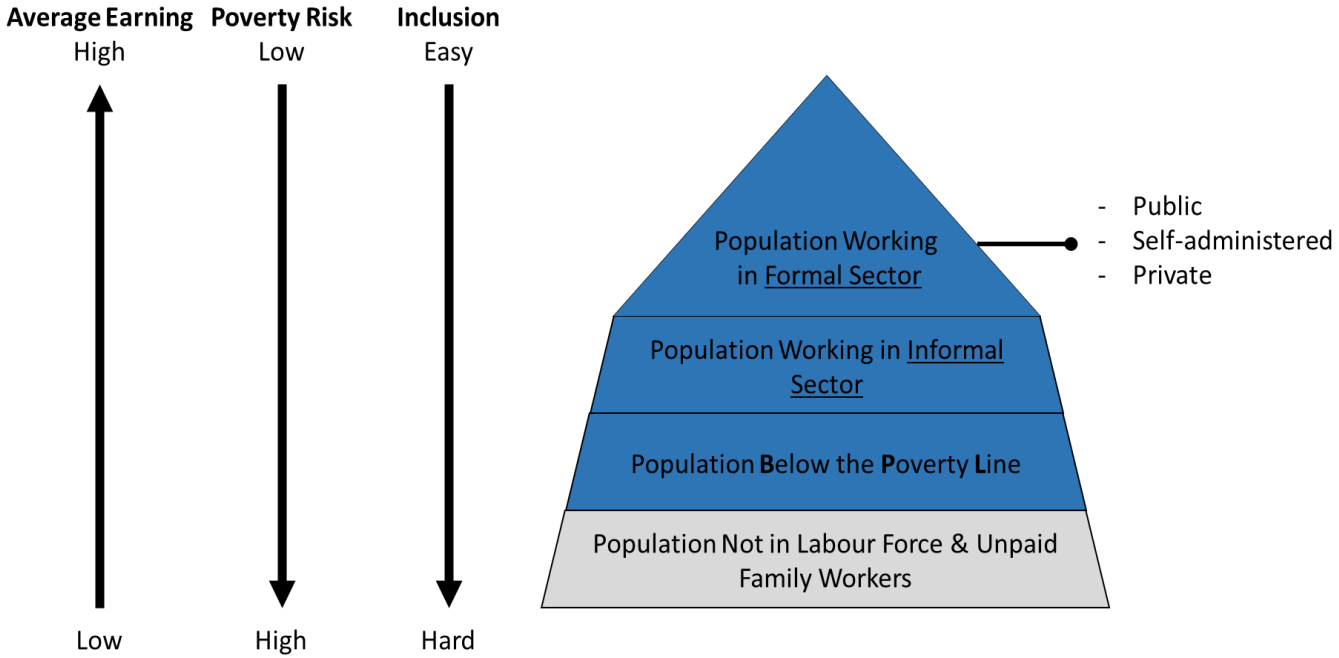
8. Proposed Operational Framework for Maternity Insurance

Comparison of existing and potential insurance models and health protection schemes of Bangladesh

- No existing model for stand-alone maternal health insurance (found evidences of embedded maternal care)
- Three patterns of funding mechanisms: (a) non-contributory or fully public funded approach, (b) partial contributory approach backed up by public funds and (c) contributory (zero/no utilization of public fund) approach
- The need for income loss coverage for the women working in the formal sector has been addressed in current labour law (BLA 2006)
- Micro-insurance provided by NGOs are highly criticized.
    - Absence of uniformity in the insurance packages (E.g., pricing, benefit packages, coverages)
    - Dual role of serving as both providers and insurers limits the potential to scale up

8. Proposed Operational Framework for Maternity Insurance

Target population and categories of beneficiaries



Variables	Population	Source
Formal Employment (Male & Female)	10,673,000	LFS 2022
Informal Employment (Only Female)	12,311,534	LFS 2022
Below Poverty Line	9,106,900	ADB 2022
Dependent or Out of LF	16,608,566	*Estimated
Total Reproductive Age Population (Women)	48,700,000	WHO 2022
Total Expected Claim (Per Year)	3,700,000	*Estimated

Source: Prepared by author based on "Health Care Financing Strategy 2012-2032" and "Study on Framework for Introduction of National Social Insurance Scheme in Bangladesh"

8. Proposed Operational Framework for Maternity Insurance

Average cost and expected cost of delivery by facilities: Background of calculation

- In Bangladesh, a limited number of studies have been conducted to estimate the cost associated with maternity health care services.
- National statistics produced by different government agencies often do not provide a clear picture but rather a shared aggregate summary.
- We studied existing literature and available statistics to estimate average OOPE.

	Public/NGO	Private
Average cost of Normal Delivery including ANC & PNC	16,148	27,385
Average cost of C-Section including ANC & PNC	37,890	49,245

**** Inflation adjusted.*

8. Proposed Operational Framework for Maternity Insurance

Average cost and expected cost of delivery by facilities: Assumptions

- Let's assume a scenario with two choices of facility (public/NGO or private) and two outcomes of pregnancy (normal and C-sections).
- Considering the current rates, expecting that the people will use these facilities equally (50% each)
- Ahmed, S. et al (2022) found high prevalence of C-section in private facilities compared to non-private facilities.

Facility	Delivery	Probability			Avg. OOPE	Avg. Expected Cost
		Facility (F)	Delivery (D)	F*D		
Public/NGO	Normal	0.5	0.648	0.324	16,148	5,231.95
	C-Section		0.352	0.176	37,890	6,668.64
Private	Normal	0.5	0.189	0.0945	27,385	2,587.88
	C-Section		0.811	0.4055	49,245	19,968.85
			Total Probability	1		
					E(avg. OOPE)	34,457.32

8. Proposed Operational Framework for Maternity Insurance

Proposed Frameworks: Summary, assumptions and estimations

- **Summary of current scenario**
  - High prevalence of C-section rate
  - No structured referral mechanism
  - Prevalence of non-institutional deliveries
  - Absence of treatment guidelines and
  - Unregulated market dominated by profit driven private facilities
- **Assumptions and Estimations**
  - Each model incorporates a controlled rate of C-sections
  - Deliveries taking place in private hospitals would be reimbursed only according to the amount that on average a delivery in an NGO facility costs
  - As government will solely provide the administrative cost, the model has excluded the administrative cost from the premium calculation

8. Proposed Operational Framework for Maternity Insurance

Proposed models

$$\text{Premium per policy (yearly)} = E(avg.OOPE) \times \frac{Total\ Number\ of\ Pregnancy\ Claim\ Per\ Year}{Total\ Number\ Population\ in\ Coverages}$$

Models	Details	Coverage Up to	Premium (Per Policy, Per Year)
Model 1	Best Case Scenario – accommodate 15% C-section	41,000	1,500
Model 2	Middle Case – accommodate 30% C-section	41,000	1,760
Model 3	Worst Case Scenario – accommodate 45% C-section	41,000	2,030

*Note: As the average OOPE is same for all models, the coverage remains same for all models. Due to changes in the **high-cost risk parameters (rate of C-section)**, premium per model changed. This means, with lower possibility of C-section, premium will go down (lower the risk, lower the premium).*

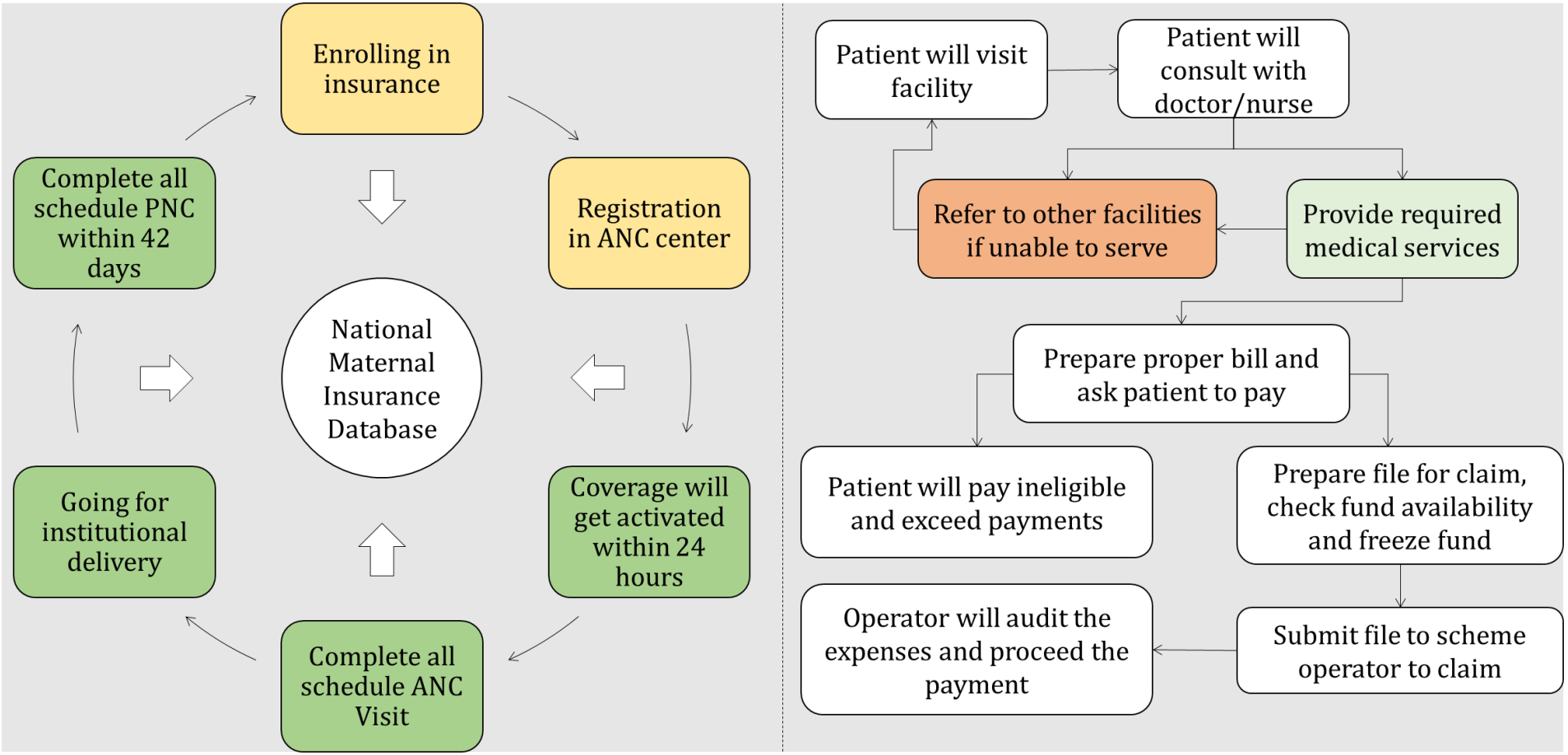
8. Proposed Operational Framework for Maternity Insurance

Proposed Frameworks: Key Features

- Universal maternal health scheme and participation is mandatory for all (including men in formal sector).
- The proposed scheme is a cashless coverage.
- Cost of admission, in-patient and out-patient consultations, lab tests, hospital/in-patient charges (including medical supplies), and transport (in special cases only) will be covered.
- Any outcome of pregnancy (such as miscarriage, stillbirth, clinical abortion, or menstrual regulation) will be covered under this package up to two living children.
- The benefit packages become active upon registration and provide coverage for up to 45 days post-delivery.
- Travel cost of patient and companion, food cost of companion, and expenses in non-partner facilities (consultation, diagnosis or medicine) will not be included in the scheme.
- The insurer may accommodate excess costs of one component by adjusting it against another, depending on availability.

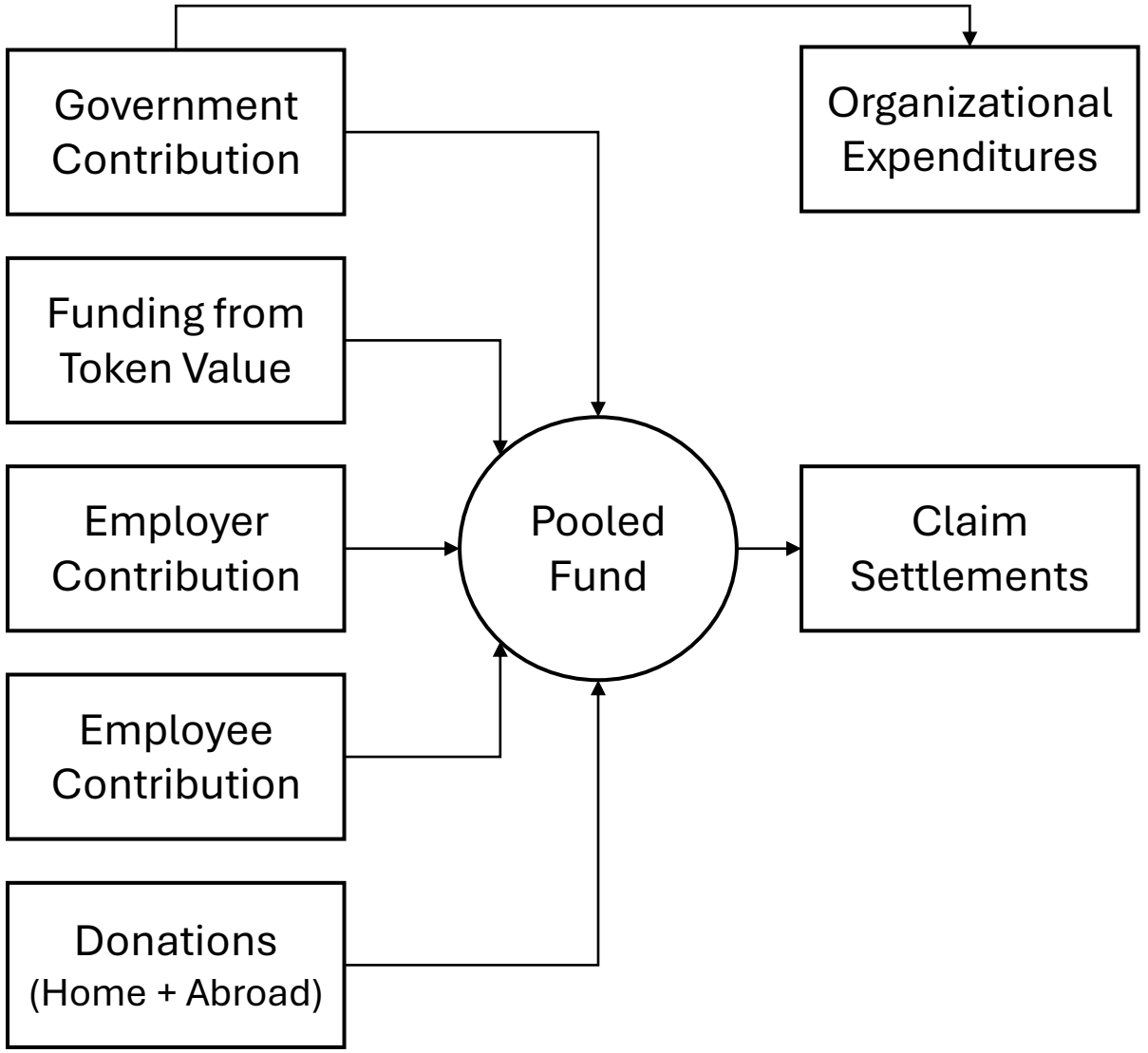
8. Proposed Operational Framework for Maternity Insurance

Proposed Frameworks: A visual illustration of insurance enrollments, coverage and process of insurance claim



8. Proposed Operational Framework for Maternity Insurance

Financial Model: Sources and Flow of Funds



8. Proposed Operational Framework for Maternity Insurance

Contribution in Premiums

Models	Per Head Premium (Yearly)	Formal Sector			Informal Sector			BPL, Dependent or Out of Labour Force		
		Employee	Employer	Govt	Employee	Employer	Govt	Beneficiary	Other Donations	Govt
Model 1	1500	750	750	0	750	0	750	60	0	1440
Model 2	1760	880	880	0	880	0	880	60	0	1700
Model 3	2030	1015	1015	0	1015	0	1015	60	0	1970

Total Contribution

Models	Total Fund Required (Cr)	Employee Contribution (both formal and informal)		Employer Contribution		Govt. Contribution		Beneficiary Contribution (BPL, Dependent or Out of Labour Force)	
		BDT in Cr	%	BDT in Cr	%	BDT in Cr	%	BDT in Cr	%
Model 1	7,305	1,724	23.60%	800	11.00%	4,626	63.30%	154	2.10%
Model 2	8,571	2,023	23.60%	939	11.00%	5,455	63.60%	154	1.80%
Model 3	9,886	2,333	23.60%	1,083	11.00%	6,316	63.90%	154	1.50%

9. Conclusion

Need for a Maternity Insurance Framework

- Bangladesh lacks a structured maternity insurance scheme, leaving many women financially vulnerable
- A well-designed framework can improve healthcare access and reduce financial distress for low-income families

Inclusive Coverage & Eligibility

- Target formal employees, informal workers, and disadvantaged women
- Cover antenatal care, delivery, postnatal care, and pregnancy-related complications

Sustainable Financing Model

- Use employer contributions, government subsidies, and individual premiums (subject to the level of earning) to ensure long-term sustainability
- Engage NGOs to extend coverage to informal sector workers

Cost Control & Risk Management

- Implement a tiered reimbursement model to regulate C-sections and control healthcare costs
- Ensure transparency in premium collection, claim settlements, and administration

9. Conclusion

Multi-Stakeholder Collaboration

- Ministry of Health & Family Welfare to lead policy and regulation
- Health Economics Unit & Insurance Development Authority to oversee design and compliance
- NGOs, private insurers, and mobile financial services to facilitate enrollment and payments