# **Evolving Arena of Adopting Innovative Digital Technologies to Enhance Health Financing Systems**



## **Background**



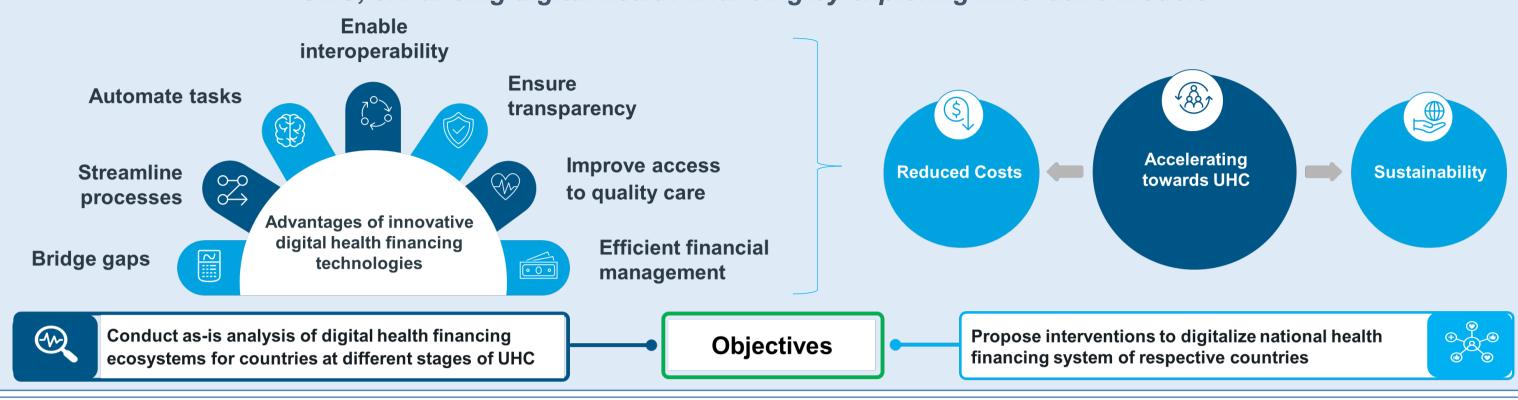


Percentage of population facing catastrophic health expenditure rose from 9.6% (2000) to 13.5% (2019), surpassing 1 billion people

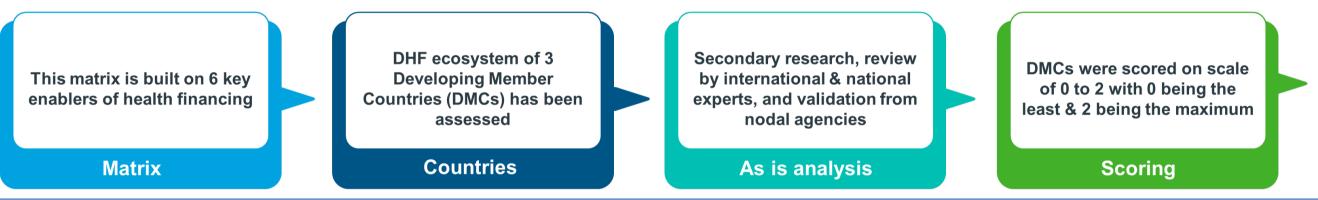


~2 billion people experienced financial hardships due to healthcare costs in 2019

Rapid advancements in technology and widespread adoption of mobile and internet present opportunities to advance UHC, enhancing digital health financing by exploring innovative models



Methodology: Inspired from "WHO's matrix used for maturity assessment of digitalization of health systems as a response to non-communicable diseases", an evaluation matrix was developed to identify gaps, intervention areas and develop strategy to achieve UHC goals, drawing inspiration from mature technologies



Major Findings: Potential impediments which countries may encounter and mitigation measures for integrating innovative digital technologies in health financing systems



- Non-availability of computer
- hardware & softwares Need for state-of-the-art
- data centers Lack of a stringent data
- backup & recovery plan

## Governance

- · Missing out digital health in National Health Strategies
- Complicated processes and interoperability challenges
- Absence of robust regulatory framework
- · Insufficient data security & privacy laws

#### **Digital Health** for Insurers

- Efficiency gaps in beneficiary identification
- Challenges in claim processing

system

Inadequate inbuilt check mechanisms to detect discrepancies

#### **Digital Health** for Providers

- Interoperability gaps across health information management systems
- Inability to track historic health records

#### **Digital Health Services** for Citizens

- Gaps in knowledge and awareness
- Inequity in access to digital technologies
- Non-user-friendly applications

## **Health Analytics**

- Absence of comprehensive Health Management Information Systems (HMIS) to manage and monitor individual health data
- No system to track key performance indicators (KPIs) for stakeholders in health financing schemes



Ensuring access

status

- Establish data centers & data recovery plan
- Develop national digital health strategy
- Adopt stringent data security & privacy laws
- Establish unified beneficiary
- identification system Automation of claims processing
- **Enabling interoperability** through Application Program Interface (APIs)
- User friendly and patient centric digital platforms
- Awareness campaigns
- Dynamic analytical dashboards

Lessons Learned: Adoption of digital technologies enhance efficiency, efficacy, and transparency for health financing



# **Revenue Raising**

- Ensure fair financing by accurate determination of household contributions
- Enhance interoperability to integrate and verify beneficiary data Simplify member registration and premium
- collection Enable tracking of enrolment and payment

# **Pooling**

- · Improve management and integration of funding pools
- Use Artificial Intelligence (AI) and Machine Learning (ML) for automated targeting and identification
- Employ digital technologies for deduplication

### **Purchasing** Automate claims processing for efficiency

- and transparency Implement automated controls to save time
- and costs Use AI, ML, and Optical Character
- Recognition for better detection of incorrect claims and faster provider payments



**Development &** adoption of dynamic analytical dashboards enables real-time stringent tracking & monitoring

Policy Recommendations: All developing member countries (DMCs) may conduct assessment of their digital health financing landscape and adopt innovative technologies tailored to enhance efficiency and efficacy. Three key areas for adopting innovative digital health financing technologies:

Unified beneficiary identification system

**Automation of claims processing system** 

Stringent data privacy and security strategies

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This strategic approach will streamline processes and support sustainable health financing systems