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**Human and Social Development Office
Sectors Group**

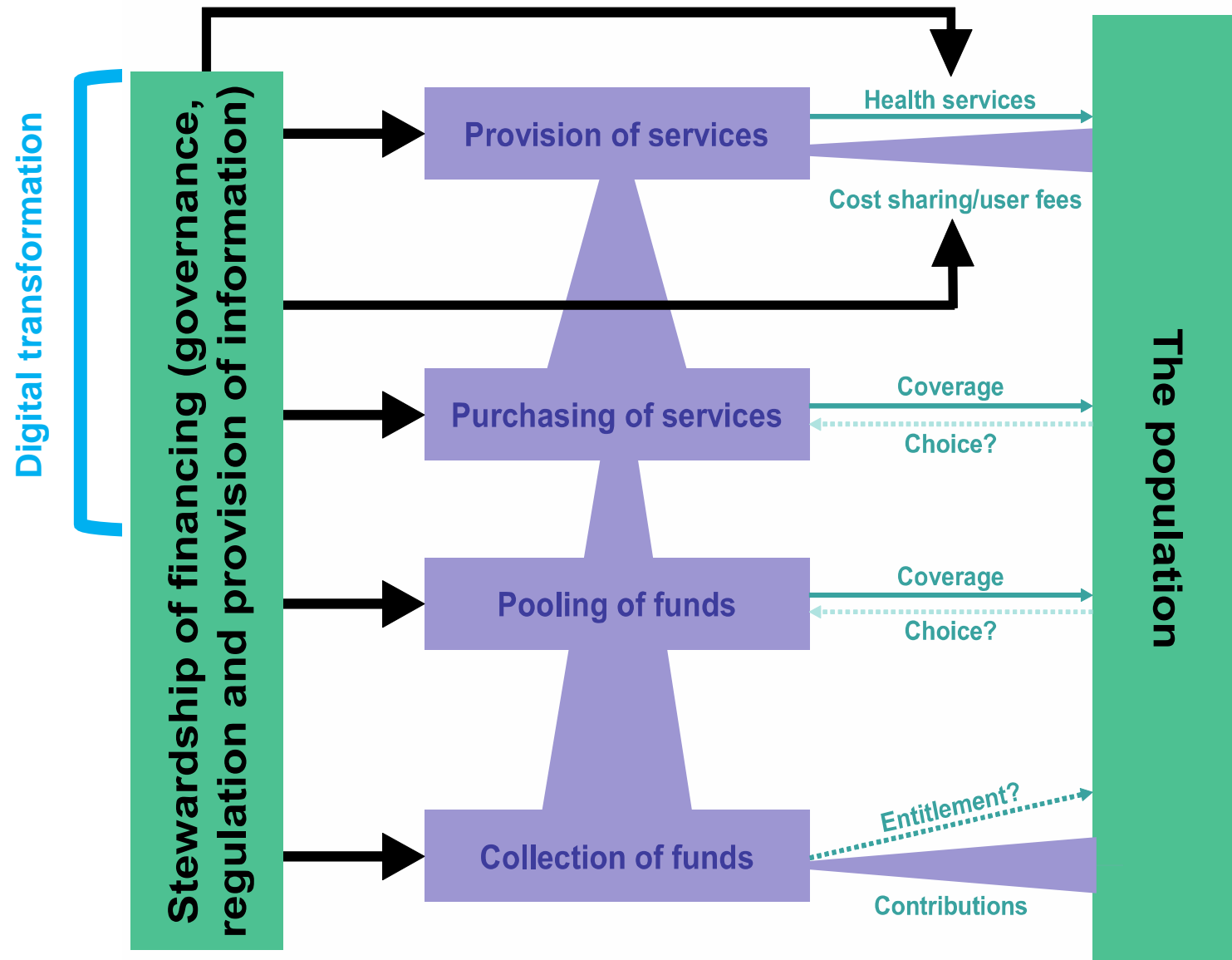# AI in Healthcare: Innovations, Challenges, and Future Directions

Dr. Akihito WATABE, MD, PhD, MSc, EMC
Health Specialist, Human and Social Development Office, Sectors Group, Asian Development Bank
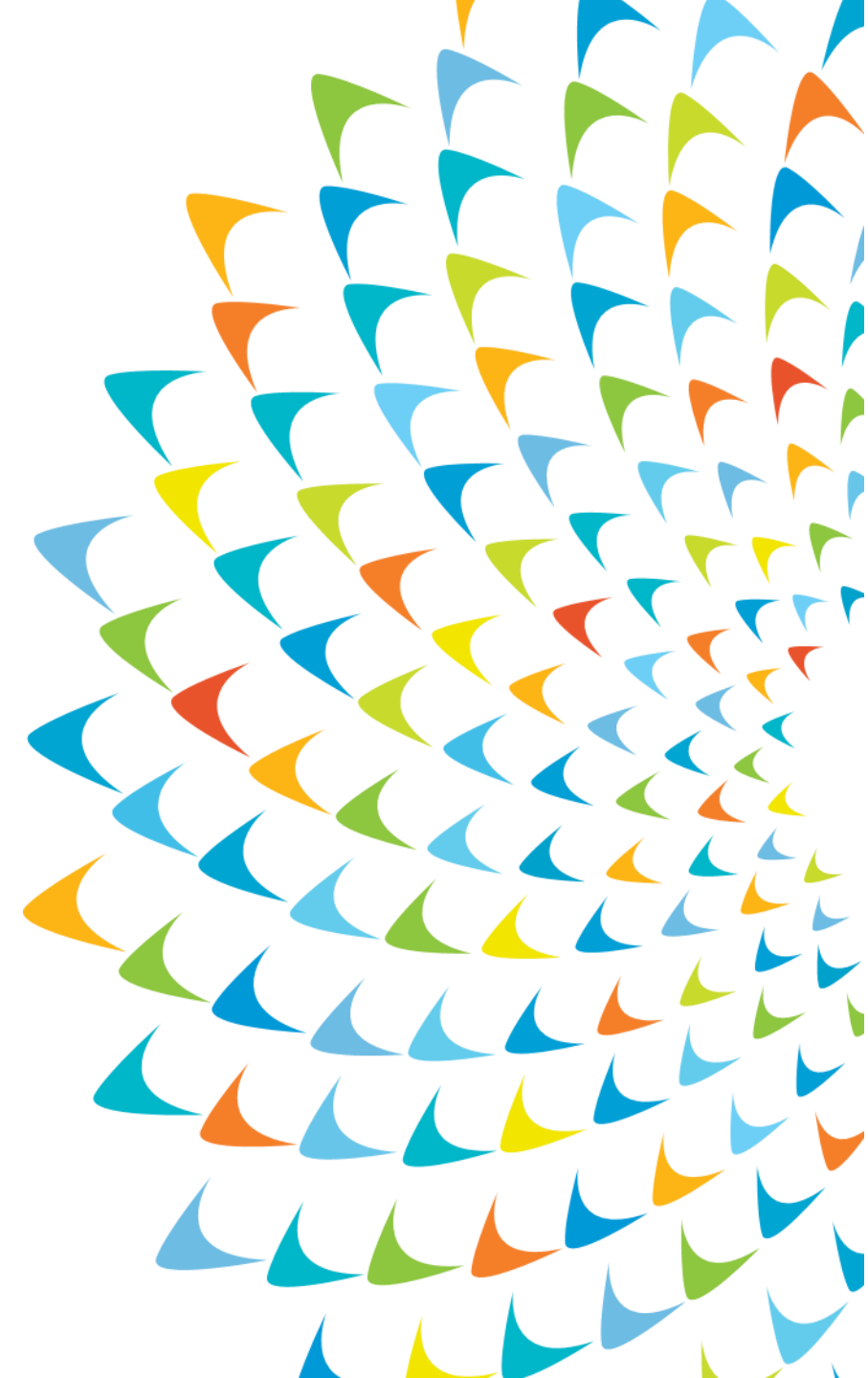
Improving inefficiencies in health systems through digitization

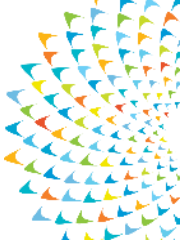# Digital transformation for health financing arrangement
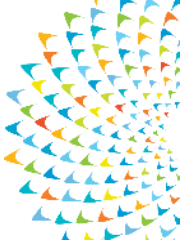
Opportunities for digitalizing health financing value chain

1. **Claims**
2. **Operations**
3. **Care management**
4. **Beneficiary management**
5. **Provider manageent**
6. **Product design**

Integration of data sources for more sophisticated decision-making

3rd party data & provider contracting data (e.g. pricing & performance)

Claims & utilization data

Data from adjacent government services (e.g. national ID, social security etc.)

Policyholder generated data, actuarial data & risk models
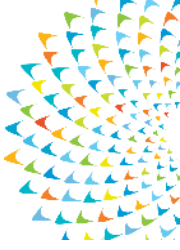
App/ website data

Descriptive
What has happened?

Predictive
What is going to happen?

Prescriptive
Suggesting the best course of action

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ADB Focus on Digital Health Innovations

TA9967: Using Digital Technology to Improve National Health Financing in Asia and Pacific

Nepal:

Bangladesh

Mongolia

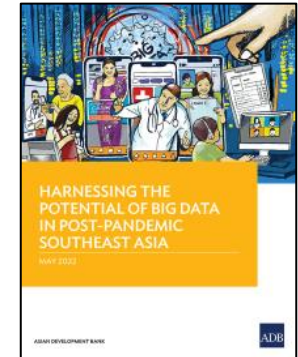Philippines

Armenia

Palao

India

Indonesia

Knowledge generation

DIGITAL HEALTH IMPLEMENTATION GUIDE FOR THE PACIFIC
MAY 2021

DIGITAL TECHNOLOGIES FOR GOVERNMENT-SUPPORTED HEALTH INSURANCE SYSTEMS IN ASIA AND THE PACIFIC
DECEMBER 2021

LEVERAGING FINTECH TO EXPAND DIGITAL HEALTH IN INDONESIA, THE PHILIPPINES, AND SINGAPORE
LESSONS FOR ASIA AND THE PACIFIC
JUNE 2022

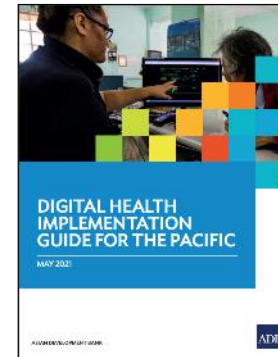HARNESSING THE POTENTIAL OF BIG DATA IN POST-PANDEMIC SOUTHEAST ASIA
MAY 2022

Innovation Challenge: Support for start-up companies in digital health financing

AV ARTIVATIC.AI

rey

Collaborating with regional organizations/networks

AeHIN

SIL-Asia

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AI for Healthcare:
Advantages & Risks
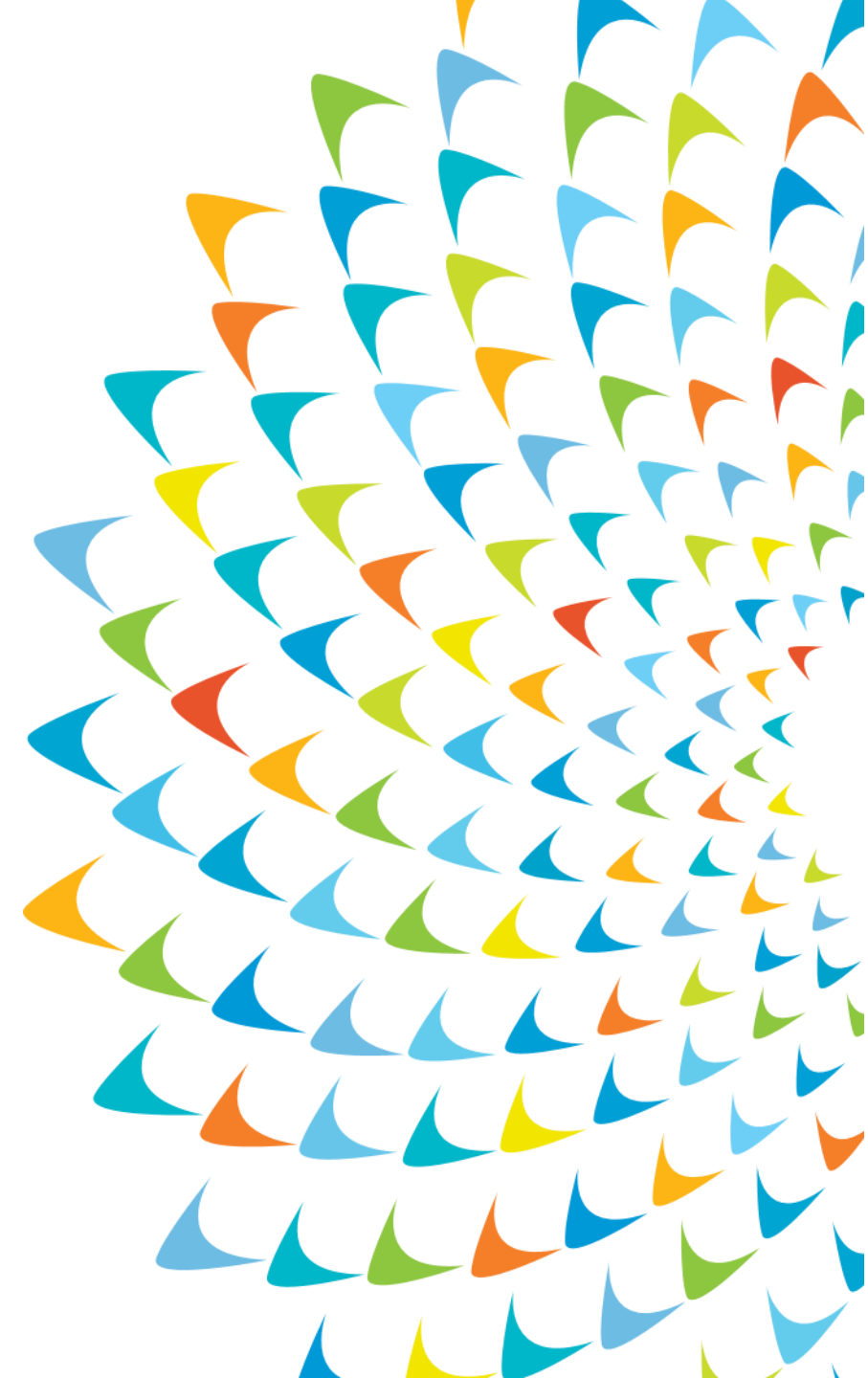
The landscape of AI in healthcare - Advantages

Predictive Analytics

Remote Monitoring

Automated Claims

1

2

3

4

5

6

Enhanced Diagnostics

Operational Efficiency

Consumer Insights

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The landscape of AI in healthcare – Potential challenges

Potential Risk

Data Privacy & Security	Data Quality & Standardization	**Data Management Risk**
Regulatory Compliance & Ethical Consideration	Bias and Fairness	**Regulatory & Ethical Risk**
Cost & Investment	Integration, Interoperability & Scalability	**Operational Risk**
Capacity building	Patient acceptance & Trust	**Capacity & Trust Risk**

The landscape of AI in healthcare – Risk mitigation strategies

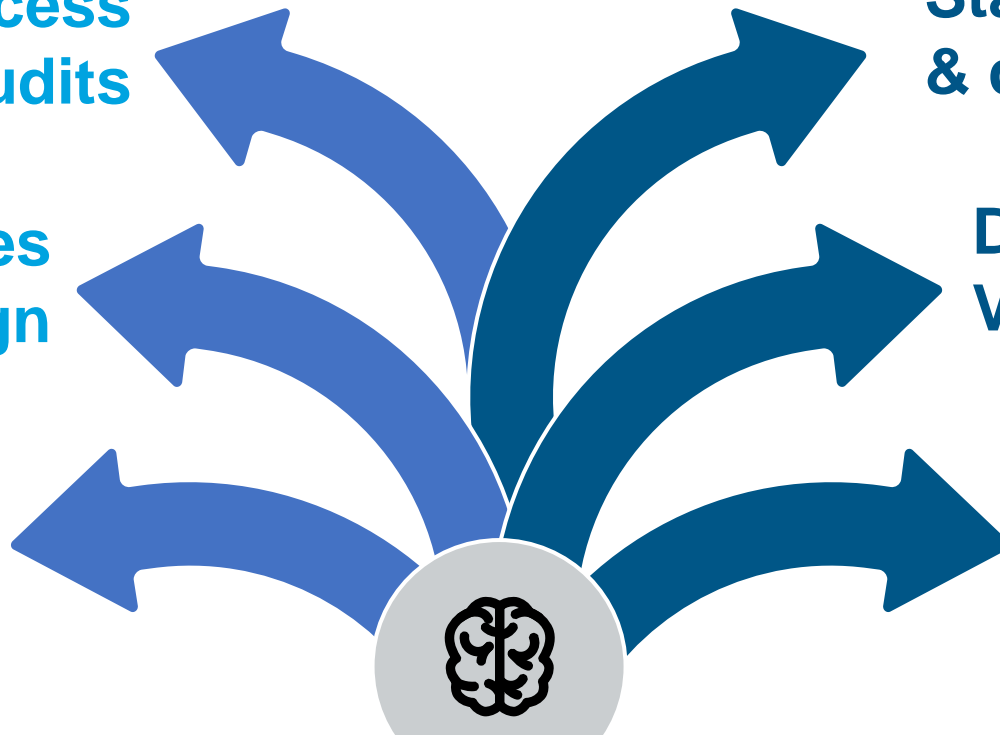**Robust Encryption, Access Controls & Regular Audits**

Adapting to Guidelines & User Centric Design

Reskilling Opportunities & Augmentation focus

Stakeholder Engagement & documentation

Decision Support & Validation

Diverse Datasets & Continuous Monitoring

Risk mitigation strategies

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Using Digital Technology to Improve National Health Financing in Asia and the Pacific
July 3 (Mon) – July 7 (Fri), 2023 | Grand Intercontinental Seoul Parnas

Thank You