

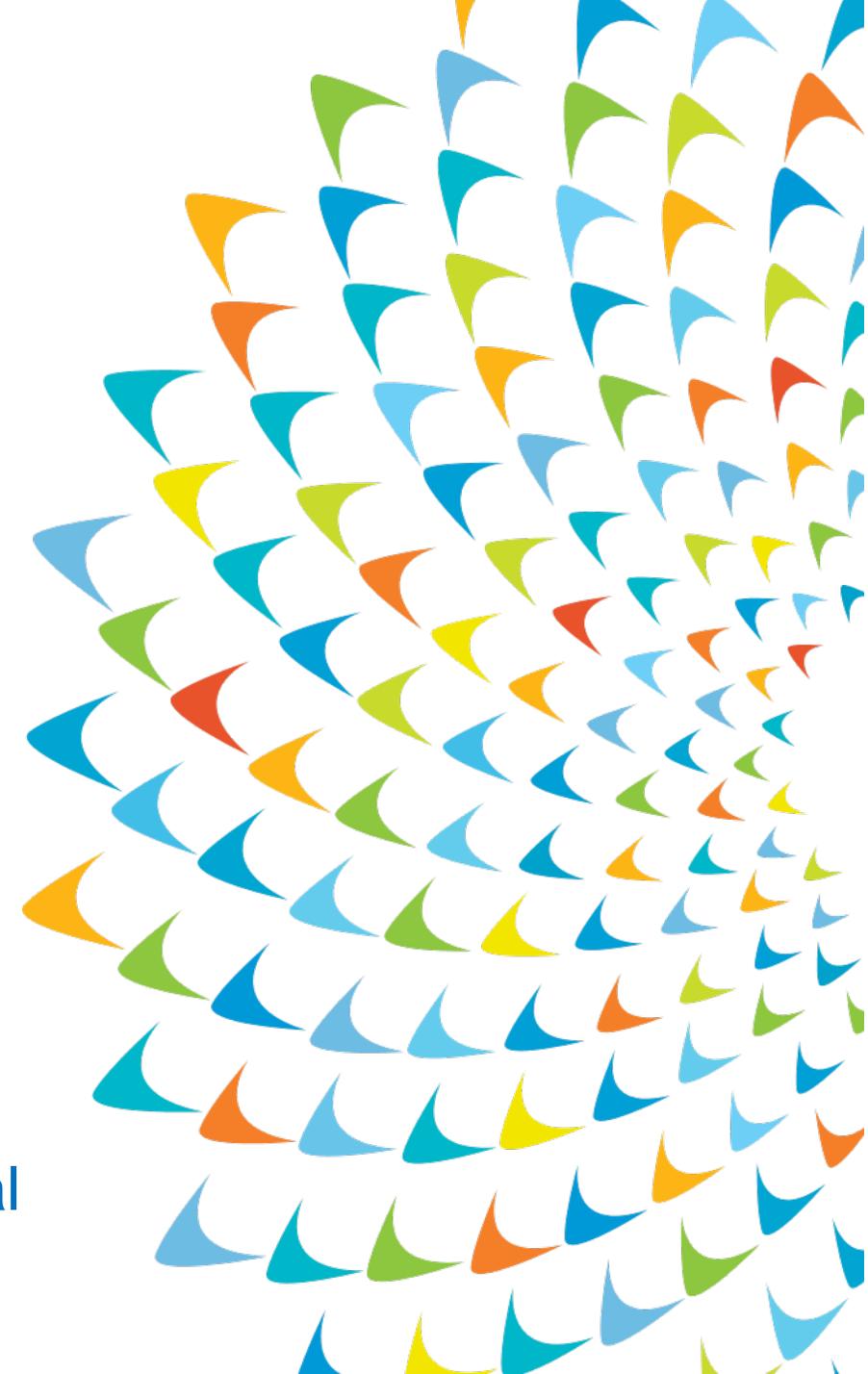


PMAC 2025 PS 1.1:

Innovative Technologies to Leverage Health
Financing for Universal Health Coverage

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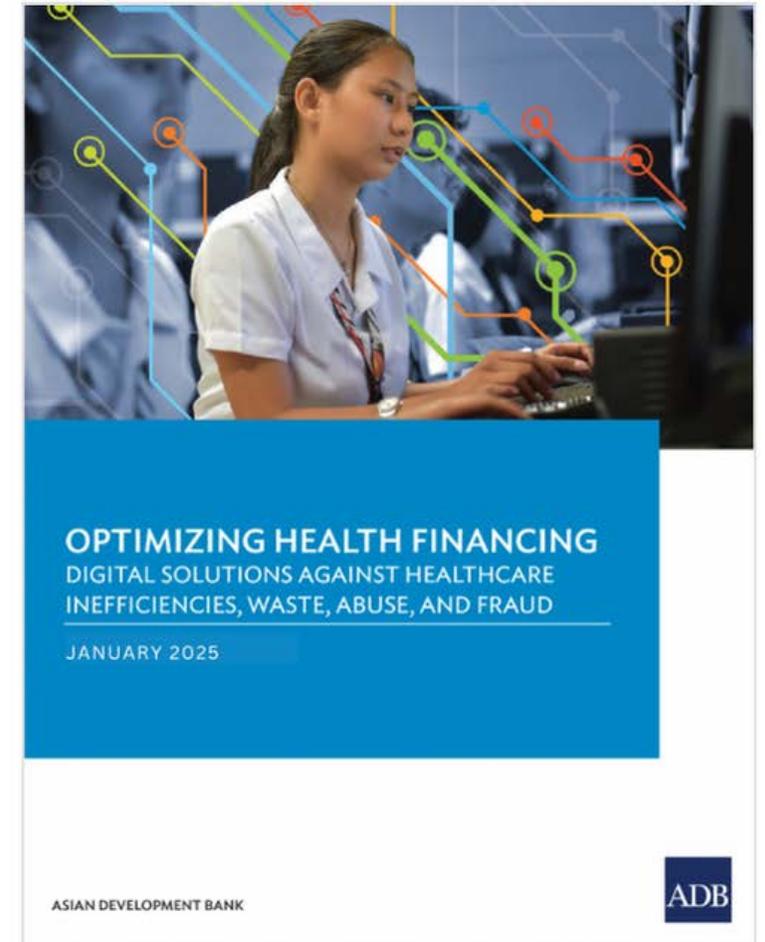
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Optimizing Health Financing Digital Solutions against Health Care Inefficiencies, Waste, Abuse, and Fraud



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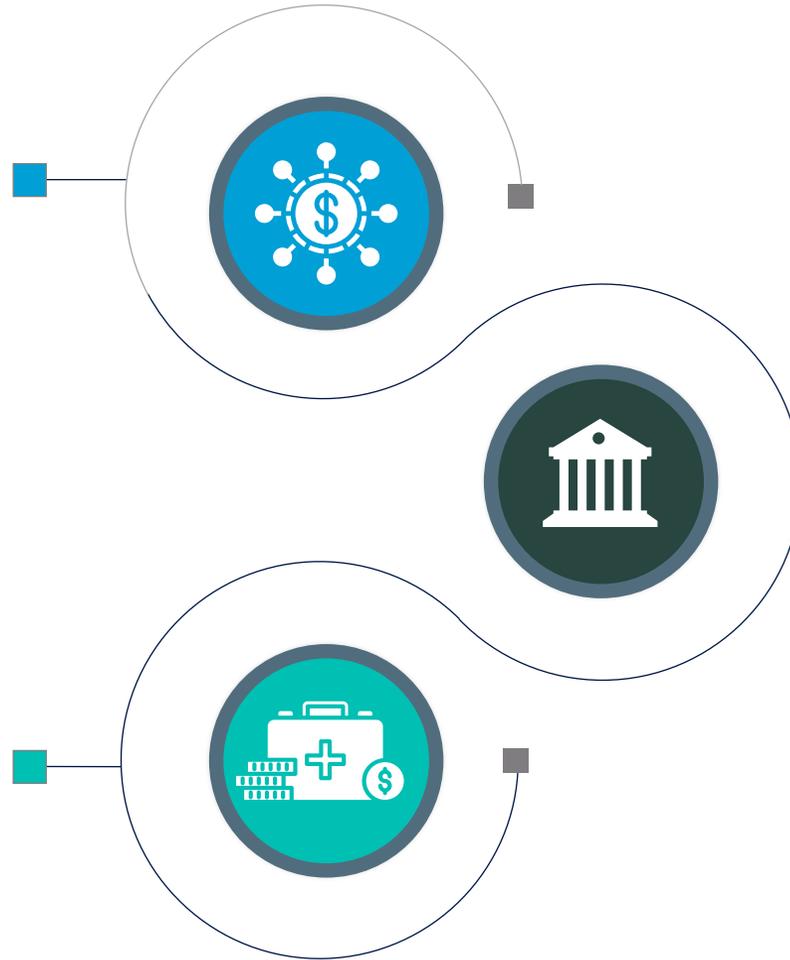
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What is Fraud, Waste & Abuse?



FWA as a major challenge facing governments and insurers across Asia-Pacific

Fraud: Activity which is typically illegal and could be charged in a court of law

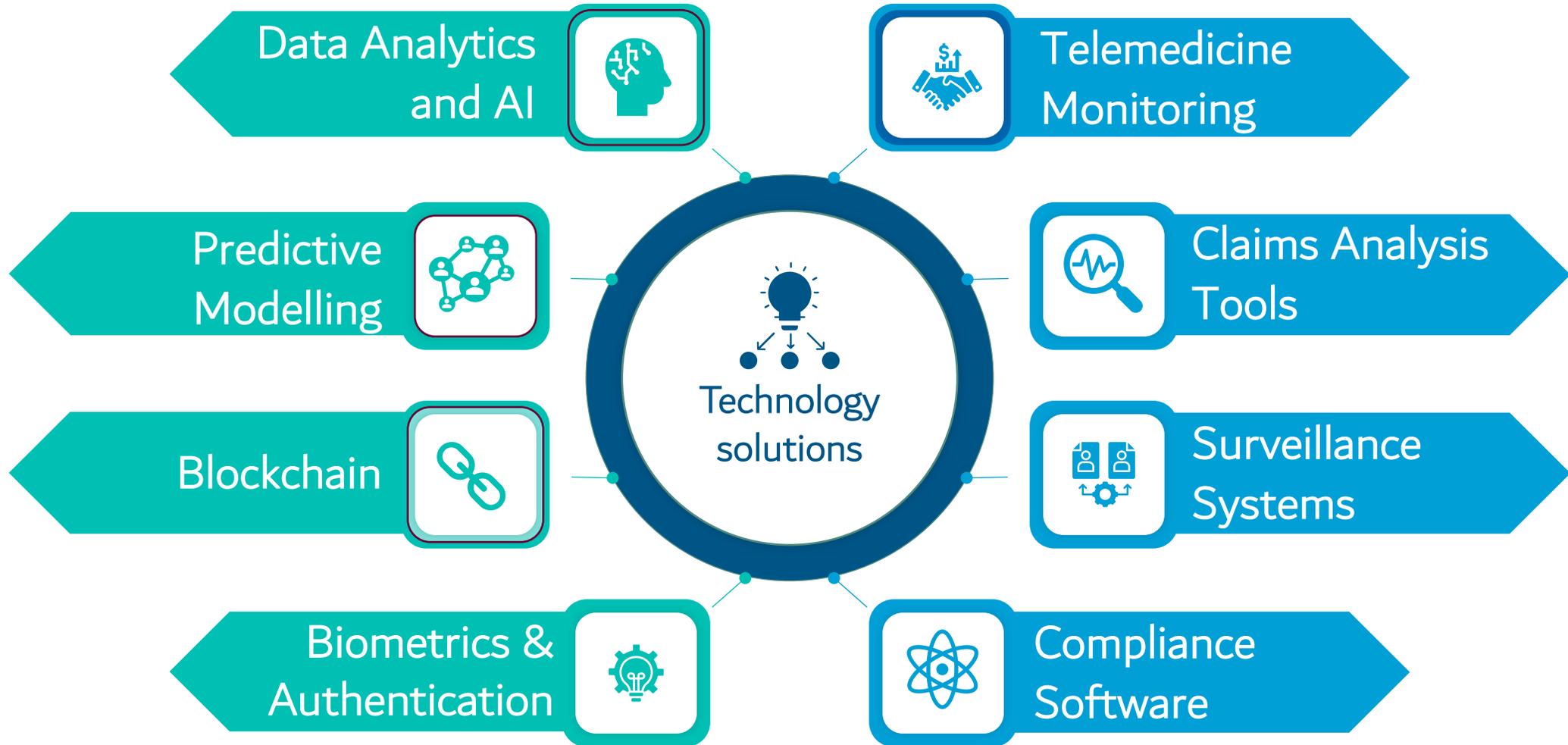


Waste: Activity which drives inefficiency and has financial impacts, but may not be intended

Abuse: Activity which is questionable and intended but often doesn't meet the legal definition of fraud

Deploying digital solutions for addressing FWA

Enhancing the ability to detect, prevent, and respond to FWA activities



Leveraged big data and AI to combat fraud and optimize monitoring



- BPJS Kesehatan is a national social health insurance scheme. By the end of 2017, BPJS had received more than 80 million claims (annually) and faced significant cost pressures and concerns about fraudulent activity.
- Indonesia invested in big data analysis and business intelligence to monitor behavioural trends and tackle fraud. They adopted machine learning to detect potential fraud more efficiently, reducing detection time and providing cost-effective solutions.
- Indonesia developed DEFRADA, a business intelligence-based fraud detection tool for hospital services, and an online pharmacy system to improve billing and drug delivery efficiency, significantly impacting fraud reduction



In 2017, DEFRADA has contributed about **25-30%** of the total efficiency gains realized by the scheme



Implemented biometric checks to help ensure the integrity of claims



- PhilHealth, a government-owned and controlled entity, was created in 1995 to provide UHC.
- PhilHealth has confronted several challenges recently, including potential internal and external fraud, waste, and abuse (e.g., providers charging for unrendered services or delivering medically unjustified services, false claims due to identity theft). Efforts are underway to enhance the systems to guard against FWA.
- One new technology example is using biometric checks at the level of health facilities to ensure the integrity of hospital claims. The biometric checks include fingerprint scanning and facial recognition to capture different facial structures and landmarks (e.g., eyes & facial contours).

In 2020, PhilHealth identified **9,200** fraudulent claims



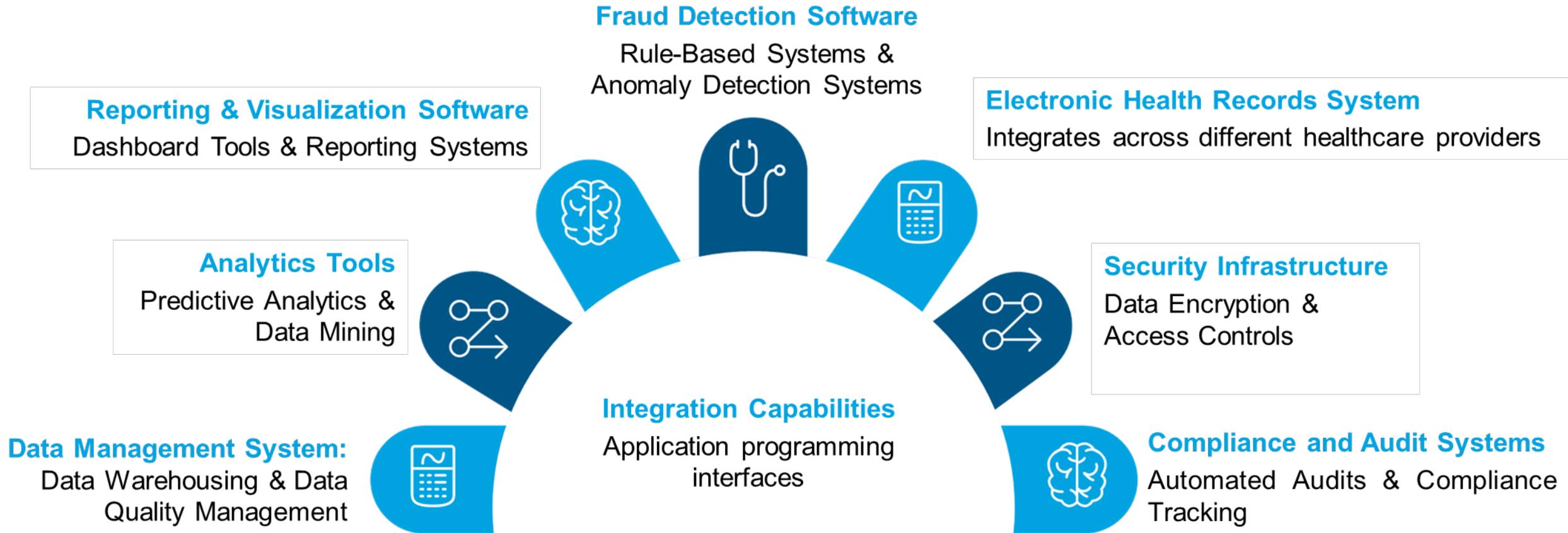
Successfully used big data analytics, Machine learning and AI to identify fraud, waste and abuse



In 2017, NHIS successfully prevented approximately **\$28million** in fraudulent claims from being released

- The National Health Insurance Service (NHIS) is the social health insurance scheme.
- It developed a fraud detection system using healthcare big data, including socio-demographic, disease, and treatment history variables.
- The system, introduced to detect and predict fraud by healthcare facilities, uses a mix of traditional rule-based and AI predictive models. It aims to prevent the establishment of illegal medical for-profit institutions and fraudulent insurance claims.
- The AI-based electronic review deploys IT technology and staff expertise to conduct a seven-step analysis. In close review, claims with a high probability of error or requiring professional medical judgment are referred to review staff for manual scrutiny.

Guidance to deploying digital solutions for addressing FWA



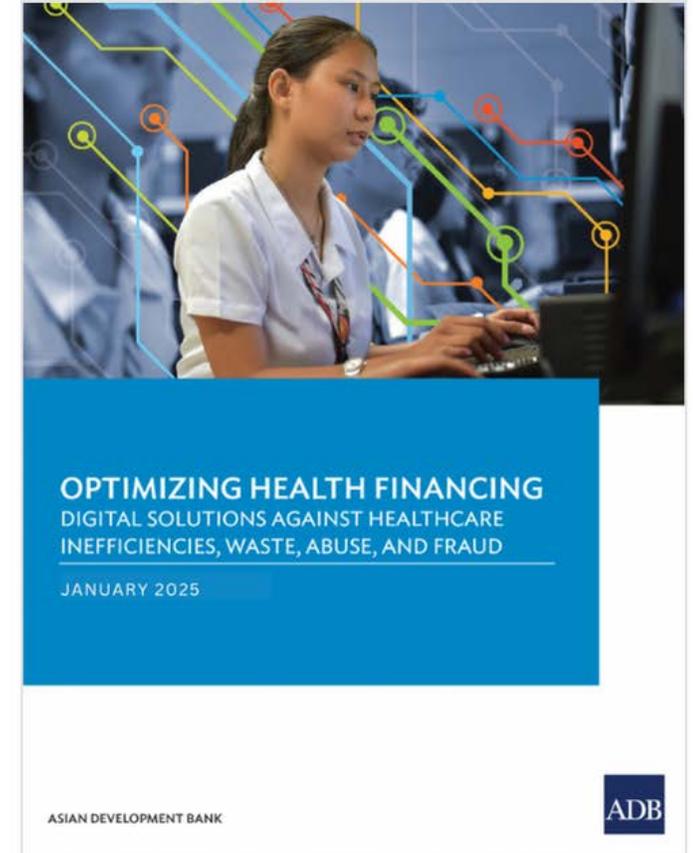
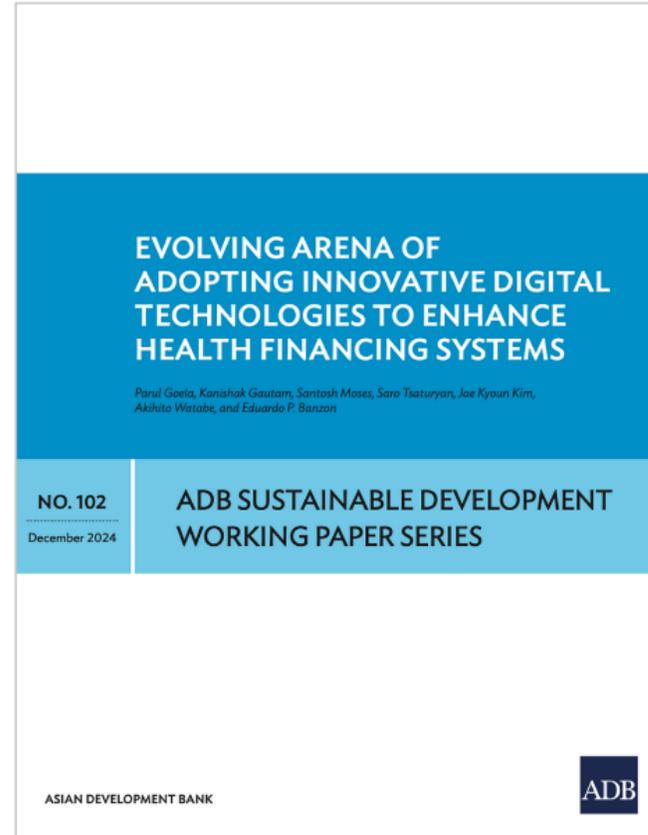
ADB's 2 New Publications on Digital Health Financing



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Key Actions for Government and Health Payers



Addressing fraud, waste, and abuse should be a policy priority given the significant health financing that likely gets lost to these issues.

- 1 Investing in technology that supports health payers in receiving claims data in structured forms is a vital step in addressing FWA
- 2 Implementing consistent use of international classification of disease coding would allow payers to appropriately analyze claims and undertake reliable local and international benchmarking to better detect FWA
- 3 Regulators and health payers should consider collecting and publicizing data on key quality indicators, such as length of stay and readmission rates
- 4 Training and developing health payer staff is a vital enabler of new models of working and successful technology deployment