



Human and Social Development Office Sectors Group

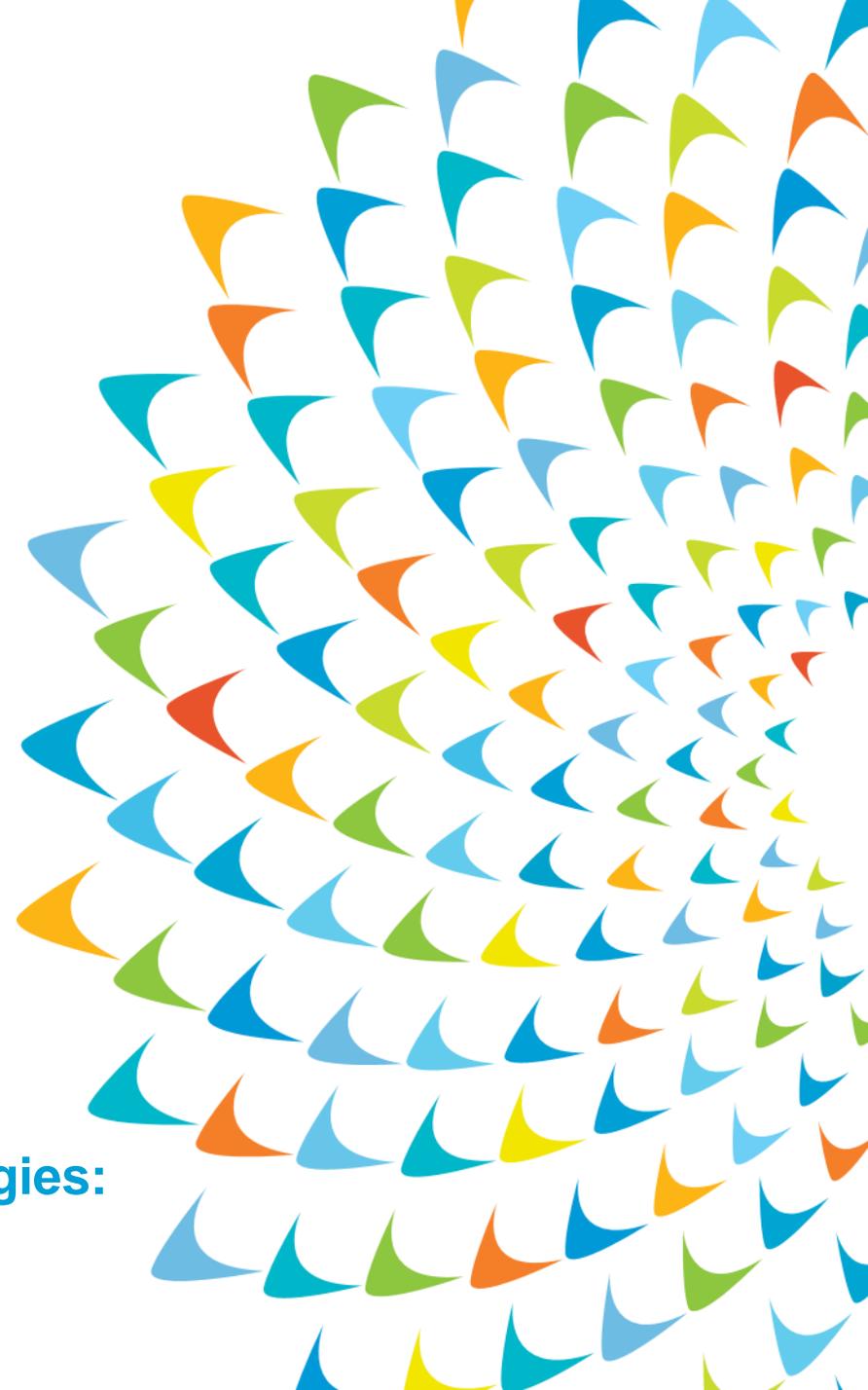
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Tackling fraud, waste and abuse in health financing

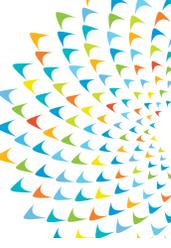
Digital solutions to support change

Webinar | April 2024

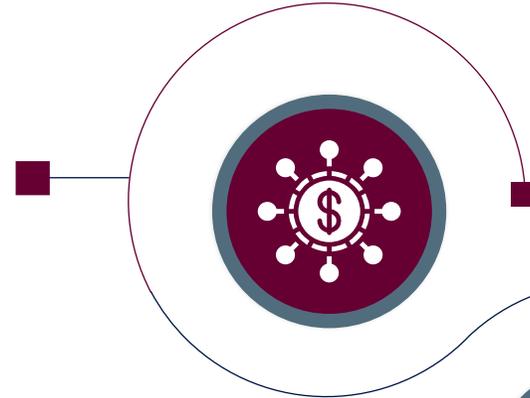
Enhancing National Health Financing through digital technologies:
Innovations and lessons from Asia and the Pacific region



Fraud, waste and abuse 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



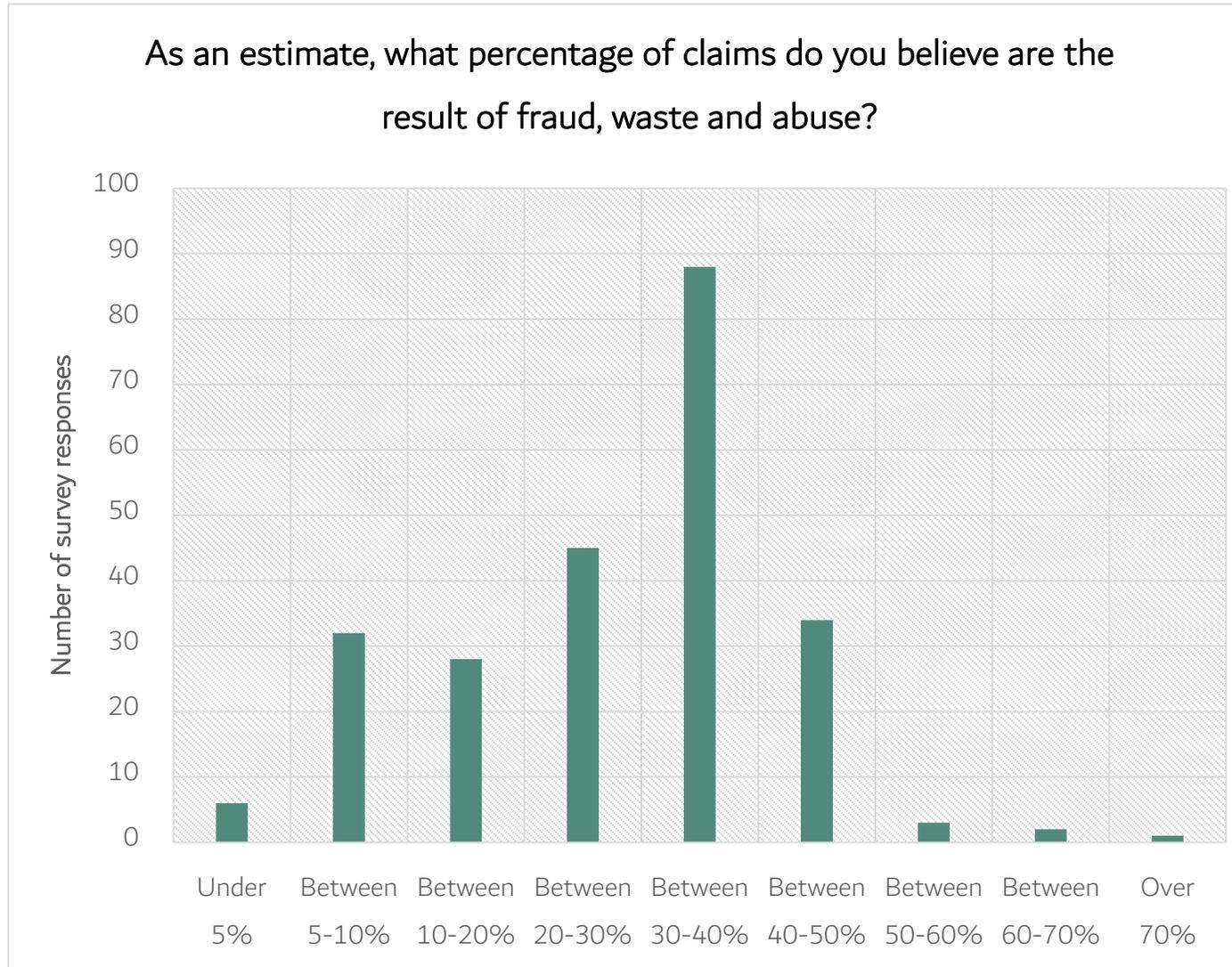
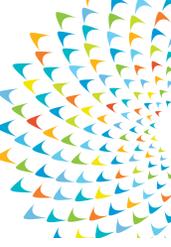
Abuse: Activity which is questionable and intended but often doesn't meet the legal definition of fraud



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

A survey to assess participant views on FWA across Asia Pacific

The majority of survey participants reported it to be a major issue.



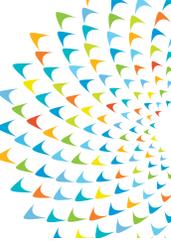
(N=239 across Asia-Pacific)

Key Findings:

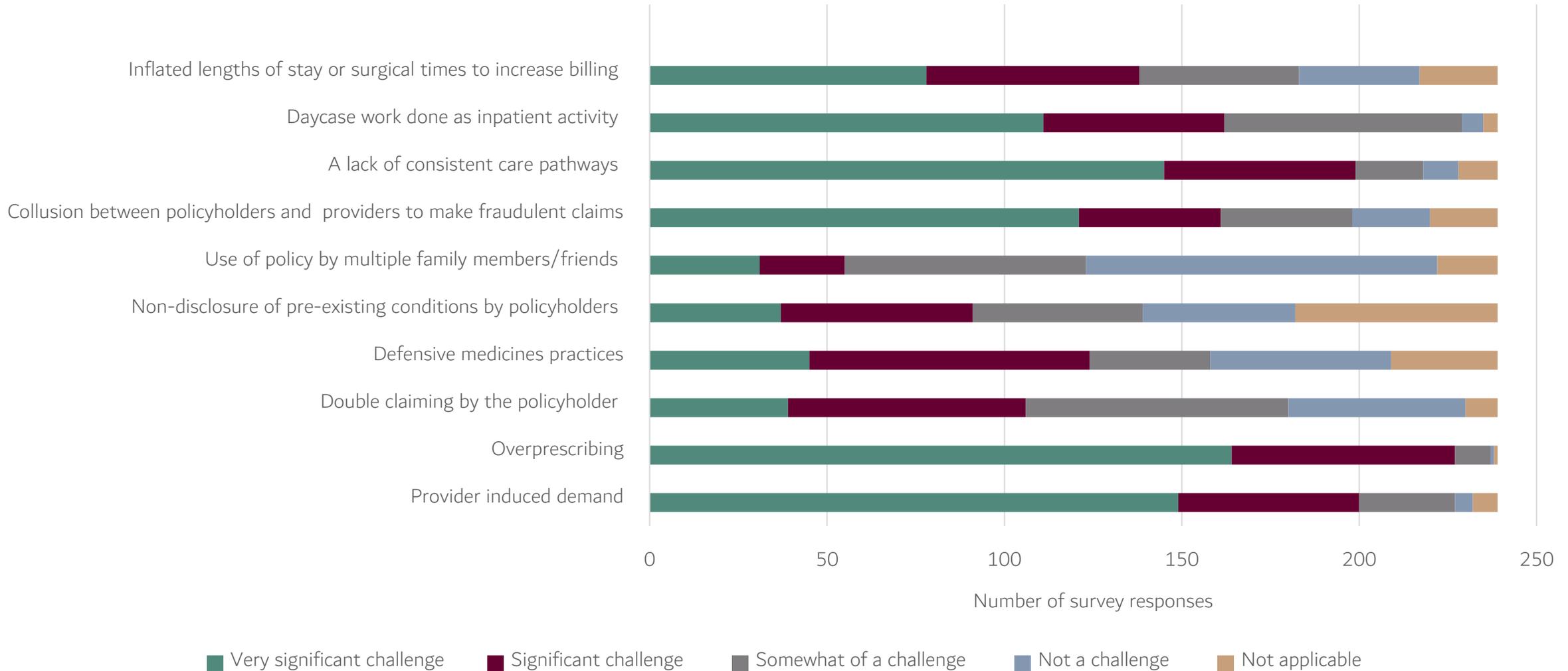
- Survey participants were from government schemes (32%), social insurers (29%), commercial insurers (39%)
- Limited differences between private and public responses, with marginally better adoption of technology in the private sector
- Public sector survey participants saw less value in punitive responses to fraud, such as legal penalties, perhaps because of a concern over enforcement

FWA were reported to manifest in numerous ways

Often driven by provider behaviour



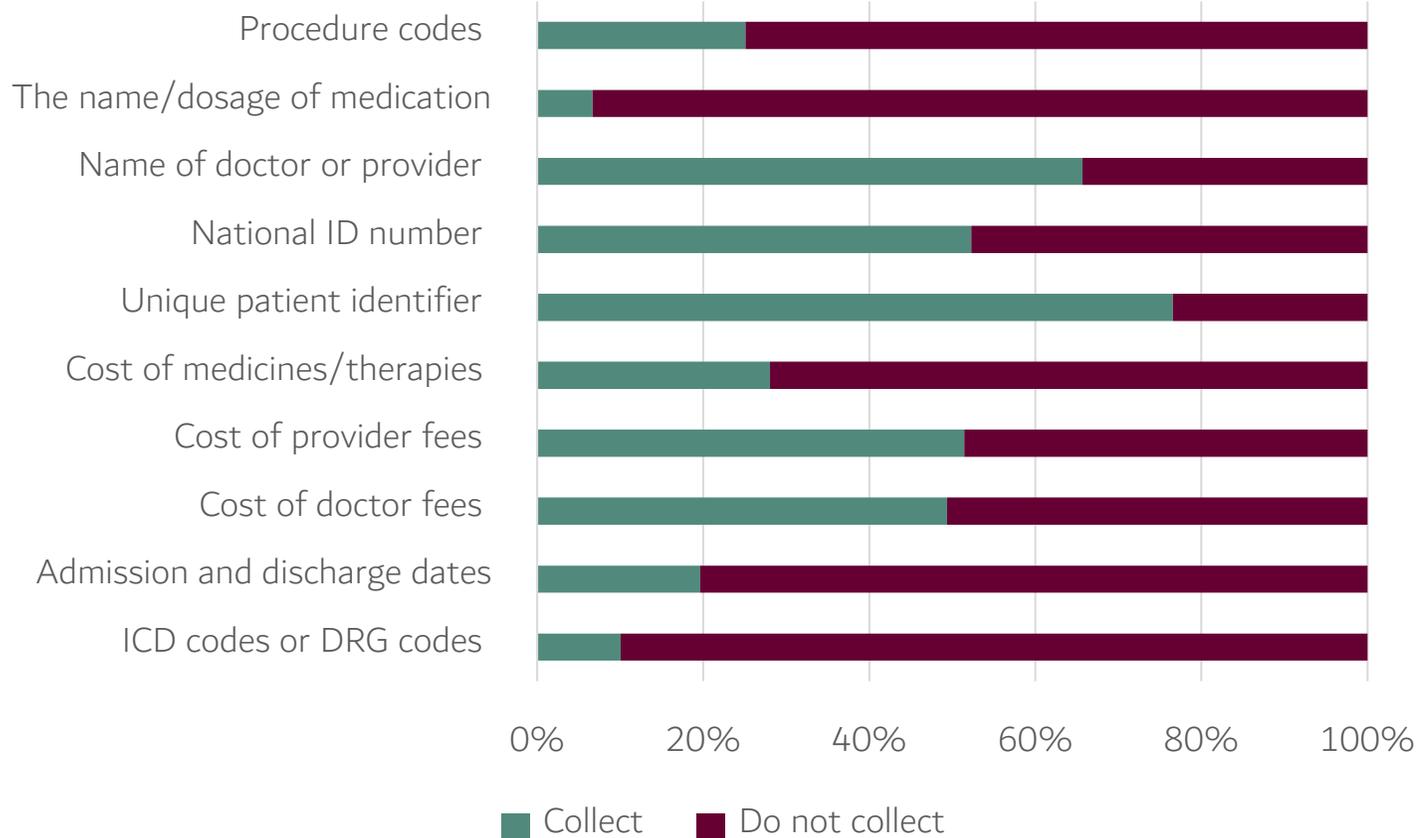
To what extent do you consider the following to be challenges faced by insurers in your country/region?



Limited FWA detection capabilities due to unstructured data



Do you collect the following as structured data?

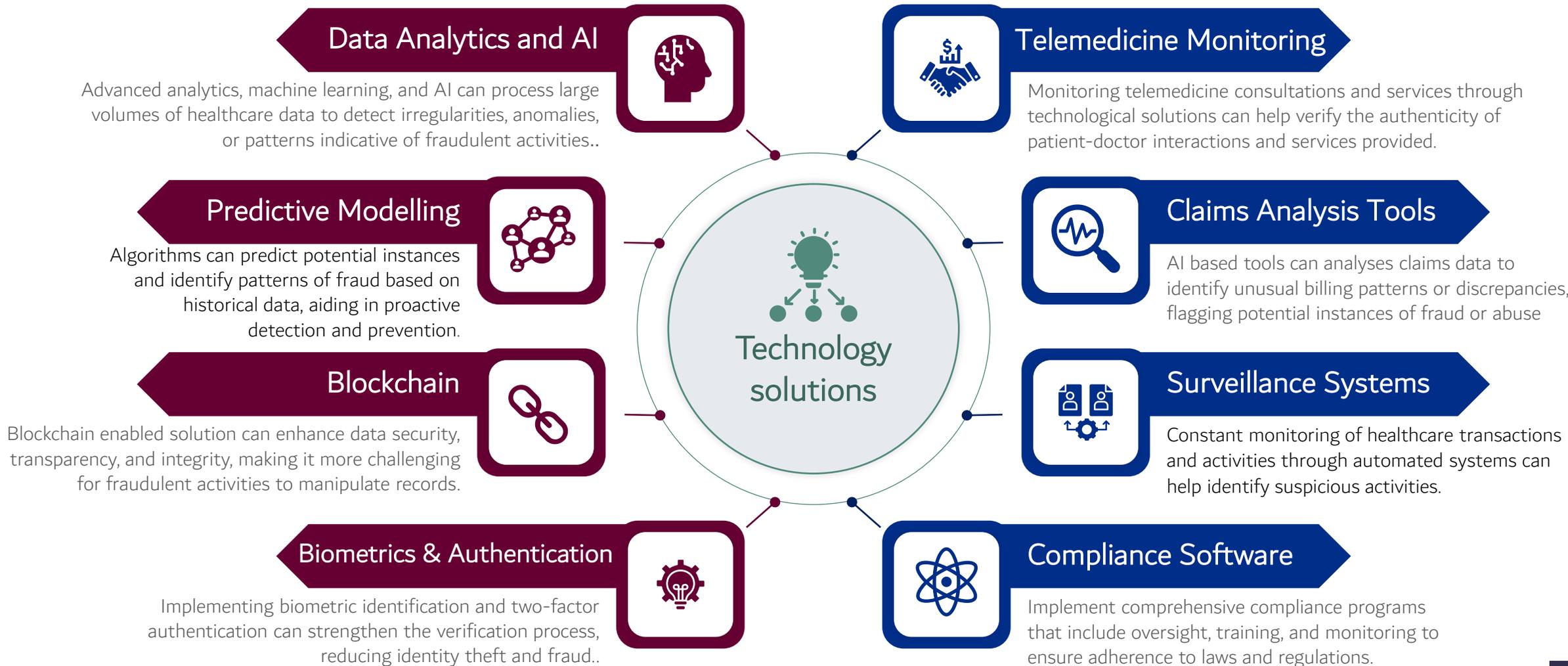


Key Findings:

- Most survey participants indicated large gaps in the structured data they received
- Whilst basic details – such as identifier and claims cost – seemed to be more routinely collect, critical information such as diagnosis codes, procedure codes and prescribed medication, was often not collected
- These gaps in structured data are likely to inhibit the ability to detect and manage fraud, waste and abuse – and need to be closed to allow improved efficiency and effectiveness of health spending



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

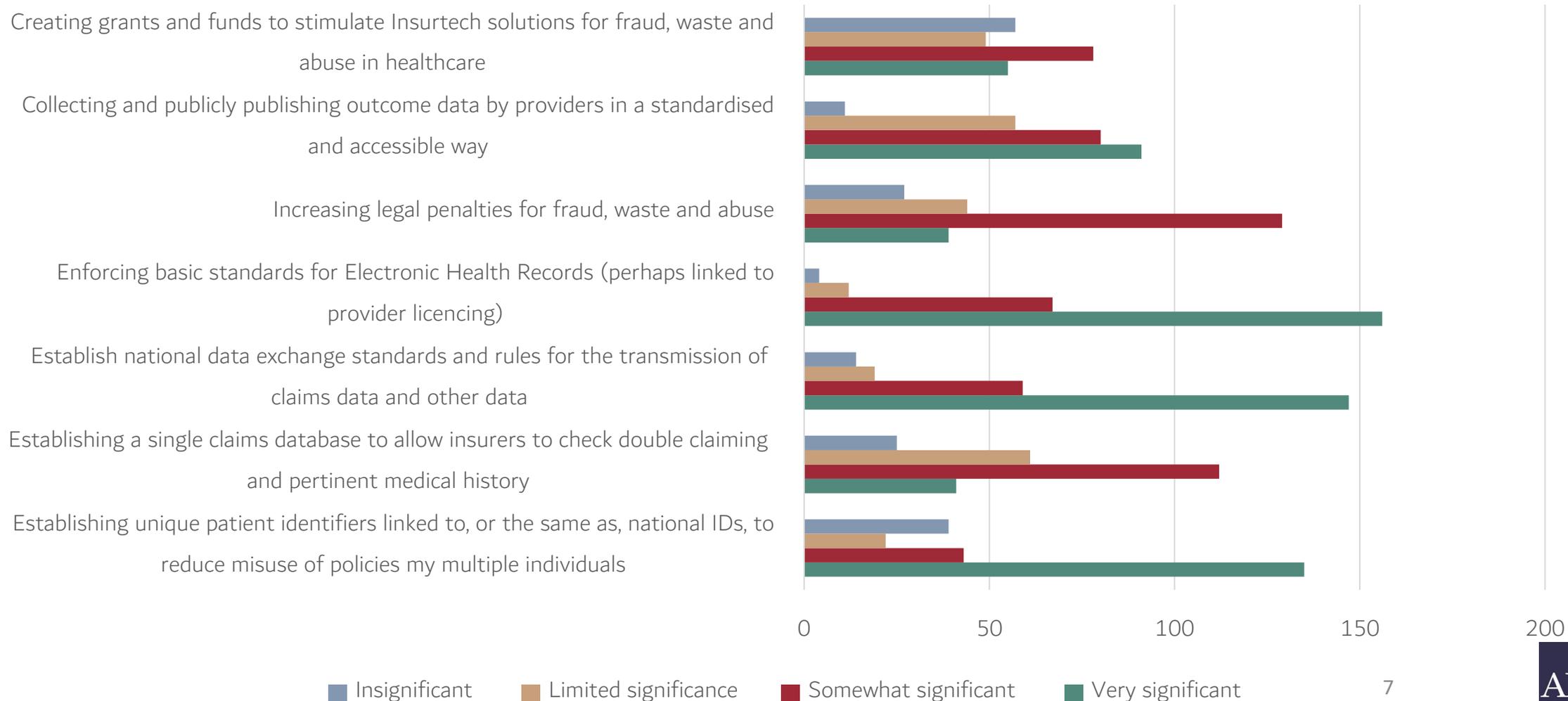


Primary levers to help manage FWA activities

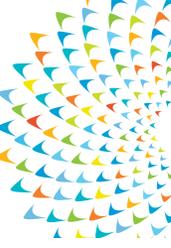
Enforcing EHS standards, effective health data exchanges and having unique identifiers for patients



What do you think governments should do to help tackle fraud, waste and abuse in health insurance?



[Indonesia] leveraged big data and AI to combat fraud and optimize monitoring



- BPJS Kesehatan is a national social health insurance scheme in Indonesia. By the end of 2017, BPJS received more than 80mil claims (annually) and faced significant cost pressures. There was concern over 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.
- They also 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

[South Korea] Successfully used big data analytics, Machine learning and AI to identify fraud, waste and abuse



In 2017, NHIS successfully prevented approximately **USD28m** in fraudulent claims from being released

- The National Health Insurance Service (NHIS) is the social health insurance scheme in South Korea
- 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.

[Philippine] Implemented biometric checks to help ensure the integrity of claims



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

- Philippines Health Insurance Cooperation (PhilHealth), a government-owned and controlled entity, was created in 1995 to provide universal health coverage for the Philippines.
- PhilHealth has confronted a series of challenges in recent years, including potential internal and external fraud, waste, and abuse. These issues, such as providers charging for services that are not rendered or delivering services that are medically unjustified and identity theft leading to false claims, are of the utmost concern. Efforts are now underway to enhance the systems to guard against FWA.
- One example of PhilHealth's new technology 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, such as eyes and facial contours.

Thank You

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