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APEC Enablers of Health Data Sharing Checklist

APEC Health Working Group - February 2026

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Introduction to the APEC Enablers for Health Data Sharing Checklist

What is the Objective of the Checklist?

The objective of the APEC Enablers for Health Data Sharing Checklist is to help APEC member economies identify actionable steps and policy enablers that facilitate effective, secure, and responsible health data sharing throughout the region. The checklist will help policymakers identify and address barriers to health data utilization, including issues related to data interoperability, cloud adoption, and data governance. By providing clear policy guidance, the checklist is to support economies in modernizing their healthcare data infrastructure, which is required to enable greater innovation in digital health, artificial intelligence (AI), and telemedicine.

Who is the Checklist for?

The key audience of the APEC Enablers of Health Data Sharing Checklist is policymakers with equities in healthcare, as well as thought leaders and policy drivers across academia, industry, and civil society. The checklist will be a flexible resource that economies can use to guide economy-level digital health initiatives and improve internal data governance.

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Fostering an Environment for Health Data Sharing

Introduction

Effective health data sharing within economies is fundamental to delivering better patient care and improving health outcomes. When healthcare providers can securely share patient information, they can make more informed decisions, reduce duplicate testing, prevent medication errors, and deliver more coordinated care. At the point of care, physicians with access to complete patient histories can make faster, better-informed decisions, potentially reducing emergency department visits and avoiding adverse events.

Beyond individual patient care, shared health data enables population health management, helps identify emerging health trends, and supports evidence-based policy making. It allows healthcare systems to more effectively allocate resources, identify at-risk populations, and implement preventive care strategies. During public health emergencies, as demonstrated during the COVID-19 pandemic, robust data sharing capabilities are also essential. For coordinated response and effective intervention, public health responses require comprehensive data sharing to enable:

- Rapid outbreak detection and response
- Evidence-based resource allocation
- Population health monitoring
- Targeted public health interventions
- Emergency preparedness

Fostering an environment for health data sharing is most effective when tailored to local priorities and system capacities. While the primary focus remains on domestic data sharing, selective cross-border collaboration can also enhance public and global health through shared research on rare diseases, early warning systems, and advanced analytics capabilities. By following the guidance outlined in the APEC Enablers of Health Data Sharing Checklist, economies can build health data sharing capabilities that improve patient care, reduce costs, and strengthen their health systems while maintaining appropriate privacy and security controls.

Key Principles for Health Data Sharing

- Leverage established international standards and frameworks to enable more efficient coordination across providers and better-informed care decisions.
- Leverage existing systems and infrastructure to accelerate impact, reduce implementation costs, and support improved outcomes at scale.
- Enable health system data flows within economies to support innovation, coordinated care, and advanced capabilities while leaving open the opportunity for cross-border flows where appropriate to support research and health management.
- Focus on risk-based approaches to protect individual privacy and trust while reducing unnecessary barriers to data use.
- Support scalable implementation based on healthcare system readiness to reduce unnecessary procedures and enable continuous system improvement.
- Minimize regulatory burdens while maintaining appropriate security and privacy controls to ensure patient data remains protected while unlocking the value of digital health investments.
- Promote a regulatory and compliance data framework that facilitates the flow and sharing of health data at the regional level in an ethical and compliant manner.
- Enable technology-neutral data protection approaches that focus on security outcomes rather than data location requirements to support innovation and cost-effective healthcare delivery.

APEC Enablers of Health Data Sharing Checklist

The APEC Enablers of Health Data Sharing Checklist outlines a series of action items and key performance indicators (KPIs) that APEC member economies can use as a guiding framework to assess their current state, implement key enablers, and measure progress toward the digital transformation of health infrastructure. These actions are intended to be adaptable, allowing each economy to tailor implementation based on its specific policy priorities, institutional capacity, and available resources. Progress should be reviewed regularly, with implementation approaches adjusted based on observed outcomes to ensure continued relevance and effectiveness.

The checklist is organized into the following eight thematic sections, each designed to reflect the core domains necessary to advance the digital transformation of health infrastructure. The associated KPIs are not intended to be exhaustive, but rather serve as practical examples to guide initial efforts in measuring readiness and implementation.

i. **Section 1: Data Governance Framework**
   a. Domestic Data Sharing Enablement
   b. Risk-Based Data Classification
   c. Privacy and Consent Management
   d. Stewardship and Lifecycle Management
ii. **Section 2: Technical Standards and Interoperability**
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vii. **Section 7: Legal Framework and Regulatory Clarity**
   a. Legal Framework Adaptation
   b. Compliance Management

Section 1: Data Governance Framework

Domestic Data Sharing Enablement

Rather than creating new regulations, economies should leverage and clarify existing frameworks to enable secure domestic health data sharing while maintaining flexibility for future cross-border capabilities.

- [ ] Map existing healthcare data protection regulations to enable domestic sharing while avoiding unnecessary data localization requirements that could limit healthcare innovation and increase costs
- [ ] Map legal basis for data processing, including compliance with data localization requirements
- [ ] Identify barriers to health data sharing between providers and data users
- [ ] Develop guidance for domestic health information exchange
- [ ] Create clear guidelines for data sharing between public and private healthcare providers
- [ ] Define clear roles and responsibilities for data stewardship
- [ ] Establish and implement legal instruments for health data protection, including enforcement and compliance mechanisms
- [ ] Adopt and maintain a domestic policy document on Health Information Exchange (HIE) that sets out standards, roles, and interoperability requirements

> *Key Performance Indicators:* Development & implementation of legal instruments for health data sharing and protection, Clear guidance on compliance issued for health institutions, economy wide policy plan and roadmap on health information exchange, percentage of population with internet access, mobile broadband coverage in rural areas, infrastructure investment incentives utilized, public-private partnerships established, universal service funds accessed.

Risk-Based Data Classification

Economies should adopt a risk-based approach to implement appropriate controls while preserving flexibility in domestic data sharing arrangements.

- [ ] Establish criteria for tiered healthcare data risk levels based on domestic use cases
- [ ] Provide examples for common health data sharing scenarios across risk levels
- [ ] Map required controls to existing member economy standards
- [ ] Create guidelines for ongoing risk assessment and adjustment
- [ ] Implement risk mitigation measures aligned with risk level to enable responsible data sharing
- [ ] Enable dynamic risk assessment for context-specific data use, including robust monitoring and evaluation for continuous improvement

Key Performance Indicators: cloud adoption guidance implemented, clinical system migration paths identified, benefits realization tracking enabled, service continuity maintained, healthcare startup ecosystem supported, percentage of data correctly classified, organizations implementing risk-based controls, audit findings and incident reporting to track improvement, frequency of risk reviews, incidents by risk level, control adjustment time.

Privacy and Consent Management

Privacy frameworks should enable both patient rights and healthcare innovation, focusing on efficient domestic data sharing while maintaining flexibility for international capabilities.

- [ ] Align on transparent, explicit, and informed consent mechanisms with domestic and international healthcare practices
- [ ] Develop guidelines for data sharing between healthcare providers, only collecting data that is strictly necessary
- [ ] Establish processes for patient data access rights and consent management,
- [ ] Enable efficient consent management across health systems, providing adequate and relevant information to research participants in their common language
- [ ] Implement shared responsibility model for data protection while clearly defining roles and responsibilities of data controllers/processors
- [ ] Enable deployer flexibility over data location and movement with safeguards that uphold privacy and security
- [ ] Support granular access controls for data sharing according to classification level
- [ ] Implement practical protections and interoperability standards through regulation
- [ ] Promote public education, digital literacy, and co-design through inclusive engagement strategies

Key Performance Indicators: cloud-specific privacy guidance established, health data transfer mechanisms clarified, international standards adopted, privacy safeguards maintained, implementation support provided, tools for patients to access health records, privacy controls documented via privacy impact assessment, monitoring the number of Data Subject Access Request requests.

Stewardship and Lifecycle Management

Ensure end-to-end governance of health data through retention, archival, de-identification, and responsible system decommissioning.
- [ ] Define and implement data retention policies aligned with regulatory and clinical requirements
- [ ] Establish archival protocols that ensure long-term data integrity, accessibility, and security

- [ ] Develop criteria and procedures for decommissioning obsolete datasets and legacy systems
- [ ] Integrate de-identification and anonymization techniques throughout the data lifecycle to mitigate re-identification risks.

Key Performance Indicators: data retention and archival policies published, legacy systems decommissioned based on defined criteria, de-identification standards implemented and audited, lifecycle governance roles assigned and documented, compliance with data sunsetting protocols monitored, automated enforcement tools deployed, public-facing data inventories maintained, frequency of lifecycle audits tracked.

Section 2: Technical Standards and Interoperability

Domestic Healthcare Data Exchange

Economies should encourage organizations to leverage established standards to enable domestic interoperability while minimizing the implementation burden and enabling efficient data sharing within the economy. Use of internationally recognized standards enable future inter-economy data sharing where ambition and agreement allows.

- [ ] Adopt established healthcare data standards suitable for domestic use
- [ ] Implement controlled terminology across domestic health systems
- [ ] Align API specifications for domestic health information exchange
- [ ] Promote systematic data exchange for secondary use of health data through implementation and adoption of international standards
- [ ] Invest in economy-wide health information exchange (HIE) platforms and cloud based architectures

Key Performance Indicators: established healthcare data standards adopted, common terminology implemented across systems, API specifications aligned, domestic data quality frameworks established, investments in economy wide HIE platforms made.

Data Quality Management

Economies should implement comprehensive data quality frameworks to ensure health data is accurate, consistent, organized, and reliable for clinical use and analysis.

- [ ] Establish baseline data quality standards; including minimum data sets, accuracy and consistency thresholds, standardized terminologies, and ensuring temporal data validity
- [ ] Adopt standardized data formats that include semantic interoperability, classifying information into categories related to diagnosis and treatment, nursing care, health promotion, and preventive medicine
- [ ] Create data quality monitoring processes: with automated validation, and data correction workflows
- [ ] Establish data quality metrics and reporting and continuous improvement mechanisms

Key Performance Indicators: Data completeness rates, accuracy scores, standardization compliance levels, error detection rates, correction response times.

Cloud Service Provider Engagement

Rather than creating new requirements, economies should encourage organizations to leverage existing certifications while ensuring cloud services meet domestic healthcare needs.

- [ ] Align compliance certifications with existing frameworks
- [ ] Enable secure data sharing through native cloud capabilities
- [ ] Implement temporary access mechanisms for specific data sharing needs
- [ ] Utilize pre-built security tools and services

Key Performance Indicators: compliance certifications aligned with existing frameworks, secure data sharing enabled through native cloud capabilities, temporary access mechanisms implemented, pre-built security tools and services utilized.

Section 3: Security Framework

Security Standards

Economies should encourage organizations to leverage existing security frameworks to enable secure domestic health data sharing while maintaining flexibility for international standards alignment.

- [ ] Adopt recognized security frameworks suitable for domestic healthcare
- [ ] Implement common encryption standards across health systems
- [ ] Align access controls for domestic health data sharing
- [ ] Use established incident response frameworks
- [ ] Avoid unique economy level frameworks or standards which limit adoption

Key Performance Indicators: recognized security frameworks adopted for domestic healthcare, implemented common end-to-end encryption in transit and at rest, provided secure ID and access controls, applied de identification and anonymization techniques before data sharing, adopted recognized ISO standards applicable to security, established incident response frameworks

Security Responsibility Allocation

Establish a clear delineation of security responsibilities to ensure comprehensive protection while maintaining organizational control over sensitive health data.

- [ ] Document security responsibilities across all parties
- [ ] Implement clear data protection protocols with roles and responsibilities clearly defined
- [ ] Leverage provider security capabilities
- [ ] Maintain visibility and control over security controls

Key Performance Indicators: percentage of deployments with documented security responsibilities, number of deployer-controlled configurations implemented, provider security features actively used, frequency of security responsibility reviews, availability of real-time visibility tools.

Risk Management

Risk management should focus on practical domestic requirements while allowing organizations to adapt international best practices to local context.

- [ ] Apply risk assessment methodologies to domestic sharing scenarios
- [ ] Enable flexible approaches to internal data flows
- [ ] Map controls to domestic healthcare requirements
- [ ] Accept international security certifications
- [ ] Implement cross-functional collaborative risk review processes
- [ ] Conduct training to relevant heath professional teams on privacy, security legal risks and ethical data use

Key Performance Indicators: risk assessment methodologies applied to domestic sharing scenarios, flexible approaches enabled for internal data flows, controls mapped to healthcare-specific requirements, collaborative risk review processes implemented.

Section 4: Implementation Support

Procurement Frameworks

Economies should encourage organizations to utilize existing procurement mechanisms to reduce administrative burden while ensuring value for money in domestic health IT investments.

- [ ] Leverage existing procurement mechanisms
- [ ] Use standard agreements for domestic health IT services
- [ ] Access whole-of-government arrangements where available
- [ ] Implement value assessment frameworks

Key Performance Indicators: existing procurement mechanisms leveraged, standard agreements used for health IT services, whole-of-government arrangements accessed, value assessment frameworks implemented, Heath IT providers implemented compliant data security and privacy safeguards.

Public-Private Partnerships

Economies should foster collaboration between public and private sectors to accelerate the implementation of health data sharing initiatives.

- [ ] Establish frameworks for public-private health data partnerships for example IDERHA in the EU
- [ ] Create incentive programs for private sector participation
- [ ] Develop joint innovation hubs for health data solutions
- [ ] Enable shared funding models for infrastructure development
- [ ] Develop agreements for public-private partnerships that accommodate respective procedures
- [ ] Develop data exchange platforms for deidentified data that can be used for research and development as well as supporting specific healthcare initiatives.

Key Performance Indicators: number of public-private partnerships established, percentage of registered private healthcare provider in domestic HIE platforms, private sector investment in health data initiatives, joint innovations developed, shared infrastructure projects implemented, collaborative governance models adopted.

Change Management Support

Economies should provide resources and guidance to help healthcare organizations manage the cultural and operational changes associated with implementing health data sharing.

- [ ] Leverage established international change management toolkits tailored for healthcare organizations
- [ ] Establish leadership and upskilling training programs for digital health transformation
- [ ] Create stakeholder engagement frameworks that applies the pentahelix model to enable multi-sectoral collaboration
- [ ] Implement best practices for organizational culture shift
- [ ] Provide resources for managing resistance to change

Key Performance Indicators: change management toolkits utilized, leaders trained in digital health transformation, stakeholder engagement levels, cultural readiness assessments conducted, reduction in change resistance incidents.

Section 5: Healthcare System Integration

Health System Connectivity

Economies should focus on connecting healthcare providers within the economy while leveraging existing infrastructure and minimizing additional investment requirements.

- [ ] Enable data sharing with functional and semantic interoperability between public healthcare providers
- [ ] Establish connectivity with private healthcare sector
- [ ] Implement domestic health information exchange
- [ ] Support rural and remote healthcare connection

Key Performance Indicators: data sharing enabled between public and private providers, rural and remote healthcare connectivity established, interoperability across sectors supported to support continuity of care.

Clinical Integration

Practical clinical data sharing should improve patient care while minimizing disruption to existing healthcare delivery.

- [ ] Support integration with existing clinical workflows
- [ ] Enable shared access to de identified patient records
- [ ] Facilitate referral processes and standardized continuation of care documents between providers
- [ ] Implement domestic e-prescription capabilities

Key Performance Indicators: integration of different types of healthcare information systems to enable access to information & support operations at the provider level; clinical workflow impact assessed, AI/ML capabilities enabled in clinical settings, continuity of patient care maintained, research capabilities enhanced.

Section 6: Innovation and Research

Domestic Research Enablement

Economies should enable domestic research and innovation while maintaining flexibility for international collaboration opportunities.

- [ ] Support health research collaboration within the economy
- [ ] Promote common data models (CDMs) for data exchange
- [ ] Prioritize interoperable cross-border research consortia, especially for emerging diseases, rare conditions, and pandemics.
- [ ] Enable data sharing between research institutions
- [ ] Identify and routinely publish key domestic health datasets at the most granular level acceptable
- [ ] Facilitate public-private research partnerships
- [ ] Support healthcare innovation ecosystem

Key Performance Indicators: health research collaboration supported within the economy, data sharing enabled between research institutions, federated learning methods available, percent availability of key domestic health datasets, public-private research partnerships facilitated, and access to real world evidence anonymized data bases.

Advanced Analytics Implementation

Economies should support advanced analytical capabilities that benefit domestic healthcare delivery while maintaining access to international technology capabilities.

- [ ] Enable responsible AI/ML use in domestic clinical settings
- [ ] Encourage adoption of ethical AI principles, model validation pipelines, and regulatory sandboxes for implementation
- [ ] Support population health analytics
- [ ] Facilitate clinical decision support capabilities
- [ ] Increase access to de-identified, minimally aggregated healthcare data
- [ ] Enable predictive healthcare analytics

Key Performance Indicators: AI/ML use enabled in healthcare settings, population health analytics supported, clinical decision support facilitated, predictive healthcare analytics implemented, and publication of key domestic health datasets in minimally aggregated, machine-readable format.

Section 7: Legal Framework and Regulatory Clarity

Legal Framework Adaptation

Existing legal frameworks should be adapted to provide certainty for domestic health data sharing while maintaining flexibility for future needs.

- [ ] Clarify existing privacy and data protection regulations
- [ ] Provide certainty for domestic health data sharing
- [ ] Enable cloud adoption in healthcare settings
- [ ] Support innovation while maintaining privacy, security, and responsible protection of and human rights protections
- [ ] Clarify shared responsibility models for data protection
- [ ] Enable use of pre-certified cloud services
- [ ] Focus data protection requirements on security outcomes rather than physical location of data

Key Performance Indicators: cloud services explicitly recognized in relevant regulations, clear guidance issued on the use of cloud for health data, legal frameworks adapted to support cloud adoption.

Compliance Management

Economies should encourage organizations to utilize available compliance capabilities while maintaining control over their compliance obligations and data governance decisions.

- [ ] Leverage provider compliance capabilities
- [ ] Implement user -specific compliance controls
- [ ] Maintain control over data governance
- [ ] Document compliance responsibilities

Key Performance Indicators: number of healthcare organizations leveraging provider-led compliance tools or attestations, percentage of health IT systems with documented customer-specific compliance controls, average time required to complete compliance reporting or certification reviews.

Implementation Guidance

Provide practical guidance that enables domestic health data sharing while minimizing regulatory burden.

- [ ] Develop clear guidance for healthcare providers
- [ ] Establish practical compliance pathways
- [ ] Enable efficient approval processes
- [ ] Support innovative care models
- [ ] Consider mandates and incentives for acceleration of health system connectivity

Key Performance Indicators: clear guidance developed for healthcare providers, practical compliance pathways established, efficient approval processes enabled, innovative care models supported, mandates or incentives considered to accelerate health system connectivity.

Section 8: Sustainability and Optimization

Financial Sustainability

Economies should focus on sustainable, cost-effective approaches to domestic health data sharing.

- [ ] Implement cost-effective data sharing approaches
- [ ] Enable shared infrastructure where appropriate
- [ ] Support efficient resource utilization
- [ ] Enable continuous improvement

Key Performance Indicators: cost-effective data sharing approaches implemented, shared infrastructure enabled where appropriate, resource utilization optimized, continuous improvement supported.

Healthcare Workforce Enablement

Economies should support the healthcare workforce in effectively using shared health information while minimizing additional training burden.

- [ ] Promote digital literacy amongst healthcare workers
- [ ] Conduct awareness and communication campaigns on ethical data use
- [ ] Enable secure and efficient access to patient information using granular role based access controls
- [ ] Support clinical decision making
- [ ] Encourage best practice sharing and academic partnerships to enable continuous learning

Key Performance Indicators: vendor-provided training programs utilized, online learning platforms accessed, healthcare-specific cloud courses identified, certification paths established and clinical staff learning paths defined.

Appendix A: Case Studies

Chinese Taipei

Chinese Taipei has demonstrated notable progress in advancing interoperable, standards-based health data systems. Through the adoption of global health data standards such as HL7 FHIR, SNOMED CT, LOINC, and RxNorm, Chinese Taipei is unifying its electronic health record (EHR) infrastructure to strengthen digital health integration and data exchange. This standards-driven approach not only improves the efficiency and consistency of health information across institutions but also positions Chinese Taipei as a model for other advanced economies. The alignment of the APEC Health Data Sharing Checklist with these internationally recognized frameworks further reinforces its applicability and value to Chinese Taipei's digital health strategy.

The United States

The Observational Health Data Sciences and Informatics (OHDSI) initiative at Columbia University is an international cross-sector collaboration designed to accelerate data-driven innovation through the creation of shared, standardized data ecosystems. OHDSI integrates diverse datasets from a variety of sources, including from governments, private sector entities, and research institutions, by using common data models (CDMs) and open-source analytical tools. This has led to high quality, trustworthy data repositories and has enabled secure and privacy preserving collaboration between diverse stakeholders across the globe. OHDSI has had a significant impact on healthcare progress, which was particularly evident during the Covid-19 pandemic. As a public data-sharing repository, it played a critical role in monitoring the safety and efficacy of vaccines – which was used to inform clinical guidelines and public health responses worldwide. For more information visit: https://www.ohdsi.org/.

Appendix B: Expert Working Group Members

Name	Title	Organization	Economy
Mr. Andrew Wiltshire	Head of Healthcare Public Policy (APAC)	Amazon Web Services	Australia
Mr. Park Jeemin	Senior Deputy Director, Division of Healthcare Information Policy	Ministry of Health and Welfare (MOHW), Republic of Korea	Republic of Korea
Mr. Sani Mohamed	Head, Foresight Division	Malaysian Communications and Multimedia Commission (MCMC)	Malaysia
Dr. Vivek Jason a/l Jayaraj	Public Health Medicine Specialist Data Analytics and Informatics Branch Digital Health Division	Ministry of Health, Malaysia	Malaysia
Dr. Hammad Fahli bin Sidek	Senior Principal Assistant Director Health Informatics Centre Planning Division	Ministry of Health, Malaysia	Malaysia
Dr. Adam Chee	Associate Professor; HL7 Singapore Chair	Saw Swee Hock School of Public Health; Founding Lead Centre of AI Enabled Health	Singapore
Dr. Chien-Chang Lee	Chief Information Officer (CIO)	Ministry of Health and Welfare (MOHW), Chinese Taipei	Chinese Taipei
Mrs. Kanokwan Mapong	Deputy Director, Information and Communication	Ministry of Public Health, Thailand	Thailand

	Technology Center		
Ms. Shweta Bhardwaj	Worldwide Director, Digital & R&D Policy	Johnson & Johnson	The United States

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