REPORT

Caribbean Connect

Building the Pan-American Highway for Digital Health

July 23-25 2024

Kingston

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Introduction

From July 23-25th 2024, representatives from seven Caribbean countries and international partner organizations gathered in Kingston, Jamaica for *Caribbean Connect: Building the Pan-American Highway for Digital Health*. Hosted by the Inter-American Development Bank (IDB) and the Pan-American Health Organization (PAHO/WHO), the objective of the conference was to provide a platform for information sharing, learning, and strategic priority setting among Caribbean countries with active IDB operations related to digital health. Caribbean Connect also introduced participants to the vision for the *Pan-American Highway for Digital Health (PH4H),* an initiative led by the IDB and PAHO/WHO, and engaged countries to contribute to the initiative in advance of its formal launch in October 2024.

Group photo with country representatives, leaders from the IDB and PAHO/WHO, and Jamaica's Minister of Health and Wellness. A full video on the event can be found here.

One of the key lessons learned from global experiences is that digital health requires a multi-disciplinary approach at both the technical and strategic levels. A successful digital transformation of the health sector requires leadership and technical expertise not only from the field of information technology, but also from a range of clinical and public health disciplines, information management, health system planning, and emerging integrated fields such as health informatics. As such, invitations for the conference were extended to a multi-disciplinary profile of participants within each country to support the development of the required digital health capacities and to foster a broader range of stakeholder engagement and knowledge sharing.

The conference encompassed a variety of modalities, including concurrent sessions focused on discussions in technical and leadership streams that included presentations from partner and country experts, as well as a strategic planning plenary session and multiple panel discussions. On the final day, there were small group sessions which

provided an opportunity for the participating Caribbean countries to share their priorities and provide strategic input for the PH4H, in advance of a regional discussion to be held in October 2024. The conference's intimate size enabled countries to engage in meaningful and productive strategic discussions, driving real-world actions and solutions while accelerating national outcomes through information sharing, collaboration, and learning.

Caribbean Connect advanced the participating countries' visions for digital health by 2030 by creating a platform for sharing knowledge and building capacity among information technology and healthcare professionals, policymakers, and government leaders. These deliberations were centered around how to implement and leverage digital health solutions effectively. The conference aimed to foster a sense of sub-regional solidarity and cooperation, as countries shared their experiences, challenges, and solutions, paving the way for collaborative projects and initiatives that can have a broader impact in the Caribbean.

Opening Plenary

Mr. Anton Edmunds, Manager of the Caribbean Countries, and the Jamaica Country Representative, IDB opened the conference. After welcoming delegates, he highlighted the significance of the event by noting that the Information Systems for Health strategy (IS4H) created by PAHO/WHO was launched in Jamaica eight years ago and has since been a foundational strategic framework for the entire Latin American and Caribbean (LAC) region. He also noted that Jamaica was the starting place for the alliance between the IDB and PAHO/WHO in digital health, which was established more than five years ago, and is formally recognized at the highest levels of both organizations. Mr. Edmunds then introduced the Pan-American Highway for Digital Health (PH4H), an exciting new initiative led by the countries of the region and supported by the IDB and PAHO/WHO. Mr. Edmunds acknowledged the support for the PH4H by the Japan Enhanced Initiative for Quality Infrastructure, Resilience against Disaster, and Health Fund, financed by the Government of Japan. Mr. Edmunds also noted the IDB's "One Caribbean" initiative, a regional flagship program that aims to promote the sustainable development of the Caribbean with a focus on high-impact initiatives.

Mr. Ian Stein, PAHO/WHO Representative to Jamaica, emphasized the importance of Caribbean Connect in reference to the launch of IS4H 8 years prior, which was spearheaded by the Honorable Minister Dr. Christopher Tufton. Mr. Stein highlighted the

progress that Caribbean countries have made since 2016, including advancements in national strategies, action plans, and digital health agendas. In speaking about the PH4H initiative, Mr. Ian Stein highlighted how the COVID-19 pandemic has demonstrated the need for health systems to be more resilient, interdisciplinary, intersectoral, and interconnected than ever before. This approach has influenced a more comprehensive approach to public health, considering elements such as connectivity, bandwidth, interoperability, and artificial intelligence. Mr. Stein reiterated that the overarching goal of the Pan-American Highway for Digital Health is to facilitate high-quality, safe, and efficient regional digital healthcare services while strengthening regional resilience to epidemics and public health crises across the LAC region. In closing, he noted digital health as a key priority of the G20 Agenda and emphasized how the PH4H initiative supports the convergence and acceleration of country priorities at the regional level.

Dr. Pablo Ibarrarán, Social Protection and Health Division Chief, IDB, further elaborated on the significance of the PH4H initiative, outlining the goals and benefits, as well as the steps for countries to join and contribute to the project. Dr. Ibarrarán highlighted the importance of sub-regional cooperation and explained that the goal of the PH4H is to enable connected health for all individuals across the LAC region. The PH4H seeks to ensure secure, efficient, and interoperable health data exchange within and between countries so that individuals across the region have better access to their health information to support continuity and quality of care. He noted that the PH4H will also strengthen public health surveillance, optimize access to limited human resources, and promote research and innovation. The PH4H will contribute to more efficient public health policies and enable countries to be better prepared for future pandemics and health threats. In closing, Dr. Ibarrarán emphasized the potential for Caribbean Connect to foster a sense of sub-regional leadership, solidarity, and cooperation amongst the Caribbean countries.

Keynote Address

Delivered by Dr. the Honorable Christopher Tufton, Minister of Health and Wellness, Government of Jamaica

Minister Tufton opened the conference by speaking about the importance of establishing

a strong framework and vision for digital health transformation that goes beyond the procurement and implementation of technologies and electronic systems. He referenced a regional discussion in 2016 where a large emphasis was placed on the principle of health as a human right and establishing a framework for achieving universal access to health and universal health coverage.

As the Caribbean countries strive towards digital transformation, Minister Tufton highlighted the value in bringing conversations around challenges to the forefront to foster a culture of learning and continuous improvement. This sentiment reinforced the objective of Caribbean Connect, which aimed to create a space for countries to come together and share experiences, challenges, and solutions on digital health projects and initiatives.

"Our digital transformation journey has not been simple or straightforward…We should accept from the start that we are prepared to deal with the obstacles that we face. We will face them, and we will try to help our partners to change."

Minister Tufton ended by speaking about key factors to ensure sustainability of digital transformation, highlighting four areas:

- *Human resources* – A lack of adequate human resources is often the biggest bottleneck of digital transformation. Minister Tufton spoke about the importance of developing strategies to train and retain individuals to drive processes and support the ongoing implementation of digital health systems. He reinforced the idea that digital transformation cannot be successful without the proper human resources in place.

- ***Cross-border interoperability*** – Minister Tufton emphasized the potential for cross-border data sharing and the need for ongoing dialogue and cooperation for it to be a success.

- ***Digital literacy*** – Digital literacy for health system planners, health care providers and citizens was highlighted as a key component of digital innovation and an area that requires greater focus as countries strive towards digital transformation.

- ***Change management*** – Minister Tufton spoke about technology as a tool for transformation, and the importance of adopting a change in mindset to ensure successful transformation. These ideas reinforced the notion that digital transformation encompasses more than the implementation of a technology, and that adequate training, process improvements, and stakeholder engagement is required for successful change.

Concurrent Session 1

Leadership Forum: Sustainability of Digital Health Transformation – Human Capital and Financing Challenges and Strategies

Facilitated by Carina Cockburn, Country Representative, Trinidad and Tobago, IDB

Session Objectives:

- Review emerging thinking and Jamaica's approach for building sustainable human capital and support for organizational structures

- Facilitate discussions among leaders around key challenges and possible strategies for sustainable digital health, with a focus on human and financial capital

- Identify opportunities for resource sharing (human resources, knowledge, shared capital investments, alternate financing strategies)

Presentations:

Daniel Doane (IDB) – *IS4H Functional Model Overview: A Tool for Developing Sustainable IS4H and Digital Health Operations*

- Mr. Doane presented an overview of PAHO/WHO's IS4H Functional Model including its purpose and how it can be used to help countries effectively sustain digital health transformation.

- Mr. Doane highlighted that the IS4H Functional Model should be used as a tool to assess the status of current functions being performed, identify gaps in functions, and support planning for long-term sustainability.

Dr. Michele Roofe (Jamaica) – *IS4H Human Resources and Organizational Structures for Sustainability*

- Dr. Roofe's presentation reviewed Jamaica's proposed organizational structure and governance model, highlighting the key elements that are required to achieve success.

- Dr. Roofe explained Jamaica's IS4H Programme Components, including Data and Standards Governance, Clinical Governance, Health Information Management, and Strategic Health ICT.

Discussion:

- Following the presentations, participants completed an online survey where they were asked questions regarding their understanding of the presentations, as well as their thoughts on the sustainability of digital health transformation.
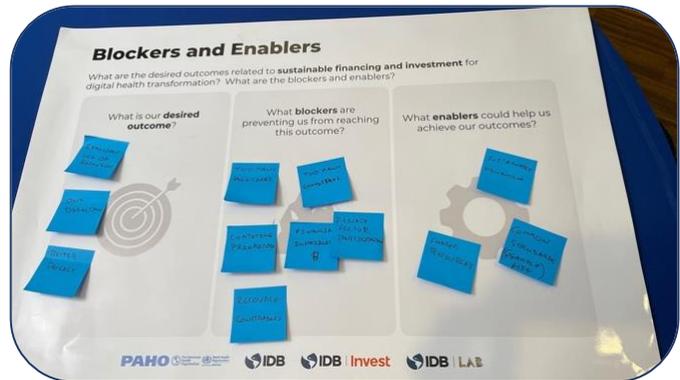
- The discussion focused on challenges related to sustaining digital health transformation, including securing long-term funding, managing competing priorities, and the need for high-level cooperation.

- The online survey prompted a conversation around enablers for sustainable digital health transformation. Many ideas were brought forward, including the importance of establishing strategic partnerships, and developing detailed strategic plans.

Technical Session 1a: Health Information Exchange Architecture – Design and Standards for Interoperability

Facilitated by Pablo Orefice, IDB and Peter Ricketts, PAHO/WHO

Session Objectives:

- Share key considerations and best practices for cybersecurity and business continuity when designing, implementing, and operating digital health infrastructure

- Share country experiences with designing and implementing resilient digital health infrastructure

- Identify opportunities for resource sharing (e.g. knowledge, human resources, infrastructure, etc.) among countries to improve digital health infrastructure

Presentations:

Dr. Keisha Barwise (Jamaica) – *Jamaica's Approach to Health Information Exchange Architecture, Design and Standards for Interoperability*

- Dr. Barwise highlighted the use of OpenEHR, FHIR, and various clinical standards that enable interoperability within Jamaica's HIE.

Dr. Taleya Girvan (Jamaica) – *Jamaica's Approach to implementing SNOMED for Interoperability and Data Analytics*

- Dr. Girvan shared Jamaica's approach to a national implementation of SNOMED, including how it'll help solve challenges with data interoperability between systems.

Michael Hamilton (The Bahamas) – *The Bahamas Approach to Design and Implementation of a National Health Information Exchange*

- Mr. Hamilton shared the proposed model for The Bahamas HIE and explained the advantages of implementing a hybrid model versus a centralized or decentralized model.

- Mr. Hamilton explained how a hybrid model offers enhanced EHR and data analytics capabilities as well as simpler deployment of care coordination and population health management tools.

Jesse Bridgelal (Trinidad and Tobago) – *Trinidad and Tobago's Approach to Design and Implementation of a National Health Information Exchange*

- Mr. Bridgelal explained the silos that exist across Trinidad and Tobago's Regional Health Authorities, making it challenging for patients to access care across regions.

- Mr. Bridgelal also highlighted the inherent challenges that arise from data silos, such as fragmented care for patients, increased healthcare costs, and dissatisfaction from healthcare workers.

Juan Carlos Sarabia (Belize) – *Belize's Approach to Design and Implementation of a National Health Information Exchange*

- Mr. Sarabia highlighted the key features of Belize's Clinical Data Exchange Platform (CDEP), including Authentication, Authorization, Audit (AAA), a Data Warehouse, a Registry Service, Master Indices, and a Terminology Service.

Richard Mendes (Suriname) – *Suriname's Approach to Design and Implementation of a National Health Information Exchange*
- Mr. Mendes explained the approach and rationale behind Suriname's HIE platform, including the advantages and disadvantages of a centralized system, centralized data repository, and federated data system.

Discussion:

- Participants engaged in discussions around challenges that countries are currently experiencing, such as concerns around the acceptance of SNOMED between the private and public sectors, as well as challenges with interoperability and standardization due to the implementation of different EMRs across regions in Trinidad and Tobago.

- Participants generated ideas on information and resources that leaders need to effectively support designing and planning digital health architecture. Countries spoke about the need for shared infrastructure and a regional interoperability platform, as well as the importance of demonstrating proof of concept and building trust in performance.

- The development of shared policies, legislation, and eMPI requirements were noted as areas that would support countries in strengthening their digital health architecture, alongside collaboration from international partners and leveraging support from CARICOM.

Technical Session 1b: Principles, Policies, and Program – The Protection of Personal Health Information in Digital Transformation

Facilitated by Blair Witzel, IDB

Session Objectives:
- Review key principles for the protection of personal health information and identify key components of health information privacy programs (i.e., cross-border data sharing)

- Share country experiences and approach to privacy legislation to support protection of personal health information

- Identify resources and support required to advance health information protection (privacy) in the Caribbean

- Identify enablers and limitations for cross-border data sharing

Presentations:

Blair Witzel (IDB) – *Principles for the Protection of Health Information; Developing a Privacy Program*
- Mr. Witzel presented on key privacy concepts, including privacy legislation, privacy frameworks, and the key components of a robust privacy program.

- Mr. Witzel's presentation emphasized that a strong privacy program must include safeguards around accountability, purpose, fair handling, patient rights, and breach response.

Prewien Ramadhin (Suriname) – *Overview of Suriname's Approach to Privacy Legislation*
- Mr. Ramadhin shared Suriname's journey to developing privacy legislation and provided recommendations for other countries to consider when developing legislation.

Jermaine Martin (Jamaica) – *Overview of Jamaica's Approach to Privacy Legislation and Next Steps with Privacy Program Development*
- Mr. Martin reviewed the key legislative frameworks in Jamaica, such as the Data Protection Act (2020) and the Personal Health Information Protection (PHIP) Guidelines for Public Sector Organizations.

- Mr. Martin outlined key safeguards in the PHIP Policy Guidelines including policies around managing consent, requests for access, retention and destruction, and data storage and security.

Discussion:

- The presentations were followed by a conversation around aspects that are required to protect personal health information when sharing data across borders, such as for the PH4H initiative. Many enablers were mentioned, such as the importance of a secure network, the ability to recover data, undergoing regular data backups, ensuring interoperability between systems, and obtaining consent from patients.

- Participants had meaningful discussions around potential areas for collaboration between countries, such as developing shared training resources and an information exchange policy.

Concurrent Session 2

Leadership Forum: Digital Health Architecture and Strategies for Leaders

Facilitated by Daniel Doane, IDB

Session Objectives:

- Review key concepts related to digital health architecture aimed at senior leaders in Ministries of Health, including the role of health information exchange platforms and key standards

- Highlight the relationship between designing a digital health architecture and digital health transformation strategies, considering such issues as health system strategic objectives (e.g., access, quality improvement, efficiency, etc.), human capital, financial suitability, and readiness for the Pan-American Highway for Digital Health

- Discuss and brainstorm strategic resources and supports to help countries advance their national digital health architecture

Presentation:

Daniel Doane – *Digital Health Architecture and Strategies for Leaders*

- Mr. Doane provided an overview on the importance of Digital Health Architecture, and highlighted key concepts such as interoperability, standards, privacy and security, conceptual architecture, technical architecture, and health information exchange.

- Mr. Doane reviewed strategic considerations for leaders around digital health architecture, including clinical and operational workflows that can be enabled, data standards and data sources that can be developed, the fit and sustainability of software and services, and the sustainability of technologies.

Discussion:

- The Digital House Framework was referenced as participants spoke about challenges with digital health architecture in each of the countries.

- Participants from Jamaica shared challenges around having strong governance to support digital health applications. In The Bahamas, the lack of education around digital literacy poses a challenge and hinders meaningful engagement with stakeholders. Guyana emphasized the need to train and retain human resources. In Barbados, challenges exist around ensuring the sustainability and longevity of investments amidst political changes.

- The Pan-American Highway for Digital Health was highlighted as a crucial step towards improving digital health architecture in the region. Emphasis was placed on generating tangible results, such as an interoperability platform and unique ID's in order to gain buy-in from Ministries.

Technical Session 2a: Data for Decision Making – Data Management and Analytics

Facilitated by Sebastian Bauhoff, IDB

Session Objectives:
- Share experiences and approaches for managing and analyzing health data to support decision-making

- Identify key challenges for data management and analysis

- Identify potential supports, resources, and opportunities for collaboration related to health data management and analysis

Presentations:

Sebastian Bauhoff (IDB) – *Leveraging Existing Data for Decision-Making and Health Policy*

- Mr. Bauhoff presented examples of data, and the potential use cases and policy actions that it can be used to inform. He provided the example of utilizing hospital discharge data to shape policies aimed at improving health outcomes and reducing hospital admissions, as well as leveraging data to support the case for increased investment in primary care.

Javan Chavarria (Belize) – *Belize's Approach for Data Quality and Data Analysis Leveraging the BHIS*

- Mr. Chavarria provided an overview of the Belize Health Information System (BHIS) and the benefits it provides, such as patient matching, data validation, and resource allocation. It also supports with policy development, reporting, and improves health outcomes among patients.

Dr. Aloysius Koendjbiharie (Suriname) – *Suriname HEARTS Initiative*

- Dr. Koendjbiharie presented on Suriname's HEARTS initiative and shared an overview of the implementation journey, which started in 2017.

- Dr. Koendjbiharie explored the development and approval of the clinical pathway for hypertension and shared next steps for the HEARTS initiative, which includes procurement and implementation in a second group of sites.

Dr. Jerry Toelsie (Suriname) – *Suriname HEARTS Initiative: Systems for Monitoring*

- Dr. Toelsie provided an overview of the data collection tools and systems that are used for the HEARTS initiative.

- Dr. Toelsie explored how data collection tools contribute to improved healthcare, reduction of treatment errors, reduced workloads, and increased efficiencies.

Dr. Jerry Toelsie and Richard Mendes (Suriname) – *Suriname's Digital Death Certificate Platform*

- Dr. Toelsie and Mr. Mendes provided an overview of Suriname's Digital Death Certificate Application and the advantages of the tool, which include standardization and quality of data, accessibility and retrieval, security and privacy, error reduction, integration with other systems, disaster recovery, and compliance with international standards and regulations.

Discussion:

- Participants engaged in discussions around the various systems shared throughout the country presentations as well as the use of data at individual, local, regional, and national levels.

- Countries were interested in learning about the use of Suriname's Digital Death Certificate within hospitals and the legislation in place to support the initiative.

- Countries highlighted that international partners could help strengthen data management and decision-making capacity by offering support in areas such as

policy development, financial aid, political commitment, and the promotion of knowledge and digital literacy.

- Participants discussed how the electronic coding system in Trinidad and Tobago, and the data policy in Barbados could be leveraged as shared resources across the region.

Technical Session 2b: Designing and Building for Digital Health Infrastructure Resilience – Approaches for Cybersecurity and Business Continuity

Facilitated by Peter Ricketts, PAHO/WHO and Mario Casco, IDB

Session Objectives:
- Review frameworks and key considerations for building digital health infrastructure that is resilient in the face of various threats (e.g., cybersecurity attacks, extreme weather events, power failure, connectivity failure, equipment failure etc.)

- Learn about country approaches to digital health infrastructure resilience and share experiences, challenges, and strategies among countries

- Identify opportunities for resource sharing among countries, including knowledge, human resources, and infrastructure resources

Presentations:
Jesse Bridgelal (Trinidad and Tobago) – *Re-design of Infrastructure for Resilience and Business Continuity*

- Mr. Bridgelal provided an overview of the impact a cybersecurity breach can have on patients, organizations, and industries as a whole. He reviewed the National Institute of Standards and Technology (NIST) Cybersecurity Framework and outlined strategies and safeguards to protect organizations from cybersecurity incidents.

Shawn Bolton (Jamaica) – *Designing and Building for Digital Health Resilience: Cybersecurity and Business Continuity*

- Mr. Bolton presented an overview of Jamaica's Digital Landscape and highlighted core principles in designing safeguards for security and resilience.

- Mr. Bolton shared a case study from Jamaica's Ministry of Health and Wellness data breach in 2021 that affected the Jamcovid database. As part of Jamaica's

response to the incident, a public awareness campaign was launched to inform citizens about protecting their personal information.

Louise Bobb (Barbados) – *Responding to a Cybersecurity Attack: Response and Lessons Learned*

- Ms. Bobb provided a review of the cybersecurity incident at the Queen Elizabeth Hospital in 2022. She shared the state of the ICT environment pre-attack, measures that were taken in response to the attack, and measures that will be taken in the future.

- Ms. Bobb highlighted proposed plans, such as completing an Incident Information Security Risk Assessment, delivering enterprise security awareness training for all staff, and developing a Security Operations Centre (SOC) monitored by an external partner.

Ben Toppin (Barbados) – *Barbados Approach for Designing Resilient Digital Health Infrastructure*

- Mr. Toppin presented on the Fiber Distributed Data Interface (FDDI), a 100Mbit network used for its low failure rate and high data throughput. The FDDI network is based on synthetic fiber cables, which differs from most networks that use copper-based cables.

Discussion:

- Participants engaged in conversations around the tools and resources needed to strengthen cybersecurity and ensure that digital health solutions are resilient. Some ideas included having updated hardware, leveraging subject matter experts, implementing cybersecurity tools, installing firewalls, increasing digital literacy, and increasing public awareness.

- Countries shared examples of resources that are available that could be shared among countries. These included clinical strategies from Jamaica, a draft FDDI network framework from Barbados, and national policies and standards.

- Countries identified various areas for collaboration, such as the development of working groups, toolkits, regional standards, and a regional cyber incident response team.

Innovation Event

Facilitated by Mr. Anton Edmunds, Manager of the Caribbean Countries and the Jamaica Country Representative for the IDB, the objective of the Innovation Event was to promote dialogue for an ecosystem approach to digital health in the Caribbean by highlighting new initiatives as well as lessons learned for public-private partnerships.

In his opening remarks, Mr. Edmunds noted that the IDB is a unique organization given that it works across three different sectors – the public sector, the private sector, and the entrepreneurial sector.

The first panelist, Brian Blakely from IDB Invest, spoke on the mission of IDB Invest as the private sector investment arm of the IDB. As a member of the IDB Group, IDB Invest has the same goals for economic growth and social inclusion as the public sector arm, but through a focus on private sector investment. Mr. Blakely highlighted various health-related private sector investments in the LAC Region, including recent investments in a private hospital in Brazil that led to increased capacity during the COVID-19 response. Mr. Blakely also explained the role of IDB Lab as the innovation and venture capital arm of the Inter-American Development Bank Group. He noted that IDB Lab fosters early-stage innovation with a focus on technology and entrepreneurship.

IDB Lab has recently invested in a Jamaican company called Novamed to build Catalyst, the first health innovation accelerator and incubator in the Caribbean region. Dr. David Walcott of Novamed joined the panel to discuss the impact of this investment and described how Catalyst will drive innovation in the health sector.

One of the key themes of the panel discussion was the role of public-private partnerships and the how government can best leverage these arrangements to drive innovation, particularly in the realm of digital health. Dr. Walcott noted that the government plays an important role as a "translator" between the private and public sectors. It works with the private sector to translate objectives and drivers into public sector priorities, aligning outcomes that benefit both sectors.

Concurrent Session 3

Leadership Forum: Information Systems for Health (IS4H) Governance for Strategy, Coordination, and Standards

Facilitated by Blair Witzel, IDB

Session Objectives:
- Review IS4H framework and benefits

- Share country experiences with IS4H governance

- Identify challenges and brainstorm solutions for strengthening IS4H governance capacity

- Learn about potential approaches to regional and sub-regional governance for the PH4H

Presentations:

Blair Witzel (IDB) – *IS4H Governance and Benefits*

- Mr. Witzel explained the key aspects of IS4H governance including decision-making, policy, strategy, standards, and legislation.

- Mr. Witzel provided an example of a decision-making structure, highlighting working groups as an important tool for digital health transformation.

Blair Witzel (IDB) – *Governance approach for the Pan-American Highway for Digital Health*

- Mr. Witzel explained the interrelation between governance mechanisms on a regional and country level for the PH4H initiative.

- Mr. Witzel shared the decision-making structure for the PH4H, including the role of the PH4H Council to support strategic planning, develop policies and standards, and establish priority use cases.

Discussion:

- Participants discussed common challenges related to governance, such as a lack of skilled human resources and the need to streamline working groups and committees to increase efficiency.

- The importance of considering change management in the long-term was raised as an area for improvement among many countries. Participants discussed strategies and solutions to improve efforts in this area.

Technical Session 3a: Digital Health Solutions – Lessons Learned from the Front Lines

Facilitated by Dr. Sergio Miguens, IDB

Session Objectives:

- Share country experiences with implementing digital health solutions.

- Identify key challenges and potential opportunities for sharing knowledge and resources related to the implementation and sustainability of digital health solutions in the Caribbean.

Presentations:

Permanent Secretary Malcolm Watkins (Guyana) – *Overview of Guyana's Digital Strategy*

- PS Watkins shared an overview of Guyana's digital health landscape, including the current state and next steps for various initiatives (e.g., telehealth, EMR implementation, hybrid learning).

- PS Watkins indicated various opportunities for growth to improve Guyana's digital health landscape, including increasing education and buy-in among stakeholders, improving training and retention among human resources, ensuring reliable connectivity, and improving security.

Jesse Chun (Belize) – *EHR Implementation in Belize: Experience and Lessons Learned*

- Mr. Chun shared the timeline for Belize's EHR implementation as well as key challenges that were experienced with the country's previous system. These challenges included limited functionality, information silos and duplication of efforts, manual data collection leading to stagnant data, inadequate information for health planners, and a lack of a unique patient identifier.

Dr. Bradley Edwards (Jamaica) – *Jamaica's Approach to Implementing an EHR in Hospitals and Primary Care Clinics*

- Dr. Edwards shared staff's perceptions and experiences with using Jamaica's EHR and highlighted key statistics. In a survey done with staff, 94% of staff indicated being comfortable with using the EMR, 94% of staff and 100% of doctors voted not to switch back to paper records, and 70% of staff perceived no change in difficulty with carrying out daily patient activities.

Akanni McDowall (Barbados) – *Integrating Lessons from COVID-19 for Future Pandemic Preparedness*

- Mr. McDowall highlighted the ways in which Barbados' Meddata platform supported with the country's COVID-19 response, such as tracking vaccine uptake, identifying vulnerable populations, managing drug distribution, and tracking healthcare system interactions among patients.

- Mr. McDowall shared how the system could be leveraged further in future pandemics, such as using surveillance data for patient education and information, and combining data from labs, pharmacies, and tertiary care for comprehensive health monitoring.

Azaad Nazir (Trinidad and Tobago) – *EHR Implementation*

- Mr. Nazir highlighted the steps taken in one of Trinidad and Tobago's EHR implementations, from developing a business plan, engaging vendors, training human resources, implementation, and monitoring/evaluation. He emphasized focusing on the issues and bottlenecks at hand rather than striving to implement an advanced Health Information System.

Michael Hamilton (The Bahamas) – *The Bahamas Design and Approach to a Patient Portal*

- Mr. Hamilton highlighted The Bahamas' proposed HIE, as well as the country's 8 IS4H key priority systems. These systems emphasized the country's vision to achieve an integrated health system.

- Mr. Hamilton shared the features included in the development of The Bahamas' Patient Portal, including online appointment booking, prescription management, a messaging feature, and a payment gateway.

Discussion:

- Participants discussed challenges and planned approaches for generating unique patient ID's. Some countries shared solutions on navigating various use cases with patient ID's.

- Participants discussed Jamaica's EHR implementation model and emphasized the importance of involving clinicians and key stakeholders in all stages of the process.

Technical Session 3b: Digital Health Regional Public Good Initiatives in the Caribbean

Facilitated by Elisa Martínez Luaces, IDB

Session Objectives:

- Share information about the Digital Health Regional Public Good initiative in the Caribbean, highlighting their alignment and support with the Pan-American Highway for Digital Health.

- Share CARPHA's vision for digital health transformation to support pandemic preparedness and response.

- Share information about the role and benefits of RACSEL and how Caribbean countries can become engaged.

- Learn about the upcoming Connectathon in October 2024, how countries can become involved, and how this work supports the PH4H.

Presentations:

Dr. Lisa Indar (CARPHA)– *CARPHA's Vision for Connected Digital Health Surveillance*

- Dr. Indar provided an overview of CARPHA's integrated response to health emergencies, including partnerships with regional and international preparedness and response agencies, the development of regional frameworks for regional health security and integrated surveillance, the provision of laboratory support and

equipment for emergency and response, and ongoing working groups to ensure preparedness.

- Dr. Indar shared a list of CARPHA's 15 current surveillance systems and how they contribute to CARPHA's vision for integrated digital public health surveillance.

Alejandra Piermarini and Carlos Nuñez (RACSEL) – *Latin American and Caribbean Digital Health Network*

- Representatives from RACSEL provided an overview on the organization, including the role they play in Latin America and the Caribbean, how countries can join, and how being a part of the network will benefit countries.

- Ms. Piermarini and Mr. Nuñez shared information about RACSEL's Connectathon events and how they enable organizations to perform connectivity and interoperability tests in a controlled environment.

Discussion:

- Countries discussed areas of development for Caribbean countries, including developing harmonized standards, the need for skilled human resources, a more robust infrastructure, reliable connectivity, and seamless clinical processes.

- Participants engaged in discussions around tools and resources that can be supported by international partners. These included funding, networks, technical expertise, and coordination of public health matters.

- To participate in RACSEL and future Connectathons, countries noted that they require adequate networks and IT infrastructure, skilled human resources, and political will. Countries referenced the IS4H Maturity Model Assessment as a tool enabling their participation in future Connectathons.

- To support CARPHA's vision for digital surveillance and public health across the region, participants noted various required tools and resources, such as DHIS2, support from sectors such as IT and finance, harmonized standards, technical expertise, and strong networks, connectivity, and infrastructure.

Plenary Session: Regional IS4H and Digital Health Strategies

PAHO Plan of Action for Strengthening Information Systems for Health 2024-2030

Presented by Marcelo D'Agostino, PAHO/WHO

Mr. D'Agostino introduced the [PAHO/WHO Plan of Action for Strengthening Information Systems for Health 2024-2030](#) and outlined the 4 strategic lines of action:

- **Strategic Line of Action 1:** Strengthen management and governance of information systems

- **Strategic Line of Action 2:** Strengthen data management and information technologies

- **Strategic Line of Action 3:** Strengthen information and knowledge management

- **Strategic Line of Action 4:** Foster innovation and digital health
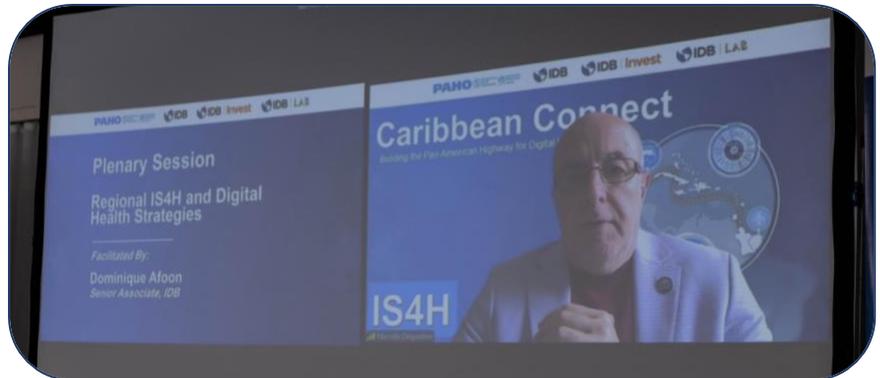
Each strategic line of action has correlating indicators. Progress will be tracked periodically through communities of practice for each strategic line of action, with the RELACSIS network serving as the main regional support mechanism for implementation. The PH4H initiative is incorporated as a specific indicator of the IS4H Plan 2024-2030, measuring the number of countries and territories that will have adopted cross-border data exchange agreements.

Mr. D'Agostino noted that the Governing Bodies of PAHO will be informed on the progress of the Plan of Action through a midterm review in 2027 and a final report in 2031. The plan was approved by PAHO's Executive Committee in June 2024, and final approval was given for the official document by PAHO's 61st Directing Council in October 2024.

Pan-American Highway for Digital Health (PH4H)

Presented by Jennifer Nelson, IDB

Ms. Nelson provided an overview of the Pan-American Highway for Digital Health initiative, explaining its objective and purpose. She highlighted the positive impact that the initiative will have on countries across the LAC region, as well as the advantage it will pose for tourists and migrants.

Ms. Nelson emphasized the importance of aligning national strategies with the mission for the PH4H initiative and urged countries to incorporate cross-border information exchange into their legal frameworks. Emphasis was placed on countries shifting from an individualized approach to a regional approach, highlighting the need to harmonize policies and strategies within and across countries. Ms. Nelson also shared several case studies of successful regional/global examples of cross-border interoperability.

Panel Discussion

Facilitated by Dominique Afoon, IDB

Ms. Afoon facilitated a panel discussion with the following participants on a discussion around the Regional Plan of Action and the Pan-American Highway for Digital Health:

- Jennifer Nelson, Senior Health Specialist, IDB
- Dr. Lisa Indar, Interim Executive Director, CARPHA
- Dr. Michele Roofe, Senior Director IS4H, MOHW, Jamaica
- Richard Mendes, Program Director IS4H, MOH, Suriname
- Malcom Watkins, Permanent Secretary, MOH, Guyana

The discussion was centered around the alignment between the two initiatives, how they will work together, and how countries should consider the projects when developing their

national IS4H and digital health strategies. Emphasis was placed on using a harmonized approach to policy development to avoid duplications among countries.

The country representatives on the panel were asked about supports needed from international partners in order for countries to successfully align with the initiatives, as well as considerations for international partners to better support the IS4H and PH4H initiatives in the Caribbean. The discussion concluded with remarks from CARPHA around the need for robust policies and data sharing agreements among countries to advance regional digital health initiatives for pandemic preparedness and response.

Concurrent Session 4

Leadership Forum: Accelerating Digital Health in the Caribbean – Strategies for Sub-Regional Knowledge and Resource Sharing

Facilitated by Nicolette Henry, IDB

Session Objectives:

- Learn about the initiative funded by the USAID and led by the Health Economics Unit, UWI, to establish a Technical Support Facility for Health Information Systems (HIS-TSF) in the Caribbean

- Summarize challenges and opportunities identified in previous leadership forum sessions related to human resource capacity

- Identify concrete mechanisms and possible next steps for sharing knowledge and resources

- Identify supports countries require from international partners

- Identify opportunities for resource sharing (human resources, knowledge, shared capital investments, alternate financing strategies)

- Identify priorities and opportunities for the HIS-TSF from a strategic perspective

Presentation:

Charmaine Metivier (Health Economics Unit, University of the West Indies) – *Proposed Approach for a Caribbean Technical Support Facility*

- Ms. Metivier highlighted challenges with knowledge and resource sharing among Caribbean countries given that countries are at different levels of development and implementation of their respective health information systems, there are varying levels of infrastructure and connectivity, skilled human resources are limited, and there is a need for legislative reform alongside technological advances.

Discussion:

- Participants discussed the funding model for the Technical Support Facility, and learned that it represents a mixed funding model, with grants and service fees for participating countries.

- Participants had conversations around the mutual benefits between the public and private sectors, noting that the TSF would mostly benefit the public sector, and would allow the private sector to leverage it as a service for profit.

Technical Session 4a: Change Management for Digital Health Transformation

Facilitated by Elisa Martínez Luaces, IDB

Session Objectives:

- Inform participants about the IDB Change Management Community of Practice forum

- Share country experiences with stakeholder engagement, communication strategies, and change management for digital health transformation

- Identify shared challenges and brainstorm opportunities for resource sharing (e.g., knowledge, human resources, infrastructure, etc.) among countries to strengthen change management capacity

Presentations:

Elisa Martínez Luaces (IDB) – *Overview of IDB Change Management Community of Practice forum*

- Ms. Martínez explained that digital transformation is broader than the implementation of a technology and requires robust change management practices in order to be successful.

- Ms. Martínez explained that large-scale change has differing levels of complexity based on the size of the system experiencing the change, whether the change

impacts the whole system or a portion of the system, and the way in which the change alters current ways of thinking and doing.

- Ms. Martínez shared the IDB [Change Management Community of Practice](#) forum and explained how it can be used as a forum to interact with colleagues across the Americas, as well as reference best practices, tools, and operational templates.

Richard Mendes (Suriname) – *Approach to Engage Citizens and Private Healthcare Providers in Healthcare Transformation*

- Mr. Mendes reviewed Suriname's IS4H Digital Health Agenda and Roadmap and the strategies to engage different stakeholder groups in digital health transformation.

- Mr. Mendes provided an overview of the 4 strategic objectives encompassed within the Digital Health Agenda, which include improving IT infrastructure and the availability of quality data, generating knowledge from data, transforming healthcare delivery through innovation, and strengthening capacity for planning, governing, and managing digital health.

Ellerie Seymour (The Bahamas) – *The Bahamas Digital Health Transformation Change Management Strategy*

- Ms. Seymour explained how The Bahamas models the ADKAR change management methodology and highlighted the country's use of surveys to gain feedback from key stakeholder groups (e.g., change management survey, patient clinic experience survey, provider satisfaction survey).

- Ms. Seymour provided an overview of strategies that are being used to address key challenges with digital health transformation. These strategies include increasing awareness of digital health transformation among citizens and healthcare professionals, enabling healthcare professionals to voice concerns, delivering robust training, providing technical support for stakeholders to foster change, and rewarding healthcare professionals for achievements.

Discussion:

- Countries discussed change management strategies being used within Suriname and The Bahamas, and determined what strategies have been successful as well as pain points that need to be addressed.

- Participants from Trinidad and Tobago discussed the change management approach within the private sector and whether a similar approach could be used within the country's public sector.

Technical Session 4b: Strategic Procurement of Digital Health Solutions – Best Practices and Lessons Learned

Facilitated by Blair Witzel, IDB

Session Objectives:

- Learn about the IDB's Digital Health Procurement Guide, including an overview of the guide, highlights of best practices, how the guide can be used, and procurement supports for digital health solutions

- Share approaches and lessons learned on the procurement of digital health solutions from countries

- Identify resources and support required to strengthen country capacity for digital health procurement

Presentations:

Blair Witzel (IDB) – *Overview: Digital Health Procurement Guide and Best Practices*

- Mr. Witzel provided an overview of factors for successful procurement, including representation from stakeholders, realistic timelines, committed resources, defined needs and goals, and a detailed approach.

- Mr. Witzel shared the key stakeholders required as part of a procurement team (e.g., project team, subject matter experts, leadership, etc.) and referenced the IDB Digital Health Procurement Guide, which countries can use as a tool for procurement.

Deneice Marshall (Barbados)– *Developing Requirements for a Robust Health Information System in a Tertiary Care Institution*

- Ms. Marshall reviewed key considerations when developing functional, nonfunctional, and service requirements for a HIS. She emphasized the importance of engaging stakeholders and conducting a current state assessment

to understand the workflows and user needs, identify gaps for improvement, learn about case studies of current issues, and discuss current limitations and constraints.

Discussion:

- Participants discussed challenges that countries are experiencing with procurement, such as a lack of end-user engagement, difficulty deviating from current processes, and disconnect from leadership when making decisions about system requirements.

- Countries outlined strategies to use when assessing and selecting a vendor. These include assessing the vendor's capabilities before specifying requirements, undergoing a multi-stage procurement process to refine requirements, and obtaining vendor responses to evaluate and refine requirements.

Plenary Session: Strategic Planning Session

Participants engaged in strategic planning sessions to discuss ideas, key priorities, and needs from countries for the PH4H initiative. There were 3 breakout groups (leadership, IT/digital health, clinical/data) and participants were required to self-assign themselves to a group based on their professional domain and role.

Leadership Breakout Group

The leadership group outlined a series of potential use cases for the PH4H initiative, and ways in which governments and Ministries would benefit the most from the project. Potential use cases for the PH4H include:

- Understanding and monitoring migration on a national/international level

- Managing health data for disease tracking and policy development

- Generating standardized templates for efficient reporting to different organizations (e.g., WHO)

- Establishing a health information exchange for countries to share and access health data. Participants discussed several use cases for data sharing, including digital vaccine certificates, public health and research, and International Patient Summaries (IPS) for tourists, migrants, and students.

- Leveraging the platform for procurement, system planning, and health surveillance

- Using the platform for health financing and education (e.g., development of a resource center to share published studies and information)

- Establishing standardized training modules to avoid duplication of effort among countries

- Ensuring compliance with international standards and governance through standardized protocols and benchmarks

In addition to developing use cases, this group discussed governance for the PH4H, and how the initiative will leverage existing protocols and governance bodies that currently exist across the Caribbean. Participants identified the Council for Human and Social Development (COHSOD), a working body of CARICOM with representation from the Ministers of Health for member states, as a potential platform for advancing shared priorities, decisions, and agreements for the PH4H in the Caribbean sub-region. The participants advised that PAHO/WHO and IDB should further engage this body to socialize members to the opportunities of the PH4H and discuss opportunities for support and cooperation.

Additionally, members noted the possible role of the Caribbean Technical Working Group for Information Systems for Health. Endorsed by CARICOM, the group was established in 2015 as a technical coordinating mechanism for IS4H, with secretariat support from PAHO/WHO Caribbean Sub-Regional Program Coordination.

Discussions around future directions for the initiative were discussed, such as private sector participation and whether the standards and information could be harmonized with other countries and regions.

IT/Digital Health Breakout Group

The IT/Digital Health group discussed technical priorities for countries to build "on ramps" to the PH4H, as well as the resources and supports required. Participants highlighted various technical priorities, including:

- Robust architecture and infrastructure to facilitate data exchange
- Common standards and regulations
- Master Patient Index (MPI)
- Consensus on software requirements

Participants discussed the importance of ensuring successful data exchange among countries given that each country is at a different level of development of implementation of their HIS. Leveraging the PH4H to facilitate digital vaccination certificates was discussed as a use case for the initiative.

Clinical/Data Breakout Group

The clinical/data group discussed priorities for cross-border sharing in the PH4H, as well as the required resources and supports. Various data elements and sets of information were identified as clinical data priorities for cross-border data sharing:

- Demographic information
- Country of origin data
- Medical/vaccination history
- Patient consent (for clinical, data sharing, and public health purposes)
- Patient history, imaging, and lab data
- Allergies
- Hospital or clinic visit/encounter information
- Referrals
- Contact information
- Health care professional registry

This data would enable continuity of care, referrals, and more accurate monitoring of public health trends across the region. To facilitate the exchange of clinical data among countries, participants identified various resources and supports that will be required. These include a strong communication strategy, robust ICT infrastructure, skilled human resources, training and capacity building, technical support, monitoring/evaluation from international organizations, harmonized and standardized legal frameworks, and support from regional bodies (e.g., CARPHA, RACSEL, CARICOM, etc).

Closing Plenary

Mr. Marcelo D'Agostino delivered the closing remarks on behalf of PAHO/WHO, highlighting the leadership demonstrated by Caribbean countries since the launch of the IS4H Strategic Framework in Kingston, Jamaica in 2016, and ongoing efforts under the renewed Regional Plan of Action for Strengthening Information Systems for Health.

Dr. Pablo Ibarrarán closed the conference by sharing some of the key themes that emerged from the event. He emphasized the importance that Caribbean countries have placed on strengthening healthcare and the health system in the region through information sharing. The need to strengthen information and resource sharing to enable progress in the region was noted as a theme, recognizing the power of collaboration among nations. Many countries highlighted the importance of standardization and the benefits it brings, while recognizing that standardization needs to align with and support

local priorities. Lastly, Dr. Ibarrarán shared that every country showed strong interest in joining the Pan-American Highway for Digital Health, highlighting the enthusiasm surrounding the collaboration on the initiative. He ended his remarks by reiterating the power of collaborative efforts to yield broader impacts than isolated national initiatives, stating that coordination between countries is crucial for success.

Conclusions and Recommendations

Caribbean Connect played a critical role in propelling countries forward in their digital health transformation journeys and fostered a sense of solidarity and collaboration across the region.

A key highlight was the introduction of the PH4H initiative, which garnered strong support from senior leaders across the region. Extensive discussions focused on the various use cases for the PH4H and its potential to facilitate seamless data exchange both within and across countries. Following Caribbean Connect, numerous countries expressed enthusiasm and a commitment to participate in the initiative, with high hopes for its transformative impact on health outcomes throughout the region. Several key themes and action items emerged from the deliberations and presentations delivered throughout the conference:

Strategic Planning and Governance

- Create a Community of Practice to enhance collaboration among Caribbean countries
- Develop governance structures that enable data sharing and cooperation across the region
- Leverage existing Caribbean sub-regional strategic frameworks to define priorities and areas for collaboration such as the Caribbean Cooperation in Health (CARICOM) and the Plan of Action for Strengthening Information Systems for Health (PAHO/WHO)
- Engage CARICOM through the Council for Human and Social Development (COSHOD) as a strategic forum and potential governance structure for identifying and supporting common strategic priorities for the PH4H
- Leverage the Caribbean Technical Working Group (TWG) in Information Systems for Health which is endorsed by CARICOM and facilitated by PAHO/WHO as a technical coordinating mechanism for PH4H in the Caribbean

Legal and Regulatory Frameworks

- Develop an international Information Exchange Policy to govern operations across the region
- Develop shared legislation and policy guidelines across the region to strengthen the capacity to protect personal health information
- Leverage existing sub-regional and regional data sharing agreements where possible to accelerate cross-border health data exchange, and identify where new or augmented agreements or legal frameworks are required

Sustainability and Long-Term Investment

- Establish data embassies to protect against cyber threats
- Share regional data from IS4H Maturity Model Assessments among countries

Human Capital Development

- Develop a repository of shared training resources for Caribbean countries
- Establish subject matter experts within various domains across the region by completing an inventory of skills and strengths
- Leverage the Health Information Technical Support Facility (HIS-TSF), currently being developed by the Health Economics Unit, University of the West Indies and supported by USAID, to develop human capital through training, mentorship and by making expert resources available "on-demand"

Regional Collaboration and Resource Sharing

- Establish a regional Cyber Incident Response Team (CIRT)
- Identify digital disaster response team leads across the region
- Establish a Caribbean Digital Health Union to centralize health data management
- Develop templates to support the procurement of digital health tools across the region
- Leverage the PH4H initiative to develop standardized clinical documents, including vaccine certificates, patient summaries, and clinical reports
- Leverage the HIS-TSF to develop and share technical resources and artefacts (e.g. reference architectures, policy templates, standards templates, etc.)

Partnerships

- Engage in global digital initiatives, such as the WHO's Global Digital Health Certification Network (GDHCN) to increase interoperability and cohesion on a global scale

Appendix

Caribbean Connect Agenda

Caribbean Connect:
Building the Pan-American Highway for Digital Health

July 23-25
📍 Kingston, Jamaica

PRELIMINARY AGENDA

Monday July 22
Participants Travel to Jamaica

Tuesday July 23

8:00 – 9:00 am	**Registration Desk Open** | *Talk of the Town 17th Floor*		
9:00 – 10:00 am **Conference Opening Plenary**	**Opening Plenary Session** | *Talk of the Town (17th Floor)* • *Conference Welcome and Opening Remarks – Anton Edmunds, Manager Caribbean Region, IDB* • *Opening Remarks – PAHO (To be confirmed)* • *Keynote Address: Dr. the Honorable Christopher Tufton, Minister of Health and Wellness, Government of Jamaica* • *Conference Objectives - Pablo Ibarraran, Social Protection and Health Division Chief, IDB* • *Conference Format and Logistics – Jennifer Nelson, Senior Digital Health Specialist*		
10:00 – 10:30 am	**Full Group Photo** | *Talk of the Town (17th Floor)*		
10:30 – 11:00 am	**Networking Break** | *Talk of the Town (17th Floor)*		
11:00 am – 12:30 pm **Concurrent Session 1**	**Leadership Forum 1** **Room:** *William Gordon Suite, Lower Lobby* **Sustainability of Digital Health Transformation – Human Capital and Financing Challenges and Strategies** ***Facilitator:*** *Carina Cockburn, Country*	**Technical Session 1a** **Room:** *Talk of the Town, 17th Floor* **Health Information Exchange Architecture: Design and Standards for Interoperability** **Facilitators:** *Pablo Orefice, IDB; Peter Ricketts, PAHO*	**Technical Session 1b** **Room:** *Rio Bueno Suite, Lobby Level* **Principles, Policies and Programs: The Protection of Personal Health Information in the Digital Transformation of Health**

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	Representative, Trinidad and Tobago, IDB **Country and Partner Presentations:** *Jamaica, IDB Invest*	**Country Presentations:** *Jamaica, Suriname, Belize, Trinidad and Tobago, Bahamas*	**Facilitator:** *Blair Witzel, IDB* **Country Presentations:** *Jamaica, Suriname*
12:30 – 2:00 pm	**Lunch and Networking Break | *Talk of the Town (17th Floor)***		
2:00 – 3:30 pm **Concurrent Session 2**	**Leadership Forum 2** **Room:** *William Gordon Suite, Lower Lobby* **Digital Health Architecture and Strategies for Leaders:** **Facilitator:** *Daniel Doane, IDB*	**Technical Session 2a** **Room:** *Talk of the Town, 17th Floor* **Data for Decision-Making: Data Management and Analytics** **Facilitators:** *Sebastian Bauhoff, IDB and PAHO (TBC)* **Partner/Country Presentations:** *IDB, Belize, Suriname*	**Technical Session 2b** **Room:** *Rio Bueno Suite, Lobby Level* **Designing and Building for Digital Health Infrastructure Resilience: Approaches to Cybersecurity and Business Continuity** **Facilitators,** *Mario Casco, IDB and Peter Ricketts, PAHO* **Country Presentations:** *Trinidad and Tobago Jamaica, Barbados*
3:30 – 4:00 pm	**Networking Break | *Talk of the Town (17th Floor)***		
4:00 – 5:00 pm **Innovation Event**	**Innovation Event: Innovating and promoting PPP in Digital Health – IDB Lab, IDB Invest, IDB |** *Talk of the Town (17th Floor)* • *Facilitator: Anton Edmunds, IDB* • *Cristina Simon, IDB Invest and IDB Lab* • *Dr. David Walcott, Novamed*		
6:30 – 8:30 pm	**Welcome Reception |** *Port Antonio Suite, Lobby Level*		

Wednesday July 24

8:00 – 9:00 am	**Registration Desk Open |** *Talk of the Town (17th Floor)*

9:00 – 10:30 am **Concurrent Session 3**	**Leadership Forum 3** **Room:** *William Gordon Suite, Lower Lobby* **Information Systems for Health Governance for Strategy, Coordination and Standards** ***Facilitator:** Marcelo D'Agostino, PAHO* ***Partner Presentations:** IDB*	**Technical Session 3a** **Room:** *Talk of the Town, 17th Floor* **Digital Health Solutions Lessons Learned from the Front Line** ***Facilitator:** Dr. Sergio Miguens, IDB* ***Country Presentation:** Jamaica, Belize, Barbados, Trinidad and Tobago, Bahamas*	**Technical Session 3b** **Room:** *Rio Bueno Suite, Lobby Level* **Digital Health Regional Public Good Initiatives in the Caribbean** ***Facilitator:** Elisa Luaces, IDB* ***Partner presentations:** CARPHA, RACSEL, Connecathon 2024*

10:30 – 11:00 am	**Networking Break |** *Talk of the Town (17th Floor)*

11:00 am – 12:30 pm **Plenary Presentations and Panel Discussion**	**Plenary Session: Regional IS4H and Digital Health Strategies |** *Talk of the Town (17th Floor)* • *Facilitator: Dominque Afoon, Senior Associate, IDB* • *Plan of Action for Strengthening Information Systems for Health 2024–2030 – Marcelo D'Agostino, Unit Chief, Information Systems and Digital Health PAHO* • *Building the Pan-American Highway for Health, Jennifer Nelson, Senior Health Specialist, IDB* • *Panel Discussion*

12:30 – 2:00 pm	**Lunch and Networking Break |** *Talk of the Town (17th Floor)*

2:00 – 3:30 pm **Concurrent Session 4**	**Leadership Forum 4** **Room:** *William Gordon Suite, Lower Lobby* **Accelerating Digital Health in the Caribbean: Strategies for Sub-Regional Knowledge and Resource Sharing** ***Facilitator:** Nicolette Henry, Health Specialist, IDB* ***Presentation:** Centre for Health Economics, UWI*	**Technical Session 4a** **Room:** *Talk of the Town, 17th Floor* **Change Management for Digital Health Transformation** ***Facilitator:** Elisa Martinez Luaces, IDB* ***Country Presentations:** Suriname, Bahamas*	**Technical Session 4b** **Room:** *Rio Bueno Suite, Lobby Level* **Strategic Procurement of Digital Health Solutions: Best Practices and Lessons Learned** **Facilitator:** *Blair Witzel, IDB* ***Country Presentations:** Barbados*

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Thursday July 25

8:00 – 9:00 am	**Registration Desk Open |**_Talk of the Town (17th Floor)_
9:00 – 9:30 am Strategic Planning Session	**Plenary Session: Strategic Planning |** _Talk of the Town (17th Floor)_ • _Overview and Instructions: Pan-American Highway for Digital Health Strategic Planning Breakout Discussion – Jennifer Nelson, IDB; Marcelo D'Agostino, PAHO_

| 9:30 – 10:30 am

Strategic Planning Session | **Leadership Breakout Group**

Room: _William Gordon Suite, Lower Lobby_

• _Priority use cases for the PH4H_

• _Governance for PH4H_

Facilitator: _Pablo Ibarraran, IDB_ | **Technical Breakout Group 1:** _Digital Health/IT_

Room: _Talk of the Town, 17th Floor_

• _Building On-ramps to the PH4H – Technical priorities and resource needs_

Facilitator: _Carlos Nuñez, RACSEL_ | **Technical Breakout Group 2:** _Clinical Leaders/Data Management_

Room: _Rio Bueno Suite, Lobby Level_

• _Clinical continuity and data sharing across the PH4H – Priorities and resource needs_

Facilitator: _Peter Ricketts, PAHO_ |

10:30 – 11:00 am	**Networking Break**
11:00 am – 12:30 pm **Strategic Planning Report Back** **Conference Close**	**Report Back and Closing Plenary |** _Talk of the Town (17th Floor)_ • _Report Back: Plenary Strategic Discussions_ o _Facilitators: Jennifer Nelson, IDB, Marcelo D'Agostino, PAHO_ • _Closing Remarks – Marcelo D'Agostino, PAHO_ • _Closing Remarks – Pablo Ibarraran, Social Protection and Health Division Chief, IDB_
12:30 – 1:30 pm	**Lunch and Networking Break**
12:45 – 4:00 pm	**_Optional Event:_ EHR in Action - Health Facility Tour in May Pen Hospital and Health Center (limited availability – sign-up process to be announced at conference)**

The Pan-American Highway for Digital Health

The Pan-American Highway for Digital Health is an initiative that aims to enable connected health for all people in Latin America and the Caribbean.

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1. Definition

The Pan-American Highway for Digital Health (PH4H) is an initiative aimed at enabling **connected health for all in Latin America and the Caribbean** (LAC). Led by the Inter-American Development Bank (IDB), the Pan American Health Organization (PAHO), and countries of the region, this initiative strives to facilitate secure, efficient, and interoperable **health data exchange** both within and between countries – allowing people in the region to share and access health information. By leveraging national investments in health information exchange and coordinating with regional bodies and networks, PH4H supports synergies within the region.

PH4H aims to provide patients with **better healthcare services** regardless of their location. It will also enhance healthcare for those who move temporarily for work or study as well as for migrant people by enabling them to share their health history, thus improving their employability and education. Additionally, the digital highway will **strengthen public health surveillance**, optimize access to limited human resources, and promote research and innovation, leading to more efficient public health policies and boosting regional economies. As a result, countries will be **better prepared for future pandemics and other health threats**.

Unlike a physical highway, the digital highway **transcends boundaries**, enabling universal access and leaving no one behind. Officially launching in October 2024, the initiative is supported by the Japan Enhanced Initiative for Quality Infrastructure, Resilience against Disaster and Health Fund, financed by the Government of Japan. We welcome more partners to join us in this transformative journey.

2. Characteristics

Through secure data sharing, the Pan-American Highway for Digital Health,

A. Enhances **patient safety and continuity of care** by promoting the exchange of clinical data.

Patients can access and share their clinical information whenever and wherever it's needed – allowing health teams to make informed decisions.

The health data exchange would be standardized for key clinical documents including:

    a. **Patient Summary**
    b. **Vaccination History**
    c. **Medication Prescription**
    d. **Laboratory Test Results Reports**
    e. **Hospital Discharge**
    f. **Medical Imaging Report**

B. Enables **trusted health information verification** for vaccination records, laboratory results, and other health records, thereby reducing informal markets for health certificates and preventing unnecessary duplication of vaccines or diagnoses.

C. Enables **cross-border healthcare services** such as telemedicine, teleconsultations, and telediagnostics, thus increasing productivity in the healthcare sector and access to specialized human resources.

D. Encourages **regional agreements and regulatory frameworks** to advance the digital health transformation of the region.

E. Enhances **coordination** among countries regarding the **adoption** of digital health **interoperability standards**.

F. **Avoids unnecessary costs to the health care system** such as repeat vaccines and tests due to a lack of verifiable records.

G. Establishes a **shared space for the secondary use** of health data for public health research, policy development, regulatory activities, and innovation in a way that preserves privacy, security, timeliness, transparency, and reliability.

H. Enhances **regional public health resilience** by enabling countries to coordinate more effectively in response to public health emergencies.

Fifteen countries from Latin America and the Caribbean are preparing for cross-border interoperability. Join them and the Pan-American Highway for Digital Health Initiative, open to all countries of the region.

3. How to Get Involved

1. **Send a letter** of intent to the **IDB** to join the Regional Technical Cooperation that will establish the Pan-American Highway for Digital Health (RG-T4546, Paving the Pan-American Highway for Digital Health).

2. **Join** the World Health Organization's **Global Digital Health Certification Network** (GDHCN) and the Pan-American Highway for Digital Health Trust Domain.

   - *Globally, the need for a trusted digital health network has been recognized. As a result of the work of WHO, G20, and OECD, the WHO announced the GDHCN in June 2023.*

   - *The GDHCN is an open-source platform based on transparent standards and available for use free by WHO member states.*

   - *The GDHCN can support various uses, such as digitization of vaccination certificates, verification of medical prescriptions, sharing the International Patient Summary, and certification of healthcare professionals.*

- *The Pan-American Highway for Digital Health relies on the PH4H Trust Domain within the GDHCN to support various uses for the LAC region.*

3. **Join** the Latin American and Caribbean digital health network (**RACSEL**) and participate in the 3rd regional Connectathon in October 2024 to technically prepare for cross-border interoperability.

3.a. Important Considerations

To build this digital highway, participating countries must **collaborate closely**, agreeing on standards, common information, health technology guidelines, and shared principles that serve as "rules of the highway."

Each country must pave and commit to maintaining its section of the highway by **building national interoperable systems and establishing the necessary policy and legal framework to enable effective participation for the benefit of its citizens.**

Although the digital highway enables a wide variety of use cases such as supporting healthcare delivery for migrant people or improving regional public health surveillance, a participating country doesn't have to participate in all types of data exchange. Countries choose which use cases they will enable.

4. OUR APPROACH

Regional Alignment

An initiative as large as the highway isn't created with just one project. Today, we have several regional projects that are aligned with the highway in addition to country-level investments that support health information exchange. These investments can be considered lanes on the highway.

Some of the regional projects, or lanes on the highway, that are currently being built include:

- **Paving the Pan-American Highway for Digital Health** (RG-T4546): This Regional Technical Cooperation of $5 million supported by the first donor of the initiative, the government of Japan, aims to establish the Pan-American Highway for Digital Health for the exchange of clinical data between healthcare providers and professionals within the healthcare sector.

- **Digital Transformation in Health to Mitigate the Effects of COVID-19 in Latin America and the Caribbean** (LACPASS) (RG-T3769**)**. This Regional Public Good (RPG), coordinated by RACSEL and executed by the National Center for Health Information Systems (CENS), pursues the exchange of health data between countries through three enabling components: a) clinical care data exchange; b) epidemiological surveillance and public health data exchange; and c) guidelines and directives for the sustainable development of cross-border telehealth. Currently, 15 countries are participating.

- **Regional Agreement for Cross-border Digital Health Services** (RG-T4392): This RPG, coordinated by RACSEL and executed by CENS, seeks to strengthen the health information exchange model implemented in the region through the adoption of standards, architectures, governance, and protocols of data exchange and interoperability. It also seeks to learn from international experiences related to health data spaces and regulation for artificial intelligence to propose options for the region.

- **Digital Health Trust Network in the LAC Region to Improve Access to Health Services for Immigrants** (RG-T4404): The objective of this RPG, coordinated by RACSEL and executed by the Julio Ricaldoni Foundation, is to enable migrant people to access their digital and paper-based International Patient Summary, and support countries to join the WHO GDHCN, which will allow countries to verify and trust this information across borders.

- **Reducing the Public Health Impact of Pandemics in the Caribbean through Prevention, Preparedness, and Response** (RG-T4387): This Pandemic Fund Technical Cooperation, executed by the Caribbean Public Health Agency (CARPHA), seeks to strengthen cross-border data sharing using interoperability standards for public health surveillance.

Nationally, many countries are working towards building their section of the highway. IDB and PAHO currently support 20 countries to enable people, processes, and technology towards national health information exchange.

5. The IDB and PAHO Alliance

Since 2018, the IDB and PAHO started working together with the mission of accompanying the digital health transformation of LAC led by countries. Their affiliation and joint vision set them apart because both organizations' efforts are directed toward the same goal. Consequently, their investments and developments in the region become more efficient and lasting.

The Pan-American Highway for Digital Health

The Pan-American Highway for Digital Health is an initiative that aims to enable connected health for all people in Latin America and the Caribbean.

Key Features

- **Connected Health:** Secure, efficient, and interoperable data exchange within and between countries.
- **Patient-centered approach:** Empowers patients to access and share their data, helping to enable universal access to healthcare services no matter the location.

Objectives

Continuity of Care
Improves quality and efficiency of healthcare services.

Regional Resilience
Strengthens public health surveillance and promotes research and innovation.

Digital Added Value
Unlike the physical Pan-American Highway, the digital highway transcends boundaries, ensuring universal access without physical constraints.

Support and Launch

Official launch: October 2024

- The Pan-American Highway for Digital Health is an initiative led by the **IDB, PAHO, and the countries of the region**, supported by the Japan Enhanced Initiative for Quality Infrastructure, Resilience against Disaster, and Health Fund, financed by the **Government of Japan.**

Key Benefits

• Enhanced Patient Safety and Continuity of Care:

- Promotes the exchange of clinical data.
- Patients can access and share clinical information as needed.

• Standardized Health Data Exchange:

- Patient Summary
- Vaccine History
- Medication Prescription
- Laboratory Test Results Reports
- Hospital Discharge
- Medical Imaging Report

• Cross-border Healthcare:

- Public health coordination and collaboration
- Telemedicine and teleconsultation
- Telediagnostics

Additional Benefits

Avoids unnecessary costs such as repeating unnecessary testing and vaccines

Improves healthcare and facilitates employability and education for migrant people.

Enables health information verification among countries and promotes regional digital health governance.

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