

# 2018

## EVALUATION AND RENEWED VISION AND STRATEGY (2019-2021) FOR THE PACIFIC HEALTH INFORMATION NETWORK (PHIN)

**“INSPIRING CHANGE TO CREATE  
NEW HORIZONS OF A HEALTHY  
PACIFIC ONE CONNECTION AT A  
TIME”.**

---



*This page is intentionally left blank*

# Contents

Acknowledgements.....	4
Forward.....	5
Acronyms .....	6
Executive Summary.....	8
<b>1 Introduction .....</b>	<b>10</b>
1.1 Project Goals & Objectives .....	10
1.2 Approach to Strategic Plan Development .....	11
1.2.1 Outputs.....	11
1.3 Guiding Principles to Developing a Renewed Vision and Strategy for PHIN .....	12
1.4 Target Audience .....	13
1.5 Report Outline .....	13
<b>2 Methodology.....</b>	<b>14</b>
2.1 Scope.....	14
2.2 Evaluation Frameworks .....	14
2.2.1 Assessing PHIN’s Performance.....	14
2.2.2 Shaping PHIN’s Strategic Priorities.....	15
2.3 Data Collection Methods .....	16
2.3.1 Environmental Scan .....	16
2.3.2 Stakeholder Engagement Activities .....	17
2.3.3 Strategic Dialogue .....	17
2.4 Analysis Approach.....	18
<b>3 Background .....</b>	<b>19</b>
3.1 Pacific Health Information Network .....	19
3.2 Membership.....	20
<b>4 Environmental Scan .....</b>	<b>21</b>
4.1 Mission & Visions of Other Similar Organizations .....	21
4.2 A Closer Look at AeHIN, PAHO, and RHINO .....	25
4.2.1 AeHIN .....	25
4.2.2 PAHO Initiatives .....	27
4.2.3 Regional Health Information Network (RHINO).....	27

4.3	Sub-Regional Groups.....	28
4.3.1	The Brisbane Accord Group .....	28
4.3.2	The Pacific Civil Registrars Network.....	29
4.3.3	Pacific Public Health Surveillance Network.....	29
4.4	Impact .....	30
5	Key Findings .....	31
5.1	Thematic Analysis .....	31
5.1.1	Stakeholder Interviews and Consultant Analysis .....	31
5.1.2	Membership Survey .....	33
5.2	Decision: PHIN Should Continue .....	33
6	Strategy Development .....	35
6.1	Introduction .....	35
6.2	Core Values .....	37
6.3	Vision and Mission .....	37
6.4	Brand Promise.....	39
6.5	Goals .....	40
6.6	Strategic Action and Activities .....	41
6.7	PHIN 2019–2021 Strategy and Implementation Roadmap .....	42
6.8	Indicators for Monitoring and Evaluation.....	48
	Appendix A: Indicators For Monitoring the Pacific Health HIS Situation .....	49
	Appendix B: Stakeholder Interview Questions .....	50
	Appendix C: PHIN Member Survey Questions .....	52
	Appendix D: Additional Information on PAHO .....	55
	Appendix E: List of Stakeholders Interviewed .....	60
	Appendix F: SWOT Analysis Guidelines .....	61
	Appendix G: Population and Health Snapshot .....	62
	Appendix H: Strategic Actions and Activities.....	65
	Appendix I: Board Governance Terms of Reference .....	70

# Figures

Figure 1. PHIN communication and reporting pathways (Adapted from 2011 Draft Implementation Plan) .....	20
Figure 2. Asian eHealth Information Network National eHealth Capacity Roadmap .....	26
Figure 3: PPHSN Institutional Framework .....	30
Figure 4: PHIN SWOT Analysis. ....	40
Figure 5. HMN framework components .....	57
<b>Figure 6.</b> Healthcare workers per capita in PICT. ....	63
Figure 7. Healthcare spending per capita in PICT .....	64

# Tables

Table 1. Outcome Evaluation Framework .....	15
Table 2. Developmental Evaluation Framework.....	15
Table 3. Regional organizations subject to a targeted literature search. ....	16
Table 4. Countries represented by PHIN members. ....	20
Table 5. Missions and Visions for PHIN and similar organizations and associations. ....	21
Table 6. AeHIN strategy action plans.....	25
Table 7. Summary of key lessons learned and best practices from survey of regional HIS initiatives. ....	27
Table 8: PHIN Strategic Framework.....	35
Table 9: PESTLE Framework.....	37
Table 10: PHIN 2019-2021 Goals and Board Members Responsible .....	42
Table 11: PHIN 2019-2021 Strategy and Implementation Plan .....	44
Table 12. Indicators to monitor PICT HIS situation (Adapted from Health Metrics Global Tracking Tool).....	49
Table 13: List of Stakeholders Interviewed.....	60
Table 14. Population size of countries with members registered in PHIN (Hawaii is not included). ....	62

## Acknowledgements

The evaluation of the Pacific Health Information Network (PHIN) took place in March/April 2018 to assess the network's vision, strategy and lessons learned from the past 12 years of its existence and to guide us in our strategy for the future. The success and outcome of this undertaking required assistance from many people:

We acknowledge, with much gratitude, the full and unconditional support rendered throughout this assignment from PHIN board members who devoted their time and energy to revitalize the Network through the Strategy Working Group: PHIN Vice-President Rumanusina Maua (Samoa), Dr. Devina Nand (Fiji), Walter Hurrell (Tonga) and Manah Dindi (Papua New Guinea). Their insights have been invaluable. We also thank the rest of the PHIN Board Members for their support and endorsements: Tearoa Iorangi (Cook Islands), Teanibuaka Tabunga (Kiribati), Dr. Silvia Tavite (Tokelau), and David Wincener (Federated States of Micronesia).

We sincerely thank all those in the public and private sector who made time to contribute to this study through their participation and input. These included: Dr. Audrey Aumua, Deputy Director-General of the Pacific Community (SPC), Dr. Rasul Baghirov and Michael Buttsworth from the World Health Organization (WHO), Finlay Batts from Australian Innovation Exchange, Susan Ivatts from the World Bank, Mirian Lu Mon from Australian Institute of Health and Welfare, Sandra Paradez from United Nations Population Fund, Ian Thompson from University of the South Pacific, Nihal Samara from Gemba360, Sue Walker and Nicola Richards from Queensland University of Technology. We also thank Dr. Alvin Marcelo and Dr. Boonchai Kijsanayotin Co-Chairs of the Asian eHealth Information Network (AeHIN) for sharing their experience, passion, and encouragement to bring PHIN to new heights.

We would like to acknowledge the excellent expertise and passion of Lauro Vives from Gevity who conducted the interviews for the evaluation, developed the evaluation framework and put together the analysis as presented here - as well as facilitated the development of the new vision, mission, and strategy of the PHIN.

Finally, thanks go to the PHIN technical secretariat, namely the World Health Organization (WHO) and SPC, for their invaluable assistance and willingness to support PHIN. We would particularly like to recognize the WHO for funding and coordinating this study, acknowledging Martina Pellny and Katri Kontio from the WHO Division of Pacific Technical Support (DPS) and Dr. Jun Gao, and Navreet Bhattal of the WHO Western Pacific Office for their leadership and servitude in helping everyone complete this undertaking, as well as Dr. Sunia Soakai (SPC) for his candor, counsel and facilitation skills.

Mr. Shivnay Naidu  
President of PHIN



## Foreword

Providing health care is a significant challenge in the South Pacific with 21 island countries and territories spanning over more than 8.5 million square kilometers. Digital technology has the potential to bridge those distances, but countries still lack comprehensive health information systems with secure data and information exchange at all levels of the health system. Often data are captured in a way that cannot be shared as needed because of interoperability between existing systems or lack of standards. Sometimes data are captured multiple times in multiple ways, leading to duplication, inaccuracies, and delays. Sometimes, they are not captured at all.

On the other hand, many Pacific Islands have already adopted some form of e-health or m-health (mobile phone-based) approach, mostly for administration and management, surveillance and emergencies. Overall, deployment has been slow, but this will quickly change with the advent of the submarine communications cable by 2021. We need to get ready.


It is within this space to close the gaps that the Pacific Health Information Network (PHIN) has sought to operate since its inception at the Health Metrics Network meeting in Noumea in 2006. Twelve years later, the PHIN Board decided to evaluate the network's role and its impact on strengthening HIS and e-Health in the Pacific.

This report is the outcome of this evaluation with contributions from many countries and stakeholders: overall 27 people across the countries and agencies were interviewed as part of the review process. The evaluation was presented during the PHIN meeting at the WHO office in Suva, Fiji on 29 June 2018 and discussed with countries. Based on this assessment, the renewed PHIN strategic plan 2019-2021 and implementation roadmap was developed and adopted by the board members of the PHIN and under the overall guidance of the Joint Technical Secretariat by the World Health Organization (WHO) and the Pacific Community (SPC). The new strategy will help to shape and guide countries in the right direction, with possible regional synergies, while also providing support and needed follow-up at the country level.

On behalf of the PHIN Joint Technical Secretariat, it is our privilege to present the Pacific Health Information Network 2019 – 2021 strategy and the final evaluation report.

**Vinaka vaka levu**

On behalf of the Technical Secretariat of the PHIN



Ms Martina Pellny  
Team Coordinator, Health Systems  
Division of Pacific Technical Support, WHO

## Acronyms

ABS	Australian Bureau of Statistics
AeHIN	Asian eHealth Information Network
BAG	Brisbane Accord Group
CRVS	Civil Registration and Vital Statistics
DE	Developmental Evaluation
DHS	Demographic Health Survey
ECLAC	Economic Commission for Latin America and the Caribbean
EFMI	European Federation for Medical Informatics
ESCAP	Economic and Social Commission for Asia and the Pacific
FNU	Fiji National University
GHI-net	Global Healthcare Information Network
GTT	Global Tracking Tool
HOH	Heads of Health
HIS	Electronic Health Information Systems
HIMF	Healthy Island Monitoring Framework
HIMSS	Healthcare Information and Management Systems Society
HMN	Health Metrics Network
ICT	Information and Communication Technologies
IDB	Inter-American Development Bank
IMIA	International Medical Informatics Association
M&E	Monitoring and Evaluation
MICS	Multiple Indicator Cluster Survey
MOH	Ministry of Health
NGO	Non-Governmental Organization
PAHO	Pan-American Health Organization
PANACeA	PAN Asian Collaboration for Evidence-based eHealth Adoption and Application
PCRn	Pacific Civil Registrars Network
PEVS	Regional Plan for the Strengthening of Vital Health Statistics
PESTLE	Political, Economic, Social, Technological, Legal, Environmental
PHC	Primary Health Care
PHIN	Pacific Health Information Network
PICT	Pacific Island Countries and Territories
PIHOA	Pacific Islands Health Officer Association
PPHSN	Pacific Public Health Surveillance Network



PVSAP	Pacific Vital Statistics and Action Plan
RCHDI	Regional Core Health Data Initiative
RELACSIS	Latin American Caribbean Network for the Strengthening of HIS
RHINO	Routine Health Information Network
RHISSIP	Regional Health Information Systems Strategy Implementation Plan
SPC	The Pacific Community
SRH	Sexual and Reproductive Health
SWG	Strategy Working Group
SWOT	Strengths, Weaknesses, Opportunities, Threats
TOR	Terms of Reference
UHC	Universal Health Coverage
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
UNSD	United Nations Statistics Division
UNSW	University of New South Wales
USAID	United States Agency for International Development
UQ	University of Queensland
VAWG	Violence Against Women and Girls
WHO	World Health Organization
WPRO	Western Pacific Region Office

## Executive Summary

Based on stakeholder consultations, analysis and the consultants' foresights and insights, the Pacific Health Information Network ("PHIN") should not only continue to be the voice of Health Information System ("HIS") and health information for the Pacific region, but to have a much broader forward-looking mandate in advocating and supporting digital health adoption to improve health outcomes.

As PHIN charts new directions, keeping the status quo is not an option. The need for collective, passionate, proactive and visionary leadership, securing new sources of funding, forging and supporting country-led initiatives, building cross-sectoral capacity building and awareness, initiating quick-wins and gaining membership and donor confidence, and instituting regional donor and multi-sectoral cooperation and coordination are the common themes defining the path forward. Therefore, under a revitalized PHIN and founded under the new five core values of **equity, unity, diversity, innovation and leadership**, the network developed a new strategic framework under the brand promise of **"Inspiring change to create new horizons of a healthy Pacific one connection at a time"**.

Under a common vision **"Guided by our five core values, PHIN fosters digital health and supports capacity building of health professionals to realize, navigate and achieve goals of the Pacific Island Countries and Territories"** and a purpose to establish **"A network of professionals that connect, innovate and collaborate towards a national health plan using health information for evidence-based decision-making to measure and improve health outcomes in the Pacific Island Countries and Territories through appropriate and sustainable digital health solutions"**, PHIN's new 2019 – 2021 strategy is defined by its four goals:

1. **Strengthen leadership, governance and brand**
2. **Advance capacity building and inclusive growth**
3. **Improve peer assistance**
4. **Strengthen regional cooperation and multi-sector collaboration**

Supporting these four goals are the following 18 strategic action items:

Goals	Strategic Action
1. Strengthen leadership, governance and brand	1.1 Establishing PICT country champions
	1.2 Developing new Board governance, operating model and funding sources
	1.3 Strengthening implementation of high level commitments and reporting
	1.4 Creating an enabling volunteer culture
	1.5 Building the brand as the voice of digital health in the Pacific
	1.6 Inaugurating PHIN as an official body at HoH 2019
2. Advance Capacity Building and Inclusive Growth	2.1 Implementing a PHIN knowledge portal
	2.2 Promoting a holistic and inclusive approach by expanding PHIN memberships within the health

Goals	Strategic Action
	sectors (e.g. clinicians) and across multi-sectors (e.g. Ministry of Finance, Ministry of ICT, Bureau of Statistics, etc.)
	2.3 Developing a Community of Practice with international subject matter experts
	2.4 Creating an enabling people-centric environment
3. Improve peer assistance	3.1 Providing country-level assistance
	3.2 Standardization of documents
	3.3 Securing funding for at least 1 PHIN regional conference a year in alignment with HoH and RCM
	3.4 Pilot innovative projects to strengthen HIS, data production and reporting
4. Strengthen Regional Cooperation and Multi-sector Collaboration	4.1 Working with development partners to identify opportunities to host in-country /regional conferences and workshops
	4.2 Facilitating and providing a platform for regional development partner coordination and harmonization
	4.3 Participating in cross sectoral initiatives namely CRVS, e-Government, Climate Change, Gender Equity and Social Inclusion, and Shared Infrastructure and Services
	4.4 Forging partnerships with education institutions (e.g. USP)
	4.5 Establishing potential funding and knowledge partnerships

Under the new strategy, 48 distinct and prioritized activities are inculcated into the strategic actions. The full strategy and implementation roadmap are provided in Section 6.7: PHIN 2019 – 2021 Strategy and Implementation Roadmap.

# 1 Introduction

As the rate of technological advancement continues to accelerate, information communication and technologies (ICT) are having an increasing impact on the health of populations. A central component of this is the use of electronic health information systems (HIS) to increase adoption; interoperability; data sharing, access, exchange; and above all, effective use. Such systems have broad potential to improve decision-making for health and, by extension, health outcomes. However, a combination of limited human resource and infrastructure capacity; inadequate policies and legal framework; and the lack of donor synergy and coordination in Pacific Island Countries and Territories (PICT) has presented challenges for advancing the use of digital health including the collection, analysis and use of health information.

It is within this space that the Pacific Health Information Network (PHIN) has sought to operate since its inception at a Health Metrics Network (HMN) meeting in Noumea in 2006. Created with the goal of providing opportunities for health stakeholders in the Pacific to network, learn, collaborate and share, the activities of PHIN prior to this study have focused on holding workshops and regional meetings across the Pacific region. Now, 12 years later, the PHIN Executive Board is interested in assessing the organization's role and its impact in a sustainable manner to strengthen HIS (and possibly broadly digital health) in the Pacific in the form of a renewed vision and a new three-year Strategic Plan and an Implementation Plan.

A Strategic Plan sets long-term priorities for an organization, providing meaningful goals that motivate and unite people to make a series of smaller decisions that will achieve complex and impactful outcomes. With the development of a new Strategic Plan, PHIN has the opportunity to strengthen the digital health agenda in the Pacific for the foreseeable future.

## 1.1 Project Goals & Objectives

In May 2018, a project was formed to perform a forward-looking review of the PHIN's work since 2006 to determine if PHIN should continue to function, and if so, establish a renewed vision and a new Strategic Plan.

The PHIN review focused on lessons learned since its inception. Although written documentation of activities and achievements are significantly lacking, the overall goal of this project was to support the PHIN Board in assessing the network's role and sustainability to strengthen health information systems in the Pacific. Much of the information gathered was from interviews and stakeholder consultation. If the findings of the study established merit for PHIN to continue, then the study would proceed to review PHIN's strategic framework (i.e., mission, vision, value, goals and strategic actions) and consequently draft a three-year Strategic Plan (2019-2021). As well, this project sought to establish a support base for executing the Strategic Plan through the development and prescriptive application of an Implementation Plan.

Thus, the three main objectives of this study were to:

- Provide an assessment of PHIN's strategic contributions to the Pacific digital health and HIS sector to date and determine whether PHIN should continue;
- If it has been established that PHIN should continue, establish a three-year Strategic Plan (2019-2021); and,
- Facilitate discussions with the PHIN Board members prior to, and at a PHIN Board meeting held from June 27-29, 2018 to validate and finalize the Strategic Plan and to establish a support base for executing the strategic priorities through an Implementation Roadmap.

## 1.2 Approach to Strategic Plan Development

Working under severe time constraints, the engagement combined eight streams of activity that at times, overlapped one another and continually built on each other to shape the direction of the Strategic Plan.

**Stream 1: Assess Status Quo:** Conduct an evaluation of past PHIN's vision and strategy to date.

**Stream 2: Environmental Scan:** This was a review and assessment of similar regional bodies to understand how they are addressed in the ever-changing and evolving digital health environment. The objective of the scan was to identify what works (and what does not), best practices, benchmarks (if data are available), and discovering emerging trends.

**Stream 3: Stakeholder Consultation:** To be successful, strategic planning requires input and perspectives from key stakeholders, contributors and thought leaders. This stream included consultations with a broad group of stakeholders, including the current Board, current PHIN members, past pioneers and founding members, bilateral and multilateral development partners, network organizations and relevant NGOs, and other supporting sectors and interest groups.

**Stream 4: Iterative Evaluation:** Highly introspective, the focus of the Iterative Evaluation stream was to assess PHIN's current situation. This included the ongoing review and discussion of the PHIN strategic framework (i.e., vision, mission, values and goals), its current governance structure and institutional capacity and a situational analysis. Focused, strategic dialogue sessions were also held every day for over two weeks leading up to the PHIN Board meeting. This stream involved reviewing insights gathered throughout the review and consultation process to build towards making a decision to continue PHIN, and in doing so, magnified a renewed set of strategic and implementation priorities that are pragmatic yet innovative.

**Stream 5: Draft the Strategy:** A draft of the new 2019-2021 strategic priorities was produced, based on the research, consultation, strategic dialogues and evaluation activities conducted through Streams 1, 2, 3 and 4. The draft was prepared in advance of the PHIN Board meeting, which was held in Suva, Fiji from June 27-29, 2018.

**Stream 6: Finalize the Strategy:** A presentation to the PHIN Board members and stakeholders, including a facilitated discussion on the 2019-2021 strategic priorities took place from June 27-29. The goal of the meeting was to finalize and gain acceptance of the Strategic Plan by Board Members and to establish a support base for executing the strategic priorities by developing an Implementation Plan.

**Stream 7: Develop Implementation Plan:** PHIN Board Members worked together to outline the steps and tactics that should be used to execute the 2019-2021 PHIN Strategic Plan.

**Stream 8: Finalize the Implementation Plan:** This stream focused on finalizing PHIN 2019-2021 Implementation Plan.

### 1.2.1 Outputs

Resulting from the eight streams of activity were five main outputs:

1. A **Discussion Paper**, which was circulated to the Board Members and key stakeholders prior to the PHIN meeting on June 27, 2018.

2. A **Consultant Report (this report)**, which builds on the Discussion Paper and includes the Environmental Scan, PHIN evaluation and situational analysis, and recommendations and considerations for strategic priorities and actions.
3. The **PHIN 2019-2021 Strategic Plan**, which includes the renewed mission, vision and goals; and,
4. The **PHIN 2019-2021 Implementation Plan**, which provides the tactical approach and actions that will be deployed to achieve the Strategic Plan. Once agreed, costing of the implementation plan will be conducted by the PHIN Board with support from Gevity.
5. A **Board Governance Terms of Reference** to assist the Board and Secretariats in clarifying the responsibilities of various PHIN participants and ensuring effective communication between the Board and its multitude of stakeholders. The Board Governance Terms of Reference (TOR) is included as part of the report submission.

## 1.3 Guiding Principles to Developing a Renewed Vision and Strategy for PHIN

The development and execution of this project were guided by the approach of the Framework on Integrated People-Centered Health Services<sup>1</sup>. *Note that the approach was modified by the author to suit the characteristics of this particular engagement.* Implementation principles using this framework reflect an emphasis on regional leadership, local ownership, engagement and use. These eleven principles listed below were used guides in setting the strategic framework.

1. **Regionally guided:** the strategy must have a regional view of the digital health needs and priorities of the PICT and is well-positioned to be the voice of the PICT. *(added by author)*
2. **Country-led:** the strategy and execution must be responsive to local contexts and will be developed, led and followed-up by the countries who are meant to benefit from it. *(modified by author)*
3. **Equity-focused:** the strategy must address efforts to improve health equity, including addressing the social determinants of health and unequal access to healthcare and form an essential component of efforts to improve the use of health information.
4. **Participatory:** the strategy efforts must be responsive and accountable to local populations and, in particular, disadvantaged or vulnerable groups.
5. **Collaborative:** the strategy must seek collaboration with Ministries of Health and other government agencies (e.g., finance and treasury, statistics, education, ICT, etc.); bilateral and multilateral development partners; and civil societies including Non-governmental organizations (NGOs) and private foundations. *(modified by author)*
6. **Improved service delivery**<sup>2</sup>: the strategy must acknowledge that digital health can be harnessed to improve service access and quality while containing costs, thereby advancing universal health coverage (UHC). *(added by author)*
7. **Systems strengthening:** the strategy must move away from the traditional “vertical” paradigms that have fragmented health systems and care, instead taking a holistic approach towards effective financing, capacity building and resourcing across health systems. *(modified by author)*
8. **Evidence-informed practice:** the strategy must be based upon the best available evidence, with formal mechanisms for iterative learning and continuous improvement built into strategies.

<sup>1</sup> World Health Organization. (2016). Framework on integrated, people-centred health services. <http://www.who.int/servicedeliverysafety/areas/people-centred-care/framework/en/>

<sup>2</sup> World Health Organization (2018): Regional Action Agenda on Harnessing e-health for Improved Service Delivery in the Western Pacific

9. **Ethics-based:** the strategy should reflect an emphasis on the right to autonomy, privacy, equity and justice.
10. **Results-oriented:** the strategy (and accompanying Implementation Roadmap) should have indicators and outcomes to monitor and quantify progress.
11. **Sustainable:** the strategy must plan for sustainability from the start and contribute to long-term development and progress, including identifying high level government advocates (i.e. country champions); recognizing, respecting and integrating to the regional and national-level strategy; ensuring financial health (i.e. addressing total cost of ownership); and the development of talent. *(modified by author)*

Two principles that are not explicitly stated in the framework's implementation approach, but rather are embedded throughout, are those of **transformational change** and **learning from failure**. Strengthening the use of electronic health information is a complex effort. Efforts to integrate HIS and health information into current practices and processes extend beyond simply digitizing health data by put on a computer. Rather, it requires large-scale shifts in thinking and practice that require vision, commitment and collaboration.

## 1.4 Target Audience

This report is primarily intended for use by Board Members and the Secretariat to inform the strategic direction and actions of PHIN. Furthermore, this report was written as a compendium to accompany the 2019-2021 Strategic Plan and Implementation Roadmap to assist the current and future Boards, the Secretariat and relevant stakeholders and partners already active in the area of health information and digital health or are interested to invest.

## 1.5 Report Outline

The strategic planning process is an extensive venture where findings and analyses from previous phases are built upon with more detail and insights. This report reflects that process. Early versions of this report constituted a Discussion Paper, which presented the Approach (Chapter 2), PHIN background and a population health snapshot (Chapter 3), and an Environmental Scan of similarly mandated organizations (Chapter 4). Now, the report has evolved into the Consultant Report, which includes findings from the consultative and evaluative approach taken to complete the study, and in turn, frames and formulates the 2019-2021 Strategy and Implementation Plan. The Consultant Report aims to corroborate the PHIN 2019-2021 Strategy and Implementation Roadmap.



## 2 Methodology

Strategic planning requires a sound methodology that incorporates research, stakeholder engagement and consultation and priority setting. This chapter provides a brief summary of the project scope, evaluation frameworks used, data collection methods, and analysis approach.

### 2.1 Scope

Developing a renewed vision and new strategic plan requires assessing the strengths, weaknesses, opportunities and threats facing PHIN and identifying the most appropriate way forward. This can be done through an introspective evaluation that also considers the environment in which PHIN operates and looks to others who are tackling similar issues. Thus, the study was guided by insights drawn from Gevity's understanding of the digital health landscape in the Pacific along with secondary research, including an environmental scan of similarly-mandated organizations. While the focus was on Pacific countries that have registered PHIN members, consideration was given to the potential role and value of PHIN across the Pacific.

### 2.2 Evaluation Frameworks

A number of evaluation frameworks were adopted to shape this study:

- The **Outcome Evaluation Framework** informs how PHIN has performed against its existing strategic priorities and actions listed in the 2012-2017 Regional Health Information Systems Strategic Plan (RHISSP).<sup>3</sup>
- The **Developmental Evaluation Framework** assesses the degree to which PHIN can respond to emerging trends and development related to health information and HIS.
- The **Pacific HIS Assessment Framework** takes indicators adapted from the Health Metrics Global Tracking Tool to monitor the Pacific HIS situation. These indicators were used in a 2016 study on HIS in the Pacific, which was conducted by PHIN. This study did not actively deploy the use of the HIS Assessment Framework but is offered in Appendix A: Indicators For Monitoring the Pacific Health HIS Situation as a way to measure progress of PHIN's strategic actions in the future and for consideration in the design of a monitoring framework.

#### 2.2.1 Assessing PHIN's Performance

The Outcome Evaluation Framework (Table 1) was selected to guide the assessment of PHIN's past strategic efforts and activities. The strategic priorities listed in the framework are taken directly from the 2012-2017 RHISSP. At the early stages of the evaluation, example indicators were developed to measure PHIN's strategic priorities based on Gevity's understanding of the PICTs health information/digital health landscape.

As the study unfolded, it was discovered that there has not been any formal effort towards monitoring the strategic actions of PHIN. Thus, the team was not able to use the Outcome Evaluation Framework to measure PHIN's performance against the previous strategic plan and suggested indicators. As a result, the assessment of PHIN's performance relied on the feedback received from the many consultations held with PHIN stakeholders

<sup>3</sup> PHIN. (2011). Regional Health Information Systems Strategic Plan 2012–2017. Pacific Health Information Network.



(see Section 2.3.2 Stakeholder Engagement Activities). Nonetheless, the example indicators can also be adopted for consideration in the design, monitoring and evaluation of the Network's future strategic actions.

**Table 1. Outcome Evaluation Framework**

Strategic Priority (2012-2017)	Example Indicators
1. Advocate for the recognition of and improvement to HIS within PICT	<ul style="list-style-type: none"> <li>Annual funding for HIS to PICT</li> <li>PHIN participation in country strategic planning</li> </ul>
2. Enhance institutional capacity and opportunities for workforce development and training	<ul style="list-style-type: none"> <li>Rollout and uptake of PHIN training courses</li> <li>Prevalence and growth of health information/health ICT positions in the Pacific</li> </ul>
3. Strengthen the application of ICT	<ul style="list-style-type: none"> <li>Number and quality of PICT HIS</li> </ul>
4. Improve data integration, quality and sharing	<ul style="list-style-type: none"> <li>Data reporting coverage</li> <li>Data reporting accuracy</li> <li>Integration of vertical disease programs</li> </ul>
5. Develop policies, regulations and legislation on HIS-related issues	<ul style="list-style-type: none"> <li>Design and adoption of national HIS strategies</li> </ul>
6. Enhance HIS leadership and sustainable governance	<ul style="list-style-type: none"> <li>Availability of, and attendance at, PHIN networking events</li> <li>Design and adoption of HIS governance and accountability mechanisms</li> </ul>

## 2.2.2 Shaping PHIN's Strategic Priorities

The Developmental Evaluation (DE) is a forward-looking "evaluation approach that can assist social innovators develop social change initiatives in complex or uncertain environments."<sup>4</sup> The DE Framework (Table 2) considers themes to evaluate how responsive PHIN is to emerging trends and where PHIN can invest effort to drive stronger outcomes. As the HIS and health information situation in the Pacific region continues to evolve, it is beneficial to use the DE Framework to establish themes and guide PHIN's strategic priorities.

As with the Outcome Evaluation Framework, the Developmental Evaluation Framework was not explicitly used to measure the 2012-2017 Strategic Plan. However, the themes of the Developmental Framework were repeatedly referenced as the study moved into the strategic plan development phases.

**Table 2. Developmental Evaluation Framework**

Theme	Definition
1. System connectivity	Examine PHIN's relationships and partnerships, how well we are connected, and if there are any gaps, barriers or challenges that need to be addressed either with external partners or within the network.
2. Responsiveness	Examine how PHIN is meeting the needs of its members and PICT and to what extent it is adaptable and responsive to changing needs and contexts.

<sup>4</sup> Better Evaluation. (no date). "Developmental Evaluation." Retrieved from: [https://www.betterevaluation.org/en/plan/approach/developmental\\_evaluation](https://www.betterevaluation.org/en/plan/approach/developmental_evaluation)

Theme	Definition
3. Accountability	Examine how PHIN demonstrates accountability and transparency to its members, PICT and the public. This assessment is related to ensuring effective and publicly available communications
4. Best practices and context dependence	Examine how PHIN contributes to improving knowledge of best practices in health information and understanding of context dependence.
5. Health equity	Examine the extent to which PHIN addresses health inequity and the needs of vulnerable or disadvantaged groups. PHIN can support health equity through capacity building, community development, and healthy public policy in addition to program and service delivery.
6. Continuous improvement	Examine how PHIN supports a culture of continuous improvement. This can include examining how well data and evidence are used in decision-making, identifying opportunities, gaps and/or challenges in the use of data and evidence, and making process improvements through formal or informal methods.

## 2.3 Data Collection Methods

This study took a multipronged approach to data collection, which included:

- An environmental scan of similarly mandated, peer organizations
- Stakeholder engagement activities which included interview and a PHIN member survey
- Strategic dialogue engagement sessions

### 2.3.1 Environmental Scan

An environmental scan of similar organizations was conducted to collect information on analogous regional organizations, benchmark PHIN against them (where at all possible) and glean best practices appropriate to the PICT setting. A targeted search of PHIN and other similarly-mandated organizations was conducted. The organizations are listed in Table 3.

**Table 3. Regional organizations subject to a targeted literature search.**

Regional Organization
Pacific Health Information Network
Asia eHealth Information Network
European Federation for Medical Informatics
European Health Information Initiative
Health Metrics Network
Healthcare Information and Management Systems Society
Joint Learning Network
Latin American and Caribbean Network for the Strengthening of HIS
Pan-American Health Organization
Personal Connected Health Alliance

Regional Organization
Regional Health Information Network (RHINO)
Regional Plan for the Strengthening of Vital Health Statistics
United States Agency for International Development Partnership Project

As well, academic literature searches were conducted to further inform best practices and best actions. The International Medical Informatics Association (IMIA) *Yearbook of Medical Informatics* was specifically targeted for publications relevant to digital health. This was complemented by a search of the PubMed database, prioritizing publications from the past five years (in order to reflect the current body of knowledge). A snowballing technique was also applied in data collection, wherein relevant resources identified in the reviewed articles were retrieved and included as appropriate.

## 2.3.2 Stakeholder Engagement Activities

An extensive consultation process was tied to both the PHIN evaluation, as well as the development of a renewed mission, vision and three-year strategic plan. For the assessment and review of PHIN, primary data gathering efforts included stakeholder interviews and a PHIN member survey.

Interviews were held with key stakeholders in the digital health sector to elicit strengths, gaps, opportunities and best practices. An interview guide was developed and distributed in advance of the discussions (see Appendix B: Stakeholder Interview Questions). However, given the extensive ground to cover, many of the interviews held were free flowing and highly interactive. Interviews and comments were held in the strictest of confidence.

The stakeholder groups involved in the consultation process included:

1. Representatives of the health sector across the PICT;
2. Representatives from other governmental sectors that make up the digital health milieu such as CRVS, ICT, education, etc.;
3. Representatives from similar network of professionals such as AeHIN;
4. Representatives from inter-governmental organizations such as SPC, BAG, UNFPA, WHO, etc.;
5. Representatives from bilateral and multilateral funding agencies such as the Australian DFAT, the Asian Development Bank, the World Bank, etc.; and,
6. The PHIN member base.

With regards to the survey, a 13-question survey was deployed to the PHIN membership via the online tool SurveyMonkey (see Appendix C: PHIN Member Survey Questions)

## 2.3.3 Strategic Dialogue

Should the study proceed to the strategic plan development phase, strategic dialogue sessions were planned to shape the PHIN strategic framework (i.e., vision, mission, values, goals, strategic actions and activities) and its current governance structure.

## 2.4 Analysis Approach

Findings from the environmental scan, stakeholder interviews and member survey were reviewed using thematic analysis of challenges, gaps, opportunities and successes. This was informed by findings from the review of evaluation frameworks and the environmental scan.

As a result of the thematic analysis, a decision needed to be made regarding PHIN's viability and sustainability for the future. The "Go/No Go" decision was based on an understanding of the value PHIN brings to the Pacific. Note that key findings from the assessment phase leading to the "Go/ No Go" decision is documented in the Section 5: Key Findings.

After much deliberation amongst the Board Members and the Secretariats on the results of the assessment, the study continued and proceeded to the SWOT analysis phase, which helped shaped PHIN's strategic framework and plan.

## 3 Background

The purpose of this chapter is to provide additional context that informed the Strategy Working Group (SWG) activities and analysis. The SWG is comprised of a subset of five Board Members<sup>5</sup>, many relatively new to the Network, to sharpen the focus of the strategy development without burdening the rest of the Board that is geographically spread across different countries and time zones. The subsections below provide a brief overview of PHIN and its Member States.

### 3.1 Pacific Health Information Network

PHIN was established in 2006 out of recognizing there is great potential to foster regional collaboration to strengthen the PICT's HIS initiatives and address shared challenges. The network was intended to facilitate this collective effort with six strategic areas for action outlined in their previous Strategic Plan<sup>6</sup>:

1. Advocate for the recognition of and improvement to HIS within PICT
2. Enhance institutional capacity and opportunities for workforce development and training
3. Strengthen the application of ICT
4. Improve data integration, quality and sharing
5. Develop policies, regulations and legislation on HIS-related issues
6. Enhance HIS leadership and sustainable governance

PHIN has a vision to enhance health in the PICT through improved use of quality and timely health information. PHIN's mission is for professionals working in HIS within the PICT to promote and use HIS for quality decision-making and improving health outcomes. Within these aims, PHIN has a number of specific target outcomes across the region. These included:

1. Supporting the integration of HIS and ensuring that cost-effective, timely, reliable and relevant information is available and used to inform health development policies.
2. Providing capacity-building mechanisms for networking, support, information-sharing and training for health care workers.
3. Promoting HIS in the broader health system strengthening agenda.

The funding notion for the PHIN Regional Health Information Systems Strategy Implementation Plan (RHISSIP) comes from multiple channels including core budgets of national agencies<sup>7</sup> and regional donor funding<sup>8</sup>. While the WHO is likely the most closely involved regional partner, other organizations that have sponsored PHIN activities include, but is not limited to:

- Australian DFAT (i.e., AusAID)
- The Secretariat of the Pacific Community (SPC)
- Global Fund
- Pacific Islands Health Officer Association (PIHOA)
- The University of Queensland

<sup>5</sup> Represent by the current PHIN President Shviny Naidu (Fiji), Devina Nand (Fiji), Vice-President Rumanusina Manua (Samoa), Walter Hurrell (Tonga) and Manah Dindi (Papua New Guinea)

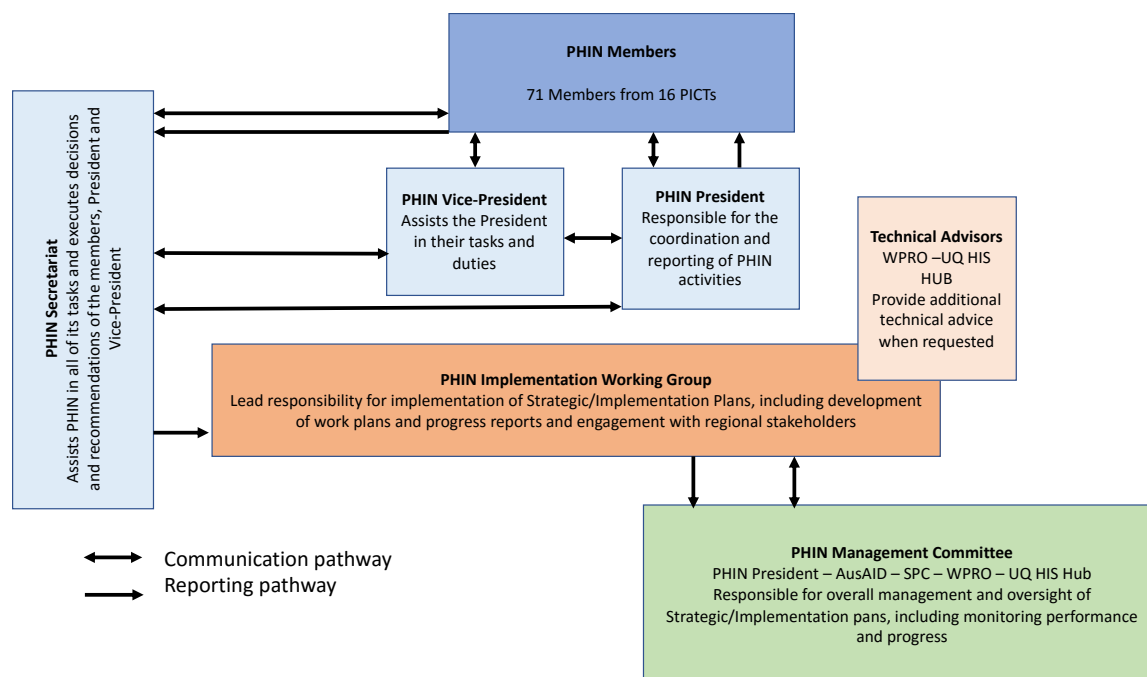
<sup>6</sup> PHIN. (2011). Regional Health Information Systems Strategic Plan 2012–2017. Pacific Health Information Network.

<sup>7</sup> There was little evidence of budgets provided by PICT national agencies. Most PHIN funding came from HIS-HUB affiliated with the University of Queensland.

<sup>8</sup> PHIN. (2011). Regional Health Information Systems Strategic Plan 2017-2017: Implementation Plan. DRAFT Version 0.6.

## 3.2 Membership

PHIN is a non-registered, non-incorporated, non-governmental and not-for-profit organization. The network is governed by an Executive Board and led by a President and Vice-President, who are nominated from existing members and elected via email ballot on a biennial basis.



**Figure 1.** PHIN communication and reporting pathways (Adapted from 2011 Draft Implementation Plan)

PHIN members are individuals and institutions from a range of health care professions that includes planning, information management, medical records, statistics, health information and quality assurance. Membership is currently free. Members must complete an online application form to be registered. As of June 2013 — the most recent figures available — there were 71 PHIN members from 16 different PICTs.

**Table 4. Countries represented by PHIN members.**

Country	
Australia	Republic of Palau
The Cook Islands	New Zealand
Federated States of Micronesia	Independent State of Samoa
Republic of Fiji	Tuvalu
Hawaii	Solomon Islands
Republic of Kiribati	Kingdom of Tonga
Republic of the Marshall Islands	Republic of Vanuatu
Republic of Nauru	

## 4 Environmental Scan

### 4.1 Mission & Visions of Other Similar Organizations

The earlier mission of PHIN is that *“health in PICT is enhanced through better use of quality and timely information”*<sup>9</sup>. The vision, meanwhile, is that *“professionals working in health information systems in PICT shall promote and use reliable, complete and timely information for decision-making and for achieving greater health outcomes”*<sup>10</sup>.

Table 7 presents a summary of the missions and visions of similar organizations, which were found to have generally similar themes, including a focus on the “use” or “application” of health information or ICT and the overall improvement of health as the ultimate goal. In other words, technological implementations are not considered to be the end-goal; rather, the *use* of these solutions to drive improvements of health was viewed as the key metric. The table also provides some indication as to how the organization is financed or funded.

It should be noted that some of these organizations are more analogous to PHIN than others. While AeHIN is understood to most closely resemble PHIN, other groups that included academic or professional organizations were also included at this stage. It should be understood that lessons learned from these organizations may be less relevant to strategic planning for PHIN (and so are left out of **Section 4.2**), but they were included here to obtain a broad scan within reason.

Lastly, a cautionary note: since every region has their own collective priorities, a distinctive starting point, inherent and underlying factor conditions (e.g. lack of universal access to broadband in the Pacific) and unique sets of strengths and challenges, the strategic actions to take by PHIN cannot possibly be an exact likeness to other network organizations. However, it is sensible to see where there are similarities, explore the lessons learned, yet still be mindful of the context and that there are several variables at play.

**Table 5. Missions and Visions for PHIN and similar organizations and associations.**

Organization	Mission	Vision	Funding Sources
PHIN	Professionals working in health information systems in Pacific Island Countries and Territories shall promote and use reliable, complete and timely information for decision-making and for achieving greater health outcomes	Health in Pacific Island Countries and Territories is enhanced through better use of quality and timely information	Multiple channels including core budgets of national agencies and regional donor funding. Sponsorships from: WHO regional partner, Australian DFAT (i.e., AusAID), The Pacific Community (SPC), Global Fund, Pacific Islands Health Officer Association (PIHOA), The University of Queensland

<sup>9</sup> Pacific Health Information Network. (2011). Regional Health Information Systems Strategic Plan 2012–2017.

<sup>10</sup> *Ibid.*

Organization	Mission	Vision	Funding Sources
AeHIN	AeHIN promotes better use of ICT to achieve better health through peer-to-peer assistance and knowledge sharing and learning through a regional approach for greater country-level impacts across South and Southeast Asia	A network of professionals who support national eHealth development towards regional interoperability. Through this support, better ICT solutions are developed that lead to better decision making and improved health outcomes	NORAD, ADB, WHO Overall, AeHIN has over 21 development and implementation partners
Digital Health Canada	Connect, inspire, and educate digital health professionals who are creating the future of health in Canada	Catalyze the digital health community, incubate knowledge, and advocate for professional members and the industry	Designated a not-for-profit organization; funding from membership dues, events, certification and credentialing activities, publications.
European Federation for Medical Informatics (EFMI)	Health for all underpinned by information and communication technology	To advance international co-operation and dissemination of information in medical informatics in Europe, promoting high standards in application, research and development in medical informatics	Financed by membership annual dues from Full Members and Institutional Members, by royalties from publications, interest on funds, contributions and surplus from events such as Congresses, Conferences and Symposia including funds arising from activities of subordinate bodies
European Health Information Initiative	Improving the health of the people of the European Region by enhancing the information on which policy is based	An integrated, harmonized health information system for the entire European Region with evidence for policy-makers. This can be achieved by fostering international cooperation in order to exchange expertise, build capacity and harmonize data collection	Multi-member network supposed by WHO Regional Office for Europe and launched from start-up funding from the Ministry of Health, Welfare and Sport of the Netherlands
Global Healthcare Information Network (GHI-net)	Contribute to the realization of the highest attainable level of health for all people worldwide, especially for the poor and disadvantaged in low-income and middle-income countries, by facilitating communication,	NA	GHI-net currently depends for most of its income on grants and donations, both unrestricted and restricted to agreed activities



Organization	Mission	Vision	Funding Sources
	understanding and advocacy among all stakeholders to address health priorities, including health information and learning needs of the public, healthcare providers, researchers and policymakers		
Healthcare Information and Management Systems Society (HIMSS)	Globally, lead endeavors optimizing health engagements and care outcomes through information and technology	Better health through information and technology	Not-for-profit organization that gains revenue from exhibitions, educational events, data and publication sales, memberships, advertising
International Medical Informatics Association (IMIA): Asia Pacific Association for Medical Informatics (APAMI)	Encourage cooperation, harmonization and synergy between the scientific and commercial health informatics communities and constituents	Global application of information science and technology in the fields of healthcare and research in medical, health and bio-informatics	Financing from fee from Member societies and Institutional Members, by royalties from publications, interest on funds, contributions and surpluses from events such as congresses, conferences and symposia, donations, subsidies and earnings arising from activities
OpenHIE	Improve the health of the underserved through the open collaborative development and support of country driven, large scale health information sharing architectures	A world where all countries are empowered to pragmatically implement sustainable health information sharing architectures that measurably improve health outcomes	This is a community network; information on financing was not found
Pan American Health Organization	To lead strategic collaborative efforts among Member States and other partners to promote equity in health, to combat disease, and to improve the quality of, and lengthen, the lives of the peoples of the Americas	To be the major catalyst for ensuring that all the peoples of the Americas enjoy optimal health and contribute to the well-being of their families and communities	PAHO is financed through quota contributions from its Member States, WHO allocations, and voluntary contributions from governments, international organizations, and the public and private sectors
Personal Connected Health Alliance	The Personal Connected Health Alliance responds to individual, community, and public health needs by catalyzing market and policy innovation, research, and	Better health and well-being for all through increased personal responsibility and connectivity as well as improved care	Similar to HIMSS, as it is a not-for-profit organization formed by HIMSS

Organization	Mission	Vision	Funding Sources
	collective action for sustained adoption of personal connected health	delivery enabled by technology	
Regional Health Information Network (RHINO)	<p>RHINO will achieve its vision through:</p> <ol style="list-style-type: none"> <li>1. Advocating for the use of routine health information in decision making and the improvement of routine health information systems in resource poor countries globally</li> <li>2. Learning from and informing HIS professionals, managers and users of health information systems, stakeholders, partners and civil society of the latest advancements in RHIS development and use</li> <li>3. Collaborating and coordinating in research and development of new methods, routine health information system standards, improving RHIS efficiency and effectiveness and improved access and availability of routine health information</li> </ol>	Better health of populations in resource poor countries globally through the use of information produced by high quality, productive and sustainable routine health information systems	Classified as an NGO – receives tax-exempt donations. USAID has provided generous funding since its inception

A review of the missions and visions of similar organizations suggests that those of PHIN fit within the general paradigm, and that substantive changes many not be necessary. However, a few changes that could be considered include, but are not limited to the following:

- PHIN's focus could be expanded from health information specifically to include ICT and eHealth, and to be more encompassing, digital health.
- PHIN can support strengthening the capacity of national statistics offices to collect and analyze data (CRVS, SRH, VAWG, HIMF) through key data collection sources such as HIS, DHS/MICS, census and other methods.
- The value of regional cooperation, coordination and peer-to-peer assistance could be recognized more explicitly and aligned accordingly.
- Transforming PHIN to be more than an information regional sharing body, but to be an enabler for action-oriented inter-activity at the country-level.

## 4.2 A Closer Look at AeHIN, PAHO, and RHINO

The three organizations that resemble PHIN the most is AeHIN and PAHO and RHINO as a distant second and third. This section delves deeper into the strategic priorities and approach for each of these organizations.

### 4.2.1 AeHIN

Perhaps the organization most similar to PHIN is AeHIN. With the Secretariat headquartered in Manila, AeHIN activities date back to the 2007 foundation of the PAN Asian Collaboration for Evidence-based eHealth Adoption and Application (PANACEA), which brought together 16 researchers from 10 countries.<sup>11</sup> This collaboration later developed into AeHIN, which now includes members across South and Southeast Asia. Like PHIN, AeHIN membership is free of charge, and all countries in the South and Southeast Asia Region are encouraged to apply.

AeHIN promotes principles of openness, country-owned and country-led projects, strategic reuse of investments, implementation of open standards to promote interoperability. In 2013, AeHIN released a five-year strategy (2012–2017) to strengthen eHealth in the Western Pacific Region. The plan<sup>12</sup> outlines four priorities for action and 11 expected outputs. While these core objectives are quite similar to those of PHIN, the explicit focus has been on peer assistance and the promotion of standards and interoperability<sup>13</sup> – all essential to collaborating and scaling up HIS efforts.

**Table 6. AeHIN strategy action plans**

Pillar	Objective	Output
Enhance leadership and governance	Harness support by building leadership, sustainable governance and monitoring and evaluation	Inter-agency coordinating mechanism to manage and coordinate actions in member countries
		Build leadership skills and organizational development, change and risk management of eHealth
		Build partnerships between public and private sector
		Establish policies to improve eHealth systems and solutions
		Develop monitoring and evaluation plan to assess needs and priorities
Build capacity	Build capacity for eHealth, HIS and ICT-enhanced Civil Registration and Vital Statistics	Advocate for institutionalizing eHealth
		Engage and partner with non-health stakeholders
Peer assistance	Build peer networks to enhance assistance and knowledge exchange	Regular multi-country workshops and conferences
		Open eLearning platform and repository
Promote standards and interoperability	Promote standards to encourage interoperability within and between	Develop best practices for eHealth
		Develop, disseminate and implement

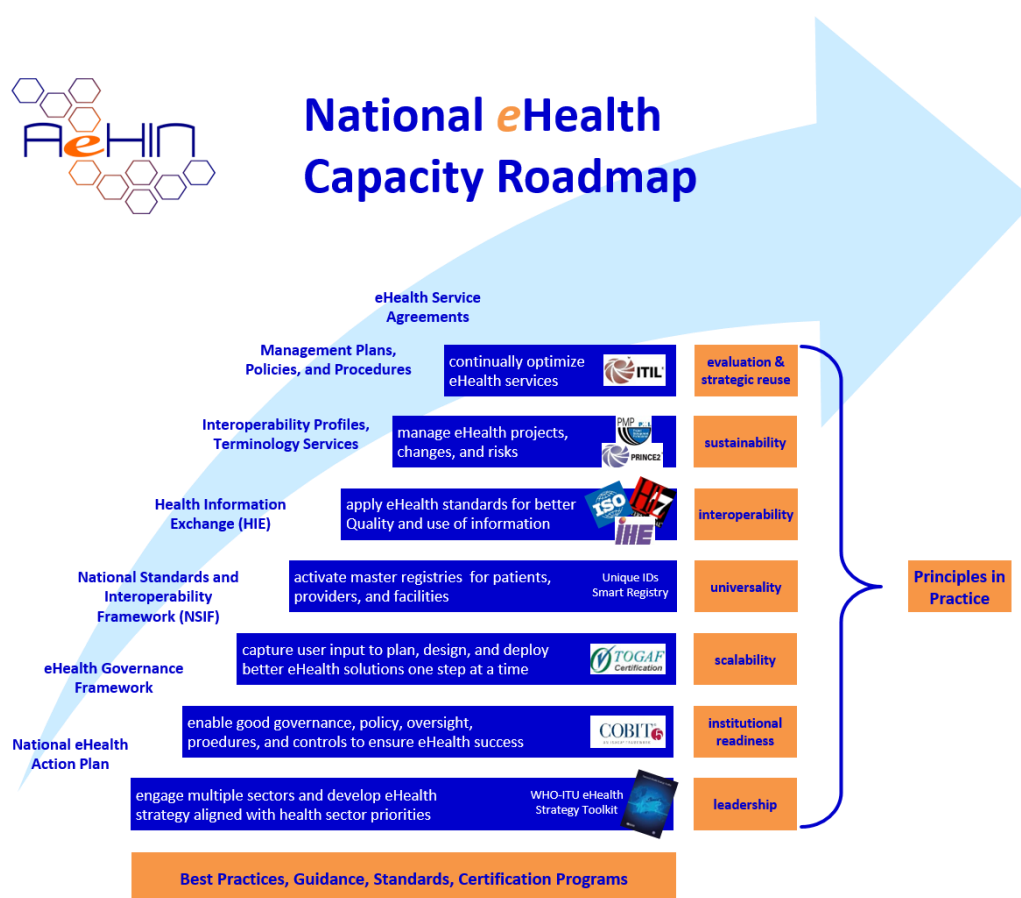
<sup>11</sup> Asia eHealth Information Network. (2016). "About Us". <http://www.aehin.org/aboutus.aspx>. Accessed May 1, 2018.

<sup>12</sup> AeHIN. (2013). Regional eHealth Strategic Plan: 2012–2017 Implementation Plan. Manila: AeHIN.

<sup>13</sup> To emphasize AeHIN's present focus, the upcoming AeHIN 6<sup>th</sup> General Meeting and Conference in Colombo, Sri Lanka is entitled "Interoperable Digital Health for UHC".

Pillar	Objective	Output
	countries	document on health data standards

To cite examples of AeHIN's work, as part of their strategic activities, AeHIN developed a roadmap for building eHealth.<sup>14</sup> The roadmap presents a continuum from eHealth strategy to implementation, emphasizing the need to develop leadership and institutional readiness before expanding the scope (scalability, universality) and sustainability of national eHealth systems. For countries in the early stages of development, the roadmap offers the WHO National eHealth Strategy Toolkit, which outlines an approach to developing a vision, action plan and monitoring and evaluation (M&E) framework. This can be tailored to many different contexts and focuses on building local leadership and ownership. Once these foundational factors are in place, the roadmap outlines governance and technical factors that can help scale eHealth tools. Although not necessarily an immediate priority for PHIN at this point given its need to focus on revitalization activities, developing a similar roadmap and toolkit that is highly pragmatic for the PICT in collaboration with the WHO may be a consideration for future undertaking.



**Figure 2.** Asian eHealth Information Network National eHealth Capacity Roadmap

<sup>14</sup> Asian eHealth Information Network. (2016). National eHealth Capacity Roadmap. <http://www.aehin.org/Resources/eHealth.aspx>

## 4.2.2 PAHO Initiatives

The Pan-American Health Organization (PAHO) was found to have implemented several targeted strategies to improve HIS in the past 15 years. Drawing on information from the organization website and technical progress reports published in 2010 (most recent available), these programs are outlined below. Table 7 presents a summary of lessons learned.

**Table 7. Summary of key lessons learned and best practices from survey of regional HIS initiatives.**

PAHO Initiative	Lessons Learned/Best Practices
Regional Plan for the Strengthening of Vital Health Statistics	<ul style="list-style-type: none"> <li>Align with existing regional initiatives</li> <li>Organize interventions according to country, regional, corporate or global action dimensions</li> <li>Align with regional funders to support budget mobilization</li> </ul>
Regional Core Health Data Initiative	<ul style="list-style-type: none"> <li>Develop publicly accessible indicator database</li> <li>Need to foster culture of data use and local ownership</li> <li>Work within human resource and financial constraints</li> </ul>
Health Metrics Network	<ul style="list-style-type: none"> <li>Develop standardized frameworks for assessment</li> <li>Foster in-country leadership for information production</li> </ul>
USAID International Development Partnership Project	<ul style="list-style-type: none"> <li>Identify and partner with international funders</li> </ul>
Latin American and Caribbean Network for the Strengthening of HIS	<ul style="list-style-type: none"> <li>Organize integrated working groups to support horizontal collaboration and focused discussion</li> </ul>

For more information about PAHO, refer to Appendix D: Additional Information on PAHO.

## 4.2.3 Regional Health Information Network (RHINO)

Created in 2001, the purpose of RHINO is to connect individuals and organizations working to strengthening routine health information systems (RHIS) around the world.<sup>15</sup> RHINO's roots are in the MEASURE Evaluation Project and has been supported generously by USAID to broaden its services. In 2008, RHINO officially became an NGO with private sector support.

RHINO has established itself as a resource center to provide information, resources, and networking opportunities on RHIS to a variety of health information experts and users. The first international workshop was held in 2001, which saw membership rise to the 1000s and participation of over 73 countries. Members represent a broad range of organizations including governments, development agencies, NGOs, health facility managers, HIS professionals and consultants. Since then, three other workshops have been held to advance the state of knowledge of developing country RHIS as well as providing a powerful rationale for advocating investment in routine health information systems.

RHINO provides technical assistance related to the components of the HIS MEASURE evaluation framework. For example, RHINO supports the review and assessment of HIS Sub-systems, Data Quality, Data Use.

<sup>15</sup> RHINO. (2018). "RHINO History." <http://www.rhinonet.org/rhino-history/>

There is also an advocacy component of RHINO's work. In terms of building HIS capacity, RHINO pulls together resources and tools related to training and professional development, developing career paths in health information and HIS, HIS implementation toolkits and guides, amongst others. On its website, RHINO offers forums for knowledge and information exchange, and supports dialogue between network participants.

The other advocacy work that RHINO participates includes supporting developing countries in attracting donors and investments in HIS. This, in particular, may be of interest to PHIN given that PICT face donor coordination and prioritization challenges.

## 4.3 Sub-Regional Groups

In addition to reviewing the mission and visions of organizations working specifically in digital health, it is useful to review the mandate of sub-regional groups that are related to health information and HIS. These include the Brisbane Accord Group (BAG) and the Pacific Civil Registrars Network (PCRN).

Further exploration on how the both these groups operate is of interest to PHIN, given the composition of stakeholders are similar.

### 4.3.1 The Brisbane Accord Group

The Brisbane Accord Group (BAG) was established in 2010 to coordinate, facilitate and support investments in the Pacific region related to capturing vital statistics and civil registration. Members of BAG include the Secretariat of the Pacific Community (SPC), the World Health Organization (WHO), UNICEF, UNFPA, the Australian Bureau of Statistics (ABS), the Pacific Health Information network (PHIN), the University of Queensland (UQ), Queensland University of Technology (QUT), University of New South Wales (UNSW), the Economic and Social Commission for Asia and the Pacific (ESCAP), the Pacific Civil Registrars Network (PCRN) and Fiji National University (FNU).<sup>16</sup>

At its first meeting, BAG partners agreed to focus on five priority areas:<sup>17</sup>

- Improving data integration and sharing
- Increasing data analytical skills
- Strengthening strategies to advocate for HIS
- Advocating the importance of health surveys as an adjunct to the information base on vital events from CRVS systems and increasing analytical capacity to analyze them to better support policy; and
- Making better use of institution-based data

The Pacific Vital Statistics Action Plan (2011-2014) was developed by the BAG partner agencies following discussions at the second BAG meeting in April 2011. The overarching aim of the plan was to assist Pacific countries to understand the critical importance of vital statistics on births, deaths and causes of deaths and to improve their availability, accuracy and use.

The basic premise of the Plan was to work with countries to assess their collection and reporting systems for births, deaths, and causes of death, and the development of country-specific improvement plans. Working groups were established based on geography, cultural affiliations, size, and known level of system development.

<sup>16</sup> Pacific CRVS. (2018). "Pacific CRVS Background." Retrieved from: <http://www.pacific-crvs.org/>

<sup>17</sup> Pacific Vital Statistics Action Plan – Outline June 12. Retrieved from: <http://www.aehin.org/Portals/0/Docs/CRVS%20Resources/Pacific-Vital-Statistics-Action-Plan-OUTLINE.pdf>

### 4.3.2 The Pacific Civil Registrars Network

The PCRN is an independent network of Civil Registrars in the Pacific, established in 2014 for sharing knowledge, lessons learned and good practice in Civil Registration among practitioners. The network seeks to foster peer-peer relationships and support in tackling common challenges affecting the implementation of CRVS systems in the region, towards implementation of the Pacific Vital Statistics Action Plan (PVSAP) and the Asia-Pacific Regional Action Framework on CRVS.<sup>18</sup>

Membership to PCRN is open to any Civil Registrar with State or Country level responsibility for civil registration or vital statistics, or their nominee. Membership may also include representatives from relevant technical agencies (e.g., UNICEF, SPC). There is no membership fee to join.

The PCRN has established a 10-year strategic plan (2015-2026), which the priorities include<sup>19</sup>:

- Jointly work to develop CRVS targets and achieve results across the Pacific
- Provide collegial advice and information sharing on BDM functions and systems
- Provide expert civil registration input to regional initiatives, including identity
- Short term and long term plan with allocated actions
- Trial data sharing between two countries
- Investigate shared IT approaches across the region as countries replace their systems
- Strengthen regional CRVS disaster planning and response
- Pacific ministerial meeting on CRVS to review progress and strengthen commitment

### 4.3.3 Pacific Public Health Surveillance Network

The Pacific Public Health Surveillance Network (PPHSN) is *“a voluntary network of countries and organizations dedicated to the promotion of public health surveillance and appropriate response to the health challenges of 22 PICT”*.

The PPHSN was established in 1996 as a result of the work of the Pacific Public Health Surveillance Working Group. The five priorities listed for the PPHSN include:

1. Harmonization of health data needs and development of adequate surveillance systems, including operational research
2. Development of relevant computer applications
3. Adaptation of field epidemiology and public health surveillance training programs to local and regional needs
4. Promoting the use of e-mail, opening the network to new partners, new services and other networks
5. Publication of health information bulletins, technical studies, applied research findings, monographs, information on resources available in the network, etc.

As shown in Figure 3, the core of the PPHSN is comprised of the 22 MOHs in the PICT that authorize the PPHSN's work through their authority and consensus. The network is also supported by allied bodies, regional and international agencies that provide further subject matter expertise and guidance, as well as financial support. Finally, a Coordinating Body (CB) is comprised of participants from both the core and the supporting agencies (7

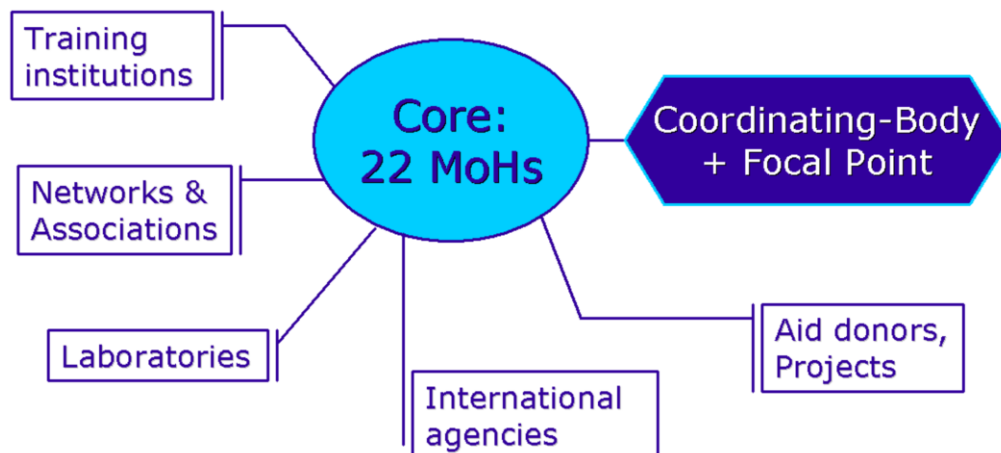
<sup>18</sup> Pacific Civil Registrars Network. (2018). <http://www.pacific-crvs.org/pcrn>

<sup>19</sup> Poster: PCRN Strategic Plan 2015-2026.



core and 5 allied body members). The CB membership is rotated in a staggered manner with membership voted or endorsed by network and CB members.

As well, SPC has been designated focal point for PPHSN, meaning that it acts as a Secretariat function, organizes meetings, and disseminates communications and information.



**Figure 3: PPHSN Institutional Framework**

## 4.4 Impact

To date, no organization reviewed has published publicly available Outcome or Development evaluation results or evaluations of a comparable ilk. As such, the degree of impact and success of PHIN's peer organizations in advancing their causes is difficult to determine, let alone to benchmark.

The positioning of these organizations and the strategic model they represent will therefore be assessed qualitatively based on feedback from the stakeholder interviews.



## 5 Key Findings

A total of 26 formally scheduled one-on-one interviews were held with PHIN stakeholders, much more than anticipated due to the lack of written documentation to properly evaluate PHIN's effectiveness. The interview was also an opportunity not only to elicit feedback on the successes, strengths, challenges and effectiveness of PHIN, but on how it can improve and position itself as a valuable contributor to the health sector across the Pacific.

The list of stakeholders interviewed is located in Appendix E: List of Stakeholders Interviewed.

### 5.1 Thematic Analysis

The following sections provide key themes that emerged from the interviews and membership survey. Overall, the stakeholder engagement process demonstrated that PHIN is a valuable organization in the Pacific community. Unanimously, citing the lack of another genuine alternative, PHIN plays an important role in fostering collaboration, building capacity and moving digital health and HIS forward.

#### 5.1.1 Stakeholder Interviews and Consultant Analysis

##### **Structure and Membership of PHIN**

A peer network, if functioning properly, offers great value to its members in terms of knowledge and information exchange, problem solving, keeping abreast trends and developments. In other words, it has the potential to enable capacity building. With limited number of qualified HIS staff in smaller countries across the Pacific, a peer network can be especially useful to reach out and to look to others for guidance and support. The stakeholders interviewed highlighted the importance of PHIN being the “meeting place” and “problem solving space” of HIS leaders across the PICTs that offer a forum and venue for digital health discussions.

To raise the level of awareness and to engage a broader stakeholder for digital health, the interviews highlighted the need to expand the membership to other key participants of digital health including other health professionals such as clinicians, health financing experts, statisticians, etc. Currently, PHIN membership includes predominantly health information and health technology professionals from mid-level management to clerical staff.

##### **Recognition of PHIN by Heads of Health**

PHIN is recognized by the leaders at Heads of Health as the conduit to drive health information and digital health in the Pacific. Unlike most network organizations globally, PHIN is highly recognized amongst these leaders as a critical body to advance the collection and use of health information for decision-making and to improve health outcomes.

##### **Contributions to HIS**

PHIN's output and contributions to the health information community flourished in the past when there was funded Secretariat support and funds to hold regional events, mostly from HIS-HUB at the University of Queensland (UQ). During this time, research was generated, priorities for HIS were being established amongst the countries and active engagement was observed. In the last few years, some stakeholders have observed a decline in PHIN activity, potentially due to the lack of funding, but because the strategic plan set for PHIN was not only too broad and high-level, but overly ambitious. There was also an effort to measure the advancement of HIS in the Pacific in 2016, including a joint collaboration between WRPO, SPC and PHIN. However, formal activities related to past strategic actions have not been conducted due to lack of monitoring and evaluation framework, processes and capacity.

Based on further analysis, what would work well for PHIN is to support a series of pragmatic incremental steps to achieve the vision, rather than continually focusing on one “regional big picture.” To that end, consistent feedback included the need for either “on-the-ground” or country-focused activities. For example:

- Supporting country-level follow-up for regional activities such as the Health Island Monitoring Framework (in which PHIN was to be the main coordinating body), the Regional Action Agenda from WHO or regional technical assistance. This can be enabled through the establishment of a PHIN Country Chapter. In effect, PHIN should be regionally led, but country-focused by being actively engaged at the ground level (i.e. at the country level);
- Offering support for innovative approaches for data collection at the point of service. Countries have found data collection at the point of service this to be a challenge, as data collection is not consistent in the Pacific. There is no standardized register or list, nor a common data dictionary used. The data ultimately feed into the larger HIS where there are data quality, accuracy, consistency and timeliness issues. PHIN could work with PICTs to build capacity at the front lines to improve data collection at the point of service to foster better data quality.

Given there are no other plausible alternatives, it was strongly argued that PHIN needs to continue but also needs to be more actively engaged and contributing to the improvement of health information and strengthening the digital health sector at the country-level.

### **Targeting the Broader Digital Health Environment**

Since its inception in 2006, PHIN has been focused in advocating for an effective implementation and use of HIS across the Pacific. Although a few PICTs have modest successful with HIS adoption (e.g., Fiji, Cook Islands, Vanuatu, Solomon Islands) for integrated patient care, public health and program planning purposes, most had struggled despite years (and at times, decades) of efforts and deliberations (i.e., assessing options).

If PHIN focuses exclusively on the large complex HIS implementations, which require long-range work efforts under the tension of limited resources and capacity, quick-wins and small success will never likely be realized. With the advancement of technology in mobile health and telehealth, it is possible to deliver immediate value at the patient level without having to take on the high risks of waiting in limbo for a fully functioning health information system.

### **e-Government and Other Health Sector-related insights**

Based on interviews and analysis of country plans, it is clear that the Pacific health milieu is not exclusive only to the health sector. As government reform, public transformation and delivering government services electronically become a priority in the PICTs, so is the need to assess the role and affinity of digital health related initiatives.

Therefore, it is essential that PHIN broadens their participation in e-Government and other health sector related initiatives (e.g., CRVS, national unique identifiers, etc.) under a new collaborative strategy to develop a strong foundation and consistent processes to effectively deliver health services to citizens.

### **Capacity Building**

Capacity building is a priority for all countries. Beyond simply relying on peer discussions and information exchange, there was a clear need for PHIN to be much more action-oriented and engaged at the front line to boost the capacity for digital health in every PICT. Commonly expressed ideas include, but are not limited to the following:

- Supporting the development of appropriate tools and policies to create an enabling environment. For example, to advance HIS and digital health, countries could benefit from support and advice on

developing a sound legal and regulatory framework. Furthermore, some stakeholders suggested that PHIN would do well to fill in knowledge gaps and address shared information needs such as a compilation of best practices or lessons learned for HIS, toolkits for implementation and change management related to digital health

- Providing more training and courses related to digital health or HIS, which can be delivered in conjunction with partners such as POHLNET or USP and deliver training in a number of digital formats including online (where technically possible), CDs or USBs. It has also been asserted a few times that training offered by PHIN should contribute towards an accredited professional qualification.

### Investments

There is an opportunity for PHIN to become a regional coordinating body for donor coordination in the Pacific. PICTs share similar needs and challenges and having a body to coordinate discussions around these commonalities is not only strategic, but both efficient and synergistic. Though donor coordination is typically performed at the country level, PHIN can provide the regional platform to exchange information with donors, to establish the digital health “big picture” in the Pacific and to promote further collaboration.

## 5.1.2 Membership Survey

A total of five responses were collected for the PHIN membership survey, which was administered online via SurveyMonkey.

Findings of note included the following:

- When asked, “Why did you register as a PHIN member?”, the top two responses were:
  - To access opportunities to network with health information professionals at local, national and international events
  - To keep informed on the latest developments in health information in the region and internationally; and

This supports findings from the stakeholder interviews, where interviewees believed a key strength of PHIN is its peer-network status, bringing members together and enabling their collaborations and discussions.

- Financing and governance were identified as areas that needed improvement to achieve PHIN’s vision. As well, some comments suggested that PHIN needs to be more action-oriented and on-the-ground with member countries to help them enhance their health information and digital health environment.
- All respondents indicated that they wished to continue participating in PHIN as a member.

## 5.2 Decision: PHIN Should Continue

Based on the review of PHIN and the context in which it operates, it was clear that a well-funded PHIN has helped advance the dial on health information and HIS in general. All 26 individuals consulted throughout this project believe that PHIN has not achieved its full potential. The Network holds great promise to connect member countries, to provide a venue for knowledge and information sharing, and to advocate for and enable positive health outcomes.

However, it was also made clear that the status quo is not acceptable. Interviews highlighted functional and existential weaknesses that the new strategy must address. PHIN should continue, but with the following insights and provisos entrenched:

1. Capacity building and peer assistance must remain a core function

2. Funding must be firmly in place and sustainable over the long term
3. Senior and experienced leadership of a volunteer-based organization is integral to advancing the PHIN agenda forward
4. More voices at all levels of the health milieu, including a multi-agency approach, would be key to holistically and progressively move digital health further
5. Donor cooperation and coordination around digital health development is required to ensure coherent policies and actions, and to create the synergistic effect required in a resource-constrained region such as the Pacific

## 6 Strategy Development

### 6.1 Introduction

Following the decision that PHIN should continue, facilitated strategic dialogues were held with PHIN Board members each day for two weeks leading up to the PHIN Board Meeting, which was held from June 27-29, 2018. The PHIN Strategic Framework used to guide these efforts is presented in Table 8 below.

**Table 8: PHIN Strategic Framework**

Strategic Framework	Description
1. Core Values	<p>Statements that describe the core behaviors that guide PHIN's relationships with members, the Secretariat and stakeholders</p> <p><u>Characteristics:</u></p> <ul style="list-style-type: none"> <li>Define how PHIN will act, consistent with the mission, in the journey toward its vision.</li> </ul> <p><u>For example:</u></p> <p><b>Integrity</b> ... To be credible, reliable and genuine in our relationships and in the development and delivery of information, products and services to hospital leaders and the entire health care community.</p> <p><b>Leadership</b> ... To pursue our mission with courage and integrity, always striving to do what is right for patients and communities even in the face of adversity or controversy.</p> <p><b>Diversity</b> ... To foster a culture that enables people to grow and learn from each other by respecting, valuing and embracing difference— of people, of backgrounds, of ideas."</p>
2. Vision	<p>Statements describing the future state of what PHIN is attempting to effect beyond itself through its work and purpose</p> <p><u>Characteristics:</u></p> <ul style="list-style-type: none"> <li>Become a beacon of light that move stakeholders towards alignment</li> <li>Should be inspiring</li> <li>Are clear, challenging, and stand the test of time</li> </ul>
3. Mission (Purpose)	<p>Statements that describe the primary work and purpose of PHIN</p> <p><u>Characteristics:</u></p> <ul style="list-style-type: none"> <li>Communicates PHIN's purpose and makes sure it is designed to say exactly what it anticipates achieving</li> <li>Energize members and stakeholders alike to pursue common goals</li> <li>Should be unique to its existence</li> <li>Are fairly broad, but cannot be all things to all people</li> </ul>
4. Goal	<p>Statements that are the overarching intended outcomes of the organization</p> <p><u>Characteristics:</u></p> <ul style="list-style-type: none"> <li>Are general, broad, and fairly abstract</li> </ul>

Strategic Framework	Description
	<ul style="list-style-type: none"> <li>• Are intangible</li> <li>• Are simply a clearer statement of the vision, but specific to the organization's planning horizon, the time frame during which the plan will be implemented</li> </ul>
5. Strategic Action	<p>The action plans that describe the individual steps required to achieve a particular goal.</p> <p><u>Characteristics:</u></p> <ul style="list-style-type: none"> <li>• Are the major components necessary to achieve the goal (i.e. Output)</li> <li>• Close the gap between the current and desired positions</li> <li>• Demonstrate a clear and direct relationship in support of the organization's mission</li> <li>• Should include metrics so progress against strategies can be monitored and, as necessary, corrected</li> <li>• Follow by a descriptor statement that further clarifies the articulated concept (i.e. Activities)</li> </ul> <p><u>For example:</u></p> <ul style="list-style-type: none"> <li>• Strategy (Output): "Improving Quality, Patient Safety and Performance"</li> <li>• Descriptor statement (Activities): "Support hospital efforts to develop systems of patient-centered care as the key to improving efficiency and effectiveness."</li> </ul>
6. Performance <sup>20</sup>	<p>Serve two purposes: (1) through a set of clearly defined metrics, mark the organization's progress in implementing the strategies and (2) ensure that the strategies collectively and directly support the mission.</p> <p><u>Characteristics:</u></p> <ul style="list-style-type: none"> <li>• Are the specific, tangible deliverables necessary to achieve the strategy</li> <li>• Are time sensitive</li> </ul>

The Developmental Evaluation (DE) Framework referenced in Table 2 was used by the consultants as guidelines in formulating the strategic content. Furthermore, the active participation of the Strategic Working Group (SWG) explicitly amplified the following principium to be incorporated into the strategic planning process:

- Acknowledgement that PICTs both share a core set of values, yet each are unique in their own right
- Leveraging the SMART principle – Specific, Measurable, Attainable, Realistic, Time-Bound
- Resources and funding from various sources to operationalize the strategic plan and actions
- A plan focusing on capacity building through formal and informal mechanisms, and leverages the power of the peer network
- A governance structure that enables effective decision-making, accountability, and active participation
- Recognition to find ways build the membership base and composition
- A sound prioritization methodology that will allow PHIN to identify what should and can be implemented in the short and long-term

<sup>20</sup> Performance measures will be developed by the designated Board Members responsible for carrying out the goal, its underlying strategic actions and activities.

## 6.2 Core Values

Core values are a set of principles that define an organization. They guide every action and decision that an organization takes. The prime question posed to the PHIN Board members was, “What do we (PHIN) value?”

As a result of the strategy dialogue, the overall set of core values defined for PHIN are:

### CORE VALUES

- **Equity ... To foster digital equity in health ICT interventions across the PICT ... always ensuring no one gets left behind.**
- **Unity ... To carry out our mission under a common purpose and a collective voice.**
- **Diversity ... To celebrate our unity by respecting, valuing and embracing the uniqueness of the PICT ... and even with its complexities, our strength remains in our diversity.**
- **Innovation ... To consistently challenge existing practices and continually improve so that we find the best solutions that are sustainable for our members.**
- **Leadership ... To pursue our mission with great courage, drive, integrity and commitment to shape a better future in the Pacific through digital health, collaboration and alignment with regional and national strategies.**

## 6.3 Vision and Mission

With the core values established, the group then went on to evaluate PHIN’s existing vision and mission.

This discussion was shaped by a review of digital health and HIS trends in the Pacific, and a reminder of the social, economic, and health contexts in which PHIN operates. The group was presented with a PESTLE framework, which offered macro-environmental considerations for the group to ruminate. As well, the group discussed PHIN’s achievements/outcomes based on the Outcome Evaluation Framework. Furthermore, a population and health snapshot for PICTs was provided for context (Appendix G: Population and Health Snapshot).

The PESTLE framework presented for discussion was as follows:

**Table 9: PESTLE Framework**

PESTLE	Discussion Points
1. Political	<ul style="list-style-type: none"> <li>• Government changes and reforms</li> <li>• Political reforms</li> <li>• Geo-political shifts</li> <li>• National or regional regulations</li> <li>• Health sector plans, priorities and governance (i.e., HoH)</li> <li>• Regional Action Agenda (i.e. Harnessing eHealth for Improved Service Delivery in the Western Pacific)</li> </ul>



PESTLE		Discussion Points
2. Economic		<ul style="list-style-type: none"> <li>National economy</li> <li>Health sector budget</li> <li>National funding mechanism</li> <li>Regional economic cooperation</li> </ul>
3. Social		<ul style="list-style-type: none"> <li>Population</li> <li>Socio economic distribution</li> <li>Morbidity and mortality</li> <li>Healthcare professional workforce</li> <li>Cultural components</li> </ul>
4. Technology		<ul style="list-style-type: none"> <li>Network coverage and infrastructure</li> <li>Technology development and adoption</li> <li>Health Information System</li> <li>IT workforce</li> </ul>
5. Legal		<ul style="list-style-type: none"> <li>Foundational legislation</li> <li>eHealth legislation</li> <li>Regional policies and legal framework</li> </ul>
6. Environment		<ul style="list-style-type: none"> <li>Climate change</li> <li>Disaster recovery</li> </ul>

Some of the points raised during the strategic dialogue were as follows:

- There has been a general improvement in the adoption and use of HIS in the PICT since the PHIN RHISSIP 2012-2017 was developed, although these improvements cannot directly be attributed to the PHIN 6 strategic priorities
- Need for monitoring and performance measures to establish if progress has been made in the adoption and use of digital health in the Pacific
- PHIN must have a much broader view of digital health other than health information, HIS and technology
- PHIN must have a broader scope to include health sector related cross cutting issues (e.g., CRVS)
- Data sourcing, collection, sharing and analysis remain a struggle in most, if not all, PICTs
- Digital health policies and strategy is considerably lacking in PICTs
- Health informatics legal and regulatory framework appears to be less established or nearly non-existent in PICT
- Governance needs considerable improvement between PHIN and countries
- Internet infrastructure development continues, but remain under developed in several PICTs, particularly in the outer islands
- Implementation maturity curve for HIS has slightly moved up (e.g. use of project management, business process improvement, etc.) but require further advancement (e.g. change management, etc.)
- Noticeable, but fleeting demonstration and evidence in delivering innovation using technology
- Shift in demographic mindset (i.e. new generation of professionals, political support for short term wins), but still require substantial change in mindset across all actors starting with the Heads of Health and the ministries of Finance



- Health budget per GDP is still far below other regions (i.e. most health budgets are spent on basic services)
- Non-communicable disease (NCD) still a crisis
- Donor investment has improved, explicitly bilateral arrangements with non-traditional donors (e.g. Singapore, Taiwan, etc.)
- Need for PHIN to align with regional and national agenda (e.g. Regional Action Agenda, Health Security)
- Need for PHIN to think inclusively by tethering to other themes (e.g. climate change)
- Need to be adaptable to changing environmental vistas
- Status quo is not an option for PHIN

Based on discussions held amongst the SWG, it was clear that for PHIN to be strategically positioned to address the ever changing landscape of digital health in the Pacific, the organization needed to renew its vision and mission. Therefore, the following vision and mission were developed by the SWG:

### **PHIN VISION**

*Guided by our five core values, PHIN fosters digital health and supports capacity building of health professionals to realize, navigate and achieve goals of the Pacific Island Countries and Territories.*

### **PHIN MISSION**

*A network of professionals that connect, innovate and collaborate towards a national health plan using health information for evidence-based decision-making to measure and improve health outcomes in the Pacific Island Countries and Territories through appropriate and sustainable digital health solutions.*

## **6.4 Brand Promise**

The Brand Promise is described as the tangible benefit that makes a service or a product desirable to members and stakeholders and is distinct in the marketplace. The Brand Promise must resonate, differentiate and substantiate; it also must be measurable. Like any promise, it is only valuable if it is kept.

Based on careful consideration by the SWG, the following is the new **Brand Promise** or tagline for PHIN:

### **Brand Promise**

*“Inspiring change to create new horizons of a healthy Pacific one connection at a time”*

## 6.5 Goals

Using the SWOT analysis framework and guidelines located in Appendix F: SWOT Analysis Guidelines, the SWG collectively performed a SWOT analysis as shown in Figure 4 to establish PHIN's goals.

<p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>• Recognized voice at HOH</li> <li>• Strengths of the Secretariat (WHO, SPC)</li> <li>• Useful for reviewing regional documentation/ initiatives</li> <li>• Ability to draw participation and create regional synergies</li> <li>• Platform for an opportunity to share experiences and resources</li> <li>• Ability to draw a community of subject matter experts with shared interest</li> </ul>	<p><b>Weaknesses:</b></p> <ul style="list-style-type: none"> <li>• Knowledge management</li> <li>• Lack of funding</li> <li>• Lack of formal structure, governance and TOR/ RACI (including HOH)</li> <li>• Member fatigue/ lack interest/ drive/ momentum</li> <li>• Volunteer based/ activities not considered as a priority due to workload</li> <li>• Lack of communication activities and touchpoints (e.g. bulletin board, newsletter, etc.)</li> <li>• Too regionally focused (not enough country-level)</li> <li>• No or little country presence</li> <li>• Limited external partnerships</li> <li>• Geographic and scope challenge/ costs of setting up regional meetings</li> <li>• Not a legal entity</li> <li>• Purely information sharing/ not action oriented</li> <li>• Lack of management depth at Board/ Member levels</li> <li>• Lack of multi-sector and sub-sector representation (MOF, MOE, Statistics, ICT, health financing)</li> <li>• Lack of clinician involvement</li> </ul>
<p><b>Opportunities:</b></p> <ul style="list-style-type: none"> <li>• High HIS and Digital Health interests with donors</li> <li>• Regional coordinating body/ harmonize coordination with donors/ cost savings</li> <li>• Standardization of documents (e.g. HIS Strategies, policies)</li> <li>• Use as a platform to improve regional issues (e.g. 5 indicators in HIMF)</li> <li>• Venue to pilot solutions (e.g. HIMF)</li> <li>• Make PHIN an official body</li> </ul>	<p><b>Threats:</b></p> <ul style="list-style-type: none"> <li>• Continued lack of budget for health sector</li> <li>• Initial costs of investments in digital health</li> <li>• Sustainable investments in digital health</li> <li>• Lack of talent depth to implement and support digital health</li> <li>• Delays in submarine cable/ high speed connectivity at PICTs</li> <li>• Unreliable essential infrastructure (e.g. power, telecommunications)</li> <li>• IT infrastructure in MOHs is inadequate</li> <li>• Lack of legal and regulatory environment for digital health</li> </ul>

**Figure 4: PHIN SWOT Analysis.**

Based on the SWOT analysis and the discussion that ensued, the SWG have drafted the four **2019-2021 Goals** for PHIN, which are as follows:

## 2019-2021 Goals

1. *Strengthen Leadership, Governance and Brand*
2. *Advance Capacity Building and Inclusive Growth*
3. *Improve Peer Assistance*
4. *Strengthen Regional Cooperation and Multi-sector Collaboration*

## 6.6 Strategic Action and Activities

After establishing the four goals to underpin the 2019-2021 PHIN Strategy, the SWG proceeded to develop strategic actions that describe the individual steps required to achieve a particular goal. Altogether, 18 strategic actions and 48 activities have been identified and agreed by the Board Members to carry out.

### Goal 1: Strengthen Leadership, Governance and Brand

Objective: To advocate for leadership and country representation to sustain and enhance the network through guidance and collaboration.

Outcome: Endorsement from HOH as the official voice for digital health in the Pacific

- 1.1 Establishing PICT country champions
- 1.2 Developing new Board governance, operating model and funding sources
- 1.3 Strengthening implementation of high level commitments and reporting
- 1.4 Creating an enabling volunteer culture
- 1.5 Building the PHIN brand as the voice for digital health in the Pacific
- 1.6 Inaugurating PHIN as an official technical body at HoH 2019

### Goal 2: Advance Capacity Building and Inclusive Growth

Objective: To inspire, develop and enhance PICT to implement digital health.

Outcome: Advocacy activities institutionalizing the implementation of digital health disciplines, processes and systems.

- 2.1 Implementing a PHIN knowledge portal
- 2.2 Promoting a holistic and inclusive approach by expanding PHIN memberships within the health sectors (e.g. clinicians) and across multi-sectors (e.g. Ministry of Finance, Ministry of ICT, Bureau of Statistics, etc.)
- 2.3 Developing a community of practice with international subject matter experts
- 2.4 Creating an enabling people-centric environment

### **Goal 3: Improve Peer Assistance**

Objective: To increase effectiveness of peer assistance, knowledge exchange and sharing.

Outcome: PICT access to relevant technical guidance, support and resources available within the region.

- 3.1 Providing country-level assistance
- 3.2 Standardization of documents
- 3.3 Securing funding for at least 1 PHIN regional conference a year in alignment with HoH and RCM
- 3.4 Pilot innovative projects to strengthen HIS, data production and reporting

### **Goal 4: Strengthen Regional Cooperation and Multi-sector Collaboration**

Objective: To pursue and create regional and trans-regional synergies.

Outcome: To pursue and create regional and trans-regional synergies.

- 4.1 Working with development partners to identify opportunities to host in-country /regional conferences workshops
- 4.2 Facilitating and providing a platform for regional development partner coordination and harmonization
- 4.3 Participating in cross sectoral initiatives namely CRVS, e-Government, Climate Change, Gender Equity and Social Inclusion, and Shared Infrastructure and Services
- 4.4 Forging partnerships with education institutions (e.g. USP)

To provide a much deeper understanding of the deliberations that have taken place during the strategic dialogues, the working notes are attached in Appendix H: Strategic Actions and Activities .

## **6.7 PHIN 2019–2021 Strategy and Implementation Roadmap**

The Strategy and its supporting Implementation Roadmap provides a framework for action and describes a series of activities to achieve the four goals of the Strategic Plan.

The strategic action items were discussed by the Board Members and Technical Secretariat in the presence of several donors that have attended the session in Suva, Fiji on June 28, 2018. The Implementation Roadmap was finally agreed to by the Board Members on August 2, 2018. The interim Board Members, which are currently composed of the old Board, have appointed the following to lead each goal, and in turn, the strategic action items and associated activities.

**Table 10: PHIN 2018-2020 Goals and Board Members Responsible**

PHIN 2019-2021 Goal	Board Member Responsible
Goal 1: Strengthen Leadership, Governance and Brand	Shivnay Naidu, Fiji (President)
Goal 2: Advance Capacity Building and Inclusive Growth	Walter Hurrell, Tonga (Working Group Member)
Goal 3: Improve Peer Assistance	Manah Dindi, Papua New Guinea (Working Group Member)

PHIN 2019-2021 Goal	Board Member Responsible
Goal 4: Strengthen Regional Cooperation and Multi-sector Collaboration	Rumanusina Maua, Samoa (Vice-President)

The Implementation Roadmap describes how the PHIN Strategic Plan 2019-2021 will be executed and defines the priorities in three phases over three years. PHIN's strategy is based on a fiscal year from July to June.

PHIN's new strategy is a humble strategy, designed to revitalize PHIN even if it means having to go back to basics. Therefore, several of the activities are front-loaded in the first phase (i.e., the first year) primarily centered on "rebooting" PHIN and putting the foundational activities in place.

The Board Governance Terms of Reference, delivered as part of the study, provides the governance operating model to be used by the Board Members in governing the PHIN's Strategic Plan 2019-2021 and Implementation Roadmap. The Board Governance Terms of Reference, however, is not a substitute for policies that the Network will need to develop over time. Details of the Board Governance are attached in Appendix I: Board Governance Terms of Reference.

The PHIN 2019-2021 Strategy and Implementation Roadmap is presented in Table 11.

**Table 11: PHIN 2019-2021 Strategy and Implementation Plan**

REFERENCE	DESCRIPTION	SCHEDULE						SUPPORTING TECHNICAL SECRETARIAT
		PHASE 1 2019H2	2019H1	PHASE 2 2020H2	2020H1	PHASE 3 2020H2	2021H1	
GOAL 1: Strengthen Leadership, Governance and Brand								
Objective: To advocate for leadership and country representation to sustain and enhance the network through guidance and collaboration.								
Outcome: Endorsement from HOH as the official voice for digital health in the Pacific								
Strategic Action 1.1: Establishing PICT country champions								
1.1.1	Identify PHIN champions in every PICT							WHO, SPC
1.1.2	Conduct country consultations with PHIN champions							
Strategic Action 1.2: Developing new Board governance, operating model and funding sources								
1.2.1	Establish new formal structures and governance							WHO, SPC
1.2.2	Appoint Honorary Board of Advisors							WHO, SPC
1.2.3	Establish Business Development Subcommittee to identify different funding sources for PHIN							WHO
Strategic Action 1.3: Strengthening implementation of high level commitments and reporting								
1.3.1	Provide support for implementation and recommendations coming out of Pacific Health Ministers and Regional Committee Meeting							WHO
1.3.2	Improve updates, analysis and insight generation of the annual Healthy Island Monitoring Framework							WHO, SPC
1.3.3	Publish HIS and health information policy briefings and digital health progress in PICT for HOH							WHO, SPC
Strategic Action 1.4: Creating an enabling volunteer culture								
1.4.1	Incentivize volunteer work activities through recognition							
Strategic Action 1.5: Building the PHIN brand as the voice for digital health in the Pacific								
1.5.1	Update PHIN website							WHO
1.5.2	Develop communication and social media plan							WHO, SPC
1.5.3	Develop the PHIN brand strategy							WHO, SPC
Strategic Action 1.6: Inaugurating PHIN as an official body at Heads of Health 2019								
1.6.1	Develop a cooperation strategy with Heads of Health							WHO, SPC
1.6.2	Explore the impact of PHIN as a registered entity							WHO, SPC
GOAL 2: Advance Capacity Building and Inclusive Growth								
Objective: To inspire, develop and enhance PICT to implement digital health.								
Outcome: Advocacy activities institutionalizing the implementation of digital health disciplines, processes and systems.								
Strategic Action 2.1: Implementing a PHIN knowledge portal								
2.1.1	Consolidate information from various sources of studies and surveys into country profiles that is continually updated to benefit							WHO

Western Pacific region

pacific health information network

REFERENCE	DESCRIPTION	SCHEDULE						SUPPORTING TECHNICAL SECRETARIAT
		PHASE 1		PHASE 2		PHASE 3		
		2019H2	2019H1	2020H2	2020H1	2020H2	2021H1	
	development partners and investors							
2.1.2	Compile an annual registry of regional studies							WHO
2.1.3	Create an environment for regular webinars and offline training							WHO
2.1.4	Develop lessons learned and best actions strategies on digital health in the Pacific							WHO
Strategic Action 2.2: Promoting a holistic and inclusive approach by expanding PHIN memberships within the health sectors (e.g. clinicians) and across multi-sectors (e.g. Ministry of Finance, Ministry of ICT, Statistics, etc.)								
2.2.1	Launch PHIN membership drives to expand member base							
2.2.2	Establish PHIN Chapter in 22 PICT							
2.2.3	Develop promotional materials targeting other health sectors and multi-sectors							WHO, SPC
Strategic Action 2.3: Developing a Community of Practices with international subject matter experts								
2.3.1	Recruit volunteer digital health subject matter experts							
2.3.2	Launch Community of Practices in Data Analysis, ...							
Strategic Action 2.4: Creating an enabling people-centric environment								
2.4.1	Establish an environment that provides members with capacity development, mentoring, training opportunities and scholarships							SPC
GOAL 3: Improve Peer Assistance								
Objective: To increase effectiveness of peer assistance, knowledge exchange and sharing.								
Outcome: PICT access to relevant technical guidance, support and resources available within the region.								
Strategic Action 3.1: Providing country-level assistance								
3.1.1	Identify in-country activities through PHIN Country Representatives							
3.1.2	Align country-level assistance program with development partner strategies (e.g. health security/ surveillance)							WHO, SPC
3.1.3	Prioritize countries requiring front-line assistance							WHO
3.1.4	Provide in-country follow-up for PHIN activities							
3.1.5	Provide in-country support for development partner projects and further strengthen country-led programs							
Strategic Action 3.2: Standardization of documents								
3.2.1	Create libraries of PHIN materials easily accessible by members through the PHIN knowledge portal.							WHO
3.2.2	Develop standard document templates for PHIN (strategies, policies, business cases, cost benefit analysis, cost of ownership, budget bids, services request etc.)							WHO
Strategic Action 3.3: Securing funding for at least 1 PHIN regional conference a year in alignment with Heads of Health and/ or Regional Committee Meetings								
3.3.1	Conduct funding and sponsorship drive							



Western Pacific Region

pacific health information network

REFERENCE	DESCRIPTION	SCHEDULE						SUPPORTING TECHNICAL SECRETARIAT
		PHASE 1		PHASE 2		PHASE 3		
		2019H2	2019H1	2020H2	2020H1	2020H2	2021H1	
Strategic Action 3.4: Pilot innovative projects to strengthen HIS, data production and reporting								
3.4.1	Identify innovative projects to pilot							
GOAL 4: Strengthen Regional Cooperation and Multi-sector Collaboration								
Objective: To pursue and create regional and trans-regional synergies.								
Outcome: Annual Pacific Digital Health Agenda that presents development partners' regional plans, essential country assistance needs and capacity building requirements.								
Strategic Action 4.1: Working with development partners to identify opportunities to host in-country /regional conferences and workshops								
4.1.1	Build a repository of development partner projects for better regional coordination and development partner harmonization							WHO, SPC
4.1.2	Forecast training demands from different development partner projects across the Pacific to plan and deliver training under PHIN							WHO
Strategic Action 4.2: Facilitating and providing a platform for regional development partner coordination and harmonization								
4.2.1	Perform analysis of development partner country partnership strategies and country operating business plans							
4.2.2	Host a forum once a year for all development partners with digital health initiatives in the Pacific							WHO, SPC
4.2.3	Develop and publish an annual Pacific Integrated Digital Health Agenda							WHO, SPC
Strategic Action 4.3: Participating in cross sectoral initiatives namely CRVS, e-Government, Climate Change, Gender Equity and Social Inclusion, and Shared Infrastructure and Services								
4.3.1	Identify cross-cutting areas for collaboration, leverage and further development (e.g. registries and identifiers)							WHO, SPC
4.3.2	Identify potential areas for sharing infrastructure and services							
4.3.3	Share lessons learned, best actions and cross-cutting synergies							
Strategic Action 4.4: Forging partnerships with education institutions (e.g. University of the South Pacific)								
4.4.1	Explore common ground and synergies with education institutions							SPC
4.4.2	Revisit how to effectively use POHLN							WHO
4.4.3	Offer certified professional development courses							
4.4.4	Explore how universities with country campuses (e.g. USP) can provide basic level technical support for ministries of Health							SPC
4.4.5	Explore developing curriculum to achieve a degree in Health Information Management							
Strategic Action 4.5: Establishing potential funding and knowledge partnerships								
4.5.1	Continuously identify potential sources of funding							WHO
4.5.2	Continuously identify potential organizations to share knowledge solutions							WHO, SPC



## 6.8 Indicators for Monitoring and Evaluation

The study did not provide a design and monitoring framework. However, as mentioned in Chapter 2, this study presents a set of indicators in Appendix A: Indicators For Monitoring the Pacific Health HIS Situation for PHIN's consideration. The indicators have been slightly modified from the Health Metrics Global Tracking Tool (GTT).

# Appendix A: Indicators For Monitoring the Pacific Health HIS Situation

The following table presents 15 dimensions of digital health adapted from the Health Metrics Global Tracking Tool (GTT), which was used to monitor the PICT HIS situation.<sup>21</sup>

To be used by the Board Members in the planning process, this framework is present-looking and provides a gauge of the region's potential strengths and gaps.

**Table 12. Indicators to monitor PICT HIS situation (Adapted from Health Metrics Global Tracking Tool)**

Digital Health Dimension	Digital Health Indicator
1. Governance	There is a representative, multi-sectoral and functioning national committee in charge of HIS coordination
2. Policy	The country has up-to-date legislation and policy framework for health information
3. Planning	HIS assessment completed and a costed HIS strategic plan is completed, used, and integrated with health sector strategies/plans
4. Financial resources	At least one National Health Accounts completed in last 5 years
5. Human resources	National database with health workers by district and main cadres updated within last 2 years
6. HIS workforce	HIS workforce job descriptions and training plan exist and staff have individual professional development plans and receive training
7. Indicators	There is a clear and explicit official strategy for measuring each of the health-related SDG indicators relevant to the country
8. Births/deaths	Percentage of births and deaths registered in the civil registration system
9. Cause of death	ICD-10 used in district and central hospitals and causes of death reported to national level
10. Health surveys	A health survey has been conducted in the past 5 years
11. Health facility reporting	Percentage of health facilities submitting weekly or monthly surveillance reports on time to the district level
12. Integration	The HIS unit at national level is running an integrated "data warehouse" containing data from all data sources.
13. Completeness and Quality	There is a mechanism in place from district up through national level to verify completeness and consistency of data from facilities
14. Dissemination	Annual summary of health service statistics was published with statistics disaggregated by major administrative region
15. Use	Senior managers and policy-makers demand complete, timely, accurate, relevant and validated HIS information

<sup>21</sup> PHIN. (2011). Regional Health Information Systems Strategic Plan 2012-2017: Implementation Plan. Draft Version 0.6.

# Appendix B: Stakeholder Interview Questions

## Towards a Renewed Vision and Strategy for the Pacific Health Information Network – Interview Guide

### Introduction:

The Pacific Health Information Network (PHIN) was established at the Health Metrics Network (HMN) meeting in Noumea in 2006. Since then, various workshops and meetings have been held across the Pacific region. PHIN was created to provide a mechanism for networking, support, information sharing and training for people working as health information professionals in the region.

Now, 12 years later, the PHIN Executive Board is interested in assessing the network's role, impact and sustainability in strengthening HIS in the Pacific, leveraging insights to inform the development of a revised vision and new Strategic Plan. This is a forward-looking review of the PHIN's work since its inception that will require extensive research and consultation with the membership of the PHIN and with donors, partners and peer organizations.

### Purpose:

The purpose of the stakeholder interview is to uncover key insights on the successes and strengths of the PHIN, and how it can continue to improve and position itself as a valuable contributor to the health information sector in the Pacific. The interview is expected to take approximately 45-minutes.

### Questions:

The following questions have been prepared in advance to facilitate the interview. Where deemed appropriate, facilitators may ask additional probing questions.

1. In your opinion, what are some of the successes achieved by PHIN in the last 5 years?
2. Can you comment on how successful PHIN has been in building capacity and or communities of practice in the health information and health ICT sectors across the Pacific?
3. Has PHIN contributed to the design and adoption of national HIS strategies? Do you see a role for PHIN in this area?
4. Has PHIN contributed to the development of policies to facilitate health information sharing and HIS?
5. What do you consider to be PHIN's strengths?
6. What do you consider to be PHIN's weaknesses or areas that need to be improved upon?
7. Are there operational areas within PHIN where efficiencies can be gained? For example:
  - Member registration
  - Selection of course offerings, registration and delivery
  - Coordination and delivery of networking opportunities and professional events
  - Partnership development
8. Do you feel that PHIN has involved/engaged the right partners (local/national/regional) to support its mandate and strategic priorities? What other partnerships should be pursued?
9. To remain relevant and sustainable what should PHIN:
  - Start doing
  - Continue doing
  - Stop doing

10. In two years, what strategic priorities should PHIN focus on?
11. In five years, what strategic priorities should PHIN focus on?
12. Do you have any other advice for the PHIN as it continues planning a renewed vision and strategic plan?

# Appendix C: PHIN Member Survey Questions

## Pacific Health Information Network Membership Survey

1. In which country are you based?

- Australia
- American Samoa
- Cook Islands
- Fiji
- French Polynesia
- Guam
- Hawaii
- Kiribati
- Marshall Islands
- Federated States of Micronesia (FSM)
- Nauru
- New Caledonia
- New Zealand
- Niue
- Palau
- Papua New Guinea
- Commonwealth of the Northern Mariana Islands (CNMI)
- Pitcairn Islands
- Samoa
- Solomon Islands
- Tokelau
- Tonga
- Tuvalu
- Vanuatu
- Wallis & Futuna
- Other

2. What is your area of work?

- Clinical
- Health Administration and Planning
- Public Health Programs
- Health Information/ Data
- Information Technology and Systems
- Other (please specify): \_\_\_\_\_



3. What is your experience level?
  - Entry level
  - Associate
  - Mid-senior level
  - Executive
  - Comments: \_\_\_\_\_
4. How long have you been a PHIN member?
  - Less than 1 year
  - 1-2 years
  - 3-5 years
  - 6-8 years
  - 9-11 years
  - Since PHIN's inception in 2006 (12 years)
5. Why did you register as a PHIN member? Check all that apply.
  - To keep informed on the latest developments in health information in the region and internationally
  - To access opportunities to network with health information professionals at local, national and international events
  - To access to specialist educational resources and publications
  - To participate at PHIN conferences, meetings and workshops
  - To receive advance information about conferences, seminars, workshops and other events in the region
  - Other (please specify): \_\_\_\_\_
6. In your own words, what are the mission, vision and priorities of PHIN?
7. Have your expectations on being a member been met? Please explain.
8. Think about the changes, progress or development relevant to health information that have occurred in the past five years.
  - a. Please describe them.
  - b. Has PHIN played a role in addressing or shaping any of these initiatives?
  - c. How can PHIN continue to contribute or respond to the advancements of health information?
9. What are some key successes that PHIN has enabled?
10. What are key barriers to advancing the vision of PHIN?

11. Do you have any recommendations on how PHIN can overcome barriers?
12. What should PHIN do to better leverage its strengths to promote the use of health information across the Pacific?
13. Do you plan on continuing your membership with PHIN?

## Appendix D: Additional Information on PAHO

### *D.1 Regional Plan for the Strengthening of Vital Health Statistics*

The Regional Plan for the Strengthening of Vital Health Statistics — known by its Spanish acronym PEVS — was adopted in 2008. With the goal of improving health information for decision-making and program planning, PEVS is a plan of action to improve quality and coverage of health statistics, horizontal cooperation between countries and coordination among international agencies. Specifically, objectives include:

1. Support development and implementation of process for M&E of vital and health data quality, coverage and timeliness
2. Identify and share best practices across countries
3. Develop standards, methodologies and tools to improve health statistics
4. Support technical cooperation with other agencies
5. Mobilize resources to improve sustainability of HIS strengthening initiatives

With a strong focus on coordination, cooperation and collaboration, PEVS sought to align with and strengthen other organizational activities in HIS, including the Regional Core Health Data Initiative (RCHDI) and the Latin American Caribbean Network for the Strengthening of HIS (RELACSHIS), discussed below. This strategy of collaboration and alignment with established initiatives and research appears to have been an important success factor for PEVS.

The PEVS operational framework included three main dimensions: (1) evaluation of the information production process; (2) identification of obstacles to data coverage, quality and timeliness; and the (3) definition of appropriate levels of intervention to deliver solutions related to geographical, demographic, thematic or sectoral problems.

These intervention levels included country, inter-country/regional, corporate and global actors. While country dimensions include the development of national strategic plans that identified specific problems and actions, inter-country interventions (i.e. regional) target common problems — such as data coverage, quality and timeliness — to propose shared solutions, including regional courses, use of standard computer software, dissemination of best practices and technology transfer. Corporate and global dimensions promoted cooperation for methodological standardization and financial and reporting harmonization.

There have been identified successes in coordinating national, regional and international activities through PEVS. Collaborating agencies include the Economic Commission for Latin America and the Caribbean (ECLAC), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), the World Health Organization (WHO) and the United Nations Statistics Division (UNSD). It has also supported alignment with financing agencies such as the Inter-American Development Bank (IDB) and the World Bank.

Extra-budgetary resource mobilization, however, appeared to fall short of targets, as financing to support implementation and technical cooperation across 15 countries in critical need was identified as a major challenge in a 2010 process report. The funding gap appeared to be about USD \$8 million annually for three years. Despite these challenges, a 2010 progress account reported that current state assessments had been performed for 25 countries, while strategic plans had been drafted for ten priority countries. This represents a major success of PEVS and suggests that a similar position as a direction setting body and advocate for good governance, strategies, policies, standards, definitions and regional coordination may be key roles for PHIN to play in the Pacific.

## D.2 Regional Core Health Data Initiative

PAHO launched the RCHDI in 1995 with the objective of improving monitoring of health situations, trends and goals across Member States. Specifically, goals included:

1. Orienting strategic policy management
2. Supporting setting priorities for action
3. Improving technical cooperation and resource allocation
4. Supporting the development of investment and disease-control strategies
5. Orienting research priorities
6. Distributing regional health status and trend reports

Developed as a set of 82 basic indicators, data collection was supported for 49 countries and territories in the Americas. Now entering its 23<sup>rd</sup> year of operation, indicators can be accessed through the interactive RCHDI Online Database<sup>22</sup> which tracks data across five indicator categories: demographic-socioeconomic, health status, risk factors, service coverage and health systems. This database has proven a significant upgrade over the previous Excel spreadsheet approach many Members States employed.

Data collection through this initiative is leveraged to produce an annual report titled Health Situation in the Americas: Core Indicators, the most recent of which was released in May, 2017<sup>23</sup>. This regional approach has been valuable in standardizing collection and reporting efforts across countries and has supported integration of Sustainable Development Goal targets; 17 of the 27 targets related to ensuring healthy lives and promoting well-being for all ages are included. Country profiles have also been of value in directing the strategic plans under PEVS, while annual reports of basic health indicators allow assessment of regional trends over time.

A 2004 report<sup>24</sup> conducted an evaluation of the first ten years of the RCHDI. Authors found that the RCHDI had improved public health data collection and its use for management and decision-making. They found that the initiative had supported monitoring of compliance with regional and global mandates, including the Millennium Development Goals. Further, use of a basic core set of indicators has proven more efficient than an exhaustive approach to developing a comprehensive set of indicators – avoiding resource wastage and duplication of effort.

However, uptake and compliance were not universal. As of 2004, 30 of the 49 (61%) Member States had adopted the RCHDI at a national level, and 6 of these 30 (80%) did not produce annual reports of their basic indicators. While 24 nations were using the initiative to identify needs and assess progress, it was found that a weakness of the program was in working within human resource and financial constraints. This also contributed to the finding that more effort was needed to improve data quality, timeliness and dissemination. Similarly, data use for program M&E was lacking and it was suggested that more political commitment and advocacy from policy decision-makers was needed.

Drawing parallel to the situation in the Pacific, the WHO has outlined a set of core indicators, called the Healthy Island Monitoring Framework (HIMF), that are being collected in the Pacific Region. However, data accuracy, completeness and timeliness are often weak, which point to a similar shortcoming in recognizing human resource, financial and technological constraints to data collection and reporting. Meanwhile, a focus on a publicly-accessible database, and its integration to better support regional and national decision-making and priority settings, would likely be beneficial. This is currently being planned in the Pacific Region in the form of a dashboard visualization of the HIMF indicators and is in line with best practices observed in the PAHO initiative.

<sup>22</sup> <http://www.paho.org/data/index.php/en/indicators.html>

<sup>23</sup> PAHO. 2017. Health Situation in the Americas: Core Indicators 2017. Washington, DC: PAHO.

<sup>24</sup> PAHO, 2004. Ten-year evaluation of the Regional Core Health Data Initiative. Washington, DC: PAHO.

The RCHDI appears to have successfully put data in the hands of national stakeholders, and a similar effort is needed in the Pacific Region. Technical collaboration with PAHO would likely be a valuable mechanism for improving data collection and use in the Pacific Region and both the WHO Regional Office for Southeast Asia and the WHO Regional Office for the Eastern Mediterranean have begun publishing annual pamphlets of basic indicators based upon this model and in collaboration with the PAHO RCHDI.

### D.3 Health Metrics Network

The HMN was a WHO initiative — launched in 2005 and discontinued in 2013 — to improve the availability and use of accurate and timely health information. Focusing on coordinated investments in core health information systems, HMN had the following objectives:

1. Establish a common HIS framework.
2. Strengthen country HIS through applying a framework, providing technical support and securing funding.
3. Improving access and use health information through development of policies and incentives to enhance data dissemination.

The HMN framework<sup>25</sup> was intended to map out a path towards increased availability, quality, value and use of data by directing joint funding and development of a national HIS.

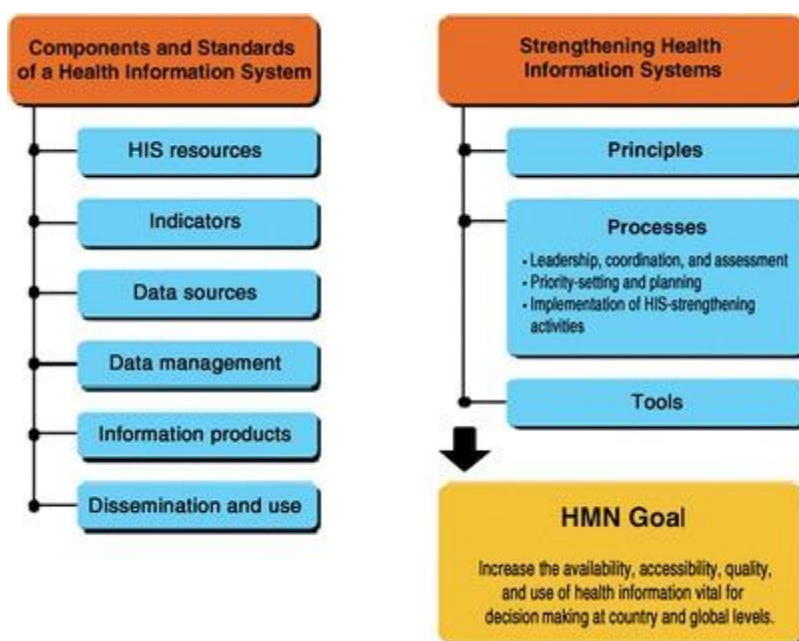


Figure 5. HMN framework components<sup>26</sup>

PAHO adopted the HMN HIS Situation Assessment Tool<sup>27</sup> to support countries in assessing their HIS and designing strategic plans to improve them. It is also worth noting that countries in the Pacific Region reported on their conceptualization of an HIS tended to refer to the HMN framework.

<sup>25</sup> Health Metrics Network. (2008). *Framework and Standards for Country Health Information Systems. Second Ed.* Geneva, Switzerland: World Health Organization.

<sup>26</sup> <http://www.who.int/entity/healthmetrics/documents/framework/en/index.html>.

A key strength of the HMN partnership was its focus on building in-country leadership for health information production and use and on building consensus surrounding a framework for HIS development and strengthening. Similar to the RCHDI, this initiative was valuable in directing the development of national strategic plans under PEVS. Based on analysis, whereas the RCHDI identified data collection needs, gaps and weaknesses, the HMN assessment tool was implemented to surface strengths and weaknesses in national HIS; this synergistic effect allowed priority-setting for further action.

Moving forward with HIS strengthening efforts in the Pacific Region, an optimal strategy may be to use previously implemented and validated tools for assessing HIS weaknesses and identifying priorities for action. The HMN framework outlines the key components of an HIS, and PHIN could support the implementation of national-level assessments informed by this framework and past experiences in other regions. According to the Health Information Systems in the Pacific at a Glance 2016 study<sup>28</sup>, nine PICTs self-identified as having a national HIS strategy. A cursory review of some of the strategies shows there is already some alignment with the HMN framework (e.g., Kiribati, Cook Islands, Vanuatu, and Fiji).

However, it is important to also note that this study is not necessarily advocating for more assessments since most countries are mindful of the same challenges for several years. Therefore the focus for PHIN should be in “getting things done” immediately and sustainably.

#### ***D.4 United States Agency for International Development Partnership Project***

Beginning in 2007, the United States Agency for International Development (USAID) and PAHO began partnering on efforts to strengthen health systems for primary health care (PHC) and improve the quality of health care services. One objective of this partnership was to enhance national capacity to develop policies and implement strategies to reduce fragmentation and improve HIS to support evidence-based public health policy. This effort centered around the promotion of standardized frameworks, methodologies and instruments to monitor HIS processes, as well as the sharing of best practices and the design of strategic plans.

Little data was found evaluating the strengths, weaknesses or impacts of this partnership. However, a similar opportunity to improve technical support and funding through the involvement of a funding agency should continuously be explored.

#### ***D.5 Latin American and Caribbean Network for the Strengthening of HIS***

One of the outcomes of the USAID/PAHO partnership was the Latin American and Caribbean Network for the Strengthening of HIS, known by its Spanish acronym RELACIS. Launched in 2010 as a joint venture with MEASURE Evaluation, the Network was intended to improve sustainability of regional efforts to improve HIS. Specifically, objectives included:

1. Proposing methodological, technical and procedural standards to produce information of high quality, accuracy and timeliness
2. Generating and sharing best practices
3. Promoting dissemination and use of data and information products
4. Promoting HIS performance monitoring and evaluation at the national level
5. Building human resource and financial capacity
6. Fostering horizontal cooperation between countries

---

<sup>27</sup> Health Metrics Network. (2006). Strengthening country health information systems: Assessment and monitoring tool. *Version 1.96*.

<sup>28</sup> World Health Organization Regional Office for the Western Pacific (2017), Health information systems in the Pacific at a glance 2016.

No reports were found that described in detail the RELACSIS procedures or impacts, and it is possible that a program evaluation has not yet been conducted. Integrated working groups were established to define future work plans across four lines of work: coverage and quality targets, production of tools, awareness-raising strategies and human resource capacity-building strategies. This approach may support horizontal collaboration alongside targeted progress in priority areas for action identified by PHIN - though it should be noted that RELACSIS benefitted from a strong, multisectoral Secretariat and substantial funding which PHIN does not currently possess.



## Appendix E: List of Stakeholders Interviewed

**Table 13: List of Stakeholders Interviewed**

Name	Title	Organization/ Country
Dr. Audrey Aumua	Deputy Director-General of the Pacific Community (SPC)	The Pacific Community
Dr. Rasul Baghirov	WHO Representative for Samoa, American Samoa, Cook Islands, Niue and Tokelau	World Health Organization
Finlay Batts	Program Manager	Australian Innovation Exchange
Vicki Bennett	Manager, My Health Record Data Unit	Australian Institute of Health and Welfare
Navreet Bhattal	Technical Officer	World Health Organization
Michael Buttsworth	Technical Officer HIS/Vanuatu	World Health Organization
Manah Dindi	PHIN Working Group Member	Papua New Guinea
Dr. Jun Gao	Regional Advisor Health Intelligence and Innovation	World Health Organization
Walter Hurrell	PHIN Working Group Member	Tonga
Tearoa Iorangi	PHIN Working Group Member	Cook Islands
Susann Ivatts	Senior Health Specialist Health, Nutrition & Population	World Bank Group
Katri Kontio	Technical Officer, HIS	World Health Organization
Miriam Lu Mon	Unit Head, Cardiovascular, Diabetes and Kidney Unit, Health Group	Australian Institute of Health and Welfare
Alvin Marcelo	Co-Chair	AeHIN
Rumanusina Maua	PHIN Vice-President	Samoa
Shivnay Naidu	PHIN President	Fiji
Devina Nand	PHIN Working Group Member	Fiji
Sandra Paredes	Population and Development Adviser	United Nations Population Fund
Nicola Richards	Previous Secretariat of PHIN	Queensland University of Technology
Nihal Samara	President	Gemba360
Dr. Wendy Snowden	NCD advisor	World Health Organization
Dr. Sunia Soakai	Deputy Director, Public Health Division	The Pacific Community
Teanibuaka Tabunga	Director, Public Health	Kiribati
Silivia Tavite	PHIN Working Group Member	Tokelau
Ian Thompson	Consultant	University of the South Pacific
Sue Walker	Director National Centre for Health Information Research & Training	Queensland University of Technology
David Wincener	PHIN Working Group Member	Federated States of Micronesia

## Appendix F: SWOT Analysis Guidelines

The following SWOT grid was used as discussions points during the two-week strategic dialogue.

<b>Strengths:</b> <ul style="list-style-type: none"> <li>• What advantages does PHIN have?</li> <li>• What can PHIN do better than anyone else?</li> <li>• What unique resources can you draw upon that others can't?</li> <li>• What do people see as PHIN's strengths?</li> <li>• What factors would get funding and support?</li> </ul>	<b>Weaknesses:</b> <ul style="list-style-type: none"> <li>• What could PHIN improve?</li> <li>• What should PHIN avoid?</li> <li>• What do people see as PHIN's weaknesses?</li> <li>• What factors would prohibit external funding and support?</li> </ul>
<b>Opportunities:</b> <ul style="list-style-type: none"> <li>• What good opportunities can you spot?</li> <li>• What interesting trends are you aware of?</li> <li>• Useful opportunities can come from such things as: <ul style="list-style-type: none"> <li>• Changes in technology and markets on both a broad and narrow scale.</li> <li>• Changes in regional and government policies and agenda</li> <li>• Changes in social patterns, population profiles, etc.</li> <li>• Regional or Local events.</li> </ul> </li> </ul>	<b>Threats:</b> <ul style="list-style-type: none"> <li>• What are funding constraints?</li> <li>• What in the PESTLE (slides 22 and 26) can threaten PHIN?</li> <li>• What other obstacles does PHIN face?</li> <li>• What are "others" doing?</li> <li>• Could any of the weaknesses seriously threaten PHIN?</li> <li>• What is standing in the way???</li> </ul>

## Appendix G: Population and Health Snapshot

Diversity is one of the defining characteristics across countries that have registered members in PHIN. Across population demographics, resource capacity and health burdens, there is a broad range of contexts that suggests a need for strategic collaboration. This heterogeneity can also affect local priorities and the feasibility of certain initiatives. This section provides a brief summary of the diversity of contexts in the region, with a mindful understanding that HIS strengthening must be locally tailored and appropriate.

Of relevance for further strategic planning is that PHIN should continue to work towards including members from a broader swatch of PICT. Such expanded membership would likely syndicate other countries and build further understanding of the range of contexts, needs and priorities in the region. In addition, an avenue for further study is to build a common understanding towards which countries may have similar needs and capacities, and to work towards understanding how collaboration networks can be optimized. On the other end of the spectrum, differences in population size, health status and resource capacity may limit the usefulness of best practices in one country (e.g. Fiji) for application in another country (e.g. Tuvalu). However, collaborations to build understanding of applicable lessons learned, building a common vision, sharing resources and services or generate funding opportunities is always useful.

### G.1 Population

As shown in Table 6, there is a huge range in population size across PICT. Most stakeholder countries have populations under 200,000. Setting aside resource constraints, countries with smaller populations may face fewer logistical challenges in implementing or strengthening HIS; this has been cited as a success factor in high-income countries in the Western Pacific, such as Brunei Darussalam (population approximately 400,000)<sup>29</sup>. However, there are challenges surrounding population dispersal, infrastructure and connectivity across broad island geographies that complicate this matter in PICT.

**Table 14. Population size of countries with members registered in PHIN (Hawaii is not included)<sup>30</sup>.**

Country	Population
Australia	24,130,000
New Zealand	4,693,000
Fiji	898,000
Solomon Islands	595,000
Vanuatu	270,000
Samoa	195,000
Kiribati	114,000
Tonga	107,000
Federated States of Micronesia	105,000
Marshall Islands	53,000
Palau	22,000

<sup>29</sup> Anshari, M., Almunawar, M., Low, P. & Al-Mudimigh, A. (2013). Empowering clients through e-Health in healthcare services: case Brunei. *International Quarterly of Community Health Education*, 33(2), 189–219.

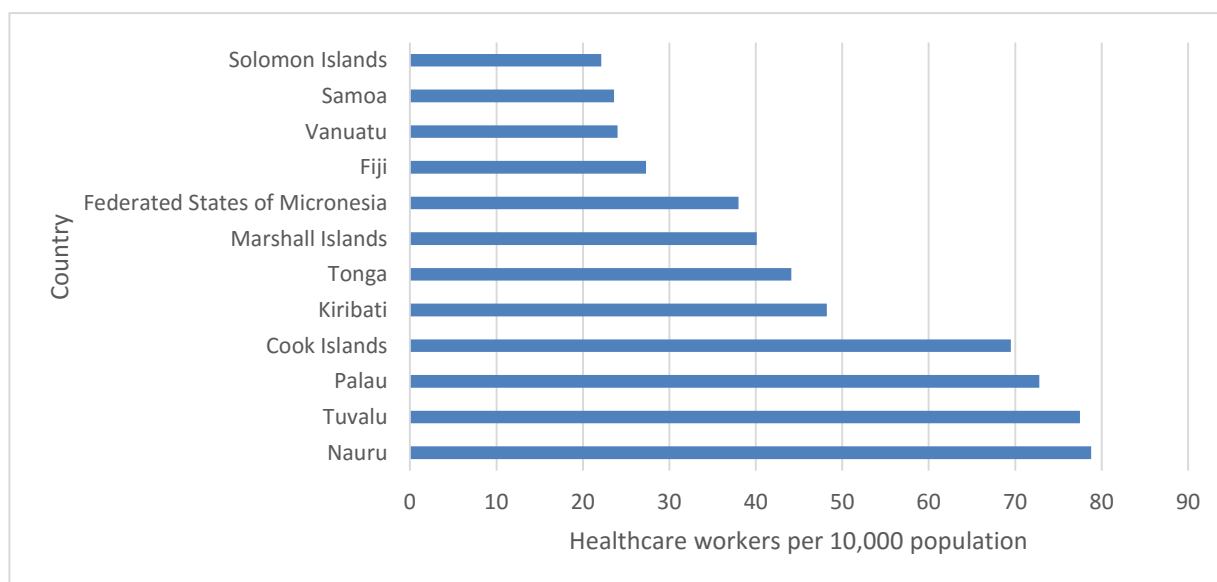
<sup>30</sup> WHO Multi-Country Cooperation Strategy for the Pacific 2013–2017.

Country	Population
Cook Islands	21,000
Nauru	10,000
Tuvalu	10,000

## G.2 Resource Capacity

As presented in **Error! Reference source not found.** there was also a broad diversity in healthcare-worker capacity, even when setting aside high-income countries like Australia and New Zealand. This has proven to affect the feasibility and risks of implementing, using and sustaining HIS.

WHO uses a threshold of 44.5 per 10,000 to measure shortages of healthcare workers: PHIN members represent seven PICT with healthcare worker capacity below this threshold (Fiji, Solomon Islands, Vanuatu, Marshall Islands, FSM, Samoa and Tonga). Areas with limited worker capacity may be less able to take on the new tasks required to implement, strengthen or use new health information processes. However, noted successes in PICT including Fiji, Vanuatu and Tonga suggest that strong governance and resource availability have a stronger impact than the number of healthcare workers. Establishing good and strong governance is another opportunity for countries to collaborate and learn from each other.

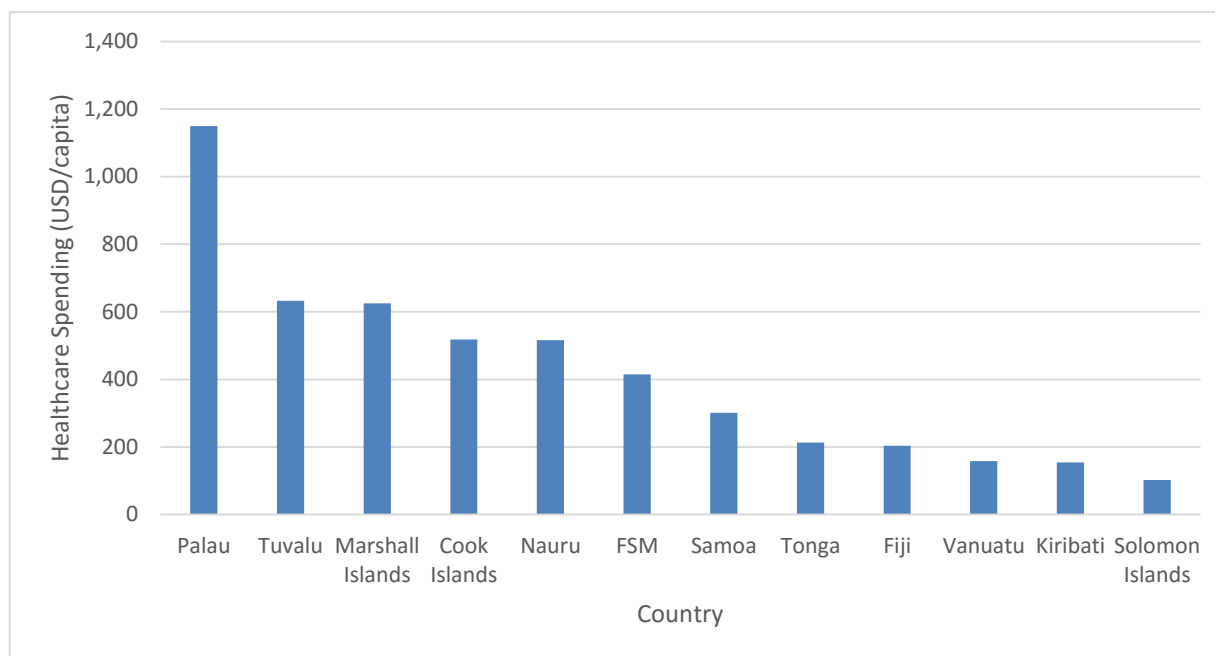


**Figure 6.** Healthcare workers per capita in PICT<sup>31</sup>.

Similarly, there is significant variation in budgets and financial resources available for digital health, as demonstrated in **Error! Reference source not found.** Most PICT with members registered in PHIN have a healthcare spending budget of under USD \$600 per capita (compared to \$3,866<sup>32</sup> and \$3,328<sup>33</sup> per capita in Australia and New Zealand, respectively).

<sup>31</sup> World health statistics 2017: monitoring health for the SDGs, Sustainable Development Goals. Geneva: World Health Organization; 2017.

<sup>32</sup> OECD. (2015). How does health spending in Australia compare? <https://www.oecd.org/els/health-systems/Country-Note-AUSTRALIA-OECD-Health-Statistics-2015.pdf> Accessed April 10, 2018.



**Figure 7.** Healthcare spending per capita in PICT<sup>34</sup>

This variation suggests that PICT may face challenges regarding constrained resources to implement, maintain and sustain HIS. However, it is difficult to assess the full scope of health budgets, as international development support and donations were not included in the figures available. The role of regional and national development partners should not be overlooked. Given the organization's neutrality and independence, there is a unique role for PHIN to help coordinate cross-country funding and collaboration. Strong partnerships and coordination between international and regional development agencies and country partners are success factors in overcoming resource constraints.

### G.3 Health Status

There are also substantial variations in health status across PICT. Many are working to combat a double burden of disease, with tuberculosis and non-communicable diseases like diabetes, cancer and cardiovascular disease appearing to be of greatest concern<sup>35</sup>. Meanwhile, maternal and child health is also a priority, with broad ranges in maternal and under-five mortality rates. Diverse health burden profiles may also lead to different priorities for health across PICT. HIS, however, is a valuable tool and enabler for informing efforts across the spectrum of these health issues.

<sup>33</sup> OECD. (2015). How does health spending in New Zealand compare? <https://www.oecd.org/els/health-systems/Country-Note-NEW%20ZEALAND-OECD-Health-Statistics-2015.pdf> Accessed April 10, 2018.

<sup>34</sup> Monitoring progress towards the vision of Healthy Islands in the Pacific 2017.

<sup>35</sup> *Ibid.*

## Appendix H: Strategic Actions and Activities

Goals	Description/ Output	Strategic Action	Proposed Activities	Risks Mitigated
<b>1. Strengthen Leadership, Governance and Brand</b>	<p>To advocate for leadership and country representation to sustain and enhance the network through guidance and collaboration.</p> <p><b>Output:</b> Endorsement from HOH as the official voice for digital health in the Pacific</p>	1.1 Establishing PICT country champions	<ul style="list-style-type: none"> <li>Country consultations identifying potential champions</li> </ul>	<ul style="list-style-type: none"> <li>Lack of visibility, political will and support</li> </ul>
		1.2 Developing new Board governance, operating model and funding sources	<ul style="list-style-type: none"> <li>Develop formal structures and governance documents for PHIN</li> <li>Write TOR for board, sub-committees, members etc.</li> <li>Board Advisors appointed to strengthen decision-making and mentorship</li> <li>Conduct biweekly/ monthly check-in with Joint Secretariats and Board</li> <li>Establish Business Development Subcommittee to identify different funding sources for PHIN</li> </ul>	<ul style="list-style-type: none"> <li>Lack of strengths and deep experience amongst Board Members (BM)</li> <li>Lack of formal structure and reporting</li> <li>Continuous lack of funding</li> </ul>
		1.3 Strengthening implementation of high level commitments and reporting	<ul style="list-style-type: none"> <li>Actively support HoH Secretariats to provide annual HIMF updates to HoH</li> <li>Publish HIS and health information policy briefings and digital health progress in PICT</li> <li>Provide support for RCM</li> </ul>	<ul style="list-style-type: none"> <li>Lack of visibility at HOH</li> </ul>
		1.4 Creating an enabling volunteer culture	<ul style="list-style-type: none"> <li>Incentivize volunteer work/ activities through recognition at HoH, certificates of appreciation, regional and global digital health conference sponsorships, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Member fatigue, lack of interest, drive and momentum</li> </ul>
		1.5 Building the brand as the voice of digital health in the Pacific	<ul style="list-style-type: none"> <li>Develop and implement the PHIN brand strategy</li> <li>Develop a communication and social media plan</li> </ul>	<ul style="list-style-type: none"> <li>Lack of brand equity and recall</li> </ul>
		1.6 Inaugurating PHIN as an	<ul style="list-style-type: none"> <li>Review structure and link</li> </ul>	<ul style="list-style-type: none"> <li>Lack of official recognition, stature and</li> </ul>

Goals	Description/ Output	Strategic Action	Proposed Activities	Risks Mitigated
		official body at HoH 2019	<p>between HOH and PHIN (e.g. HOH chairs; PHIN official technical body)</p> <ul style="list-style-type: none"> <li>Explore feasibility and options for registering as a legal entity to enter into binding agreements.</li> </ul>	legitimacy to influence change in the Pacific
<b>2. Advance Capacity Building and Inclusive Growth</b>	<p>To inspire, develop and enhance PICT to implement digital health.</p> <p><b>Output:</b> Advocacy activities institutionalizing the implementation of digital health disciplines, processes and systems.</p>	2.1 Implementing a PHIN knowledge portal	<ul style="list-style-type: none"> <li>Compile a registry of regional documentation and digital health initiatives</li> <li>Consolidate information from various sources of studies into country profiles that is continually updated to benefit donors and investors</li> <li>Ensure dissemination of updates to members via PHIN website and apps</li> <li>Create an environment for regular webinars and offline training</li> <li>Include lessons learned and best practice strategies on digital health</li> </ul>	<ul style="list-style-type: none"> <li>Inability to share and exchange knowledge effectively</li> </ul>
		2.2 Promoting a holistic and inclusive approach by expanding PHIN memberships within the health sectors (e.g. clinicians) and across multi-sectors (e.g. Ministry of Finance, Ministry of ICT, Bureau of Statistics, etc.)	<ul style="list-style-type: none"> <li>Promote and raise awareness of PHIN across health and other sectors</li> <li>PHIN membership drive</li> </ul>	<ul style="list-style-type: none"> <li>Absence of key actors in the digital health milieu</li> </ul>
		2.3 Developing a Community of Practice with international subject matter experts	<ul style="list-style-type: none"> <li>Draw subject matter experts with shared interests under the PHIN brand</li> </ul>	<ul style="list-style-type: none"> <li>Lack contribution of experts on key subjects</li> </ul>
		2.4 Creating an enabling people-centric	<ul style="list-style-type: none"> <li>Establish an environment that provides members with capacity</li> </ul>	<ul style="list-style-type: none"> <li>Lack of a learning culture to increase knowledge, competence and performance</li> </ul>



Goals	Description/ Output	Strategic Action	Proposed Activities	Risks Mitigated
		environment	development, mentoring, training opportunities, scholarships, cross-country attachments etc.	
<b>3. Improve Peer Assistance</b>	To increase effectiveness of peer assistance, knowledge exchange and sharing.  <b>Output:</b> PICT access to relevant technical guidance, support and resources available within the region	3.1 Providing country-level assistance	<ul style="list-style-type: none"> <li>Align country-level assistance program with donor strategies (e.g. health security/ surveillance)</li> <li>Prioritize countries requiring front-line assistance</li> <li>Provide in-country follow-up for PHIN activities</li> <li>Provide in-country support for donor projects</li> <li>Identify in-country activities through country champions/focal points for support or technical guidance</li> </ul>	<ul style="list-style-type: none"> <li>Mismatch between donor priorities and PHIN focus</li> <li>Lack of country ownership and follow-up</li> </ul>
		3.2 Standardization of documents	<ul style="list-style-type: none"> <li>Create a library of PHIN materials easily accessible by members through the PHIN knowledge portal.</li> <li>Develop standard templates for PHIN (strategies, policies, business cases, cost benefit analysis, cost of ownership, budget bids, services request etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Risk of “reinventing the wheel”</li> <li>Applying inappropriate methods not relevant</li> </ul>
		3.3 Securing funding for at least 1 PHIN regional conference a year in alignment with HoH and RCM	<ul style="list-style-type: none"> <li>Identify funding needs and sponsors</li> </ul>	<ul style="list-style-type: none"> <li>Inability to build trust, team work and solidarity</li> <li>Lack of PHIN alignment with regional agendas</li> </ul>
		3.4 Pilot innovative projects to strengthen HIS, data production and reporting	<ul style="list-style-type: none"> <li>Identify potential pilots for PHIN to participate in</li> </ul>	<ul style="list-style-type: none"> <li>Lack of readiness for innovation</li> <li>Lack of further health systems strengthening</li> </ul>
<b>4. Strengthen Regional Cooperation</b>	To pursue and create regional and trans-	4.1 Working with development partners to identify opportunities to	<ul style="list-style-type: none"> <li>Build a repository of donor projects for better regional</li> </ul>	<ul style="list-style-type: none"> <li>Duplication of efforts, resources</li> </ul>

Goals	Description/ Output	Strategic Action	Proposed Activities	Risks Mitigated
<b>and Multi-sector Collaboration</b>	regional synergies.  <b>Output:</b> Annual Pacific Digital Health Agenda that presents donor regional plans, essential country assistance needs and capacity building requirements.	host in-country /regional conferences and workshops	coordination and donor harmonization <ul style="list-style-type: none"> <li>Forecast training demands from different donor projects across different PICT to plan and deliver the training under PHIN</li> </ul>	
		4.2 Facilitating and providing a platform for regional development partner coordination and harmonization	<ul style="list-style-type: none"> <li>Understand donor country partnership strategy and country operating business plans</li> <li>Host a forum once a year for all donors with digital health initiatives in the Pacific</li> <li>Develop an annual Pacific Integrated Digital Health Agenda</li> </ul>	<ul style="list-style-type: none"> <li>Duplication of efforts, resources</li> </ul>
		4.3 Participating in cross sectoral initiatives namely CRVS, e-Government, Climate Change, Gender Equity and Social Inclusion, and Shared Infrastructure and Services	<ul style="list-style-type: none"> <li>Identify cross-cutting areas for collaboration, leverage and further development (e.g. registries and identifiers)</li> <li>Identify potential areas for sharing infrastructure and services</li> <li>Share lessons learned and best actions</li> </ul>	<ul style="list-style-type: none"> <li>Duplication of efforts, resources</li> </ul>
		4.4 Forging partnerships with education institutions (e.g. USP)	<ul style="list-style-type: none"> <li>Find common ground and synergies</li> <li>Revisit how to effectively use POHLN</li> <li>Identify how universities (e.g. USP) with country campuses can provide basic level technical support function to support MOH</li> <li>Assist in developing binding contracts and service level agreements (SLAs)</li> </ul>	<ul style="list-style-type: none"> <li>Possibility of “re-inventing the wheel”</li> <li>Inability to provide first-line technical support in PICT</li> </ul>
		4.5 Establishing potential funding and knowledge partnerships	<ul style="list-style-type: none"> <li>Identify potential funding sources</li> <li>Identify potential organizations to share knowledge solutions</li> </ul>	<ul style="list-style-type: none"> <li>Lack of alternative sources of funds</li> </ul>



# Appendix I: Board Governance Terms of Reference

## BOARD GOVERNANCE TERMS OF REFERENCE

### A. INTRODUCTION

As volunteer leaders, the operational Board Members that are made up of the President and Directors (herein called “the Board”) play an important role in the success of the Pacific Health Information Network (“PHIN” or “the Network”). The Board has significant leadership, legal and ethical responsibilities to the membership, the secretariats and the wider health and digital health profession. A strong and knowledgeable Board helps an organization maintain credibility, provide important access to the community and serve as effective advocates of a profession. The Board works to fulfill its vision, mission and strategic objectives under a core set of values of equity, unity, diversity, innovation and leadership.

### B. PURPOSE

The Board is embodied in one President and four Directors. Each has a primary responsibility to foster the Network’s short and long-term success consistently with a direct responsibility to its membership and stakeholders.

The Board are stewards of PHIN. The Board, working as an operating board with minimal staff (i.e. one administrative secretariat yet to be hired) and two technical secretariats (i.e. World Health Organization, WHO and The Pacific Community, SPC) has the responsibility to oversee the conduct of the Network’s activities and to provide guidance strategically, technically and operationally. The Board will set the standards of conduct for PHIN.

These terms of reference are prepared to assist the Board and Secretariats in clarifying the responsibilities and ensuring effective communication between the Board and its stakeholders.

### C. GOVERNING INSTRUMENT

PHIN is a peer-to-peer network organization of professionals participating or directly working on digital health. Since its inception at a Health Metrics Network (HMN) meeting in Noumea in 2006, the goal was to provide opportunities for digital health stakeholders in the Pacific to network, learn, share knowledge, and collaborate and share learnings across the region. However, since its renewed vision in 2018, the Network is now positioning itself to be much more participative at the country-level in supporting digital health initiatives across the Pacific.

By promoting a holistic and inclusive approach, the members of the Network are those individuals engaged in health information, health information systems, eHealth and broader digital health activities across the health sector, over multi-sectors and within cross-disciplines.

PHIN is not currently registered as a legal entity. PHIN’s legal sponsors are its Technical Secretariats namely World Health Organization (WHO) and the Pacific Community (SPC).

### D. APPOINTMENT AND COMPOSITION OF THE BOARD OF DIRECTORS

Board Members have a collective responsibility to run the affairs of PHIN.

Each Pacific Island Countries and Territories (PICT) will appoint an official Country Representative to PHIN. Under a 3-year term, five Country Representatives will be appointed on a rotational basis as members of the Board of Directors to:

1. Govern the Network on behalf of the membership;
2. Ensure propriety of operations and compliance with relevant legislation and regulations;
3. Strengthen alignment from the Heads of Health (HOH) and the Pacific Health Ministers meetings; and
4. Execute the Strategy and Implementation Roadmap (i.e. the “Strategy”)

The five Board Members will be represented by a President and four Directors. Each Director will be responsible for a goal from the Strategy. The President will be responsible for the overall financial health of PHIN. The President will be nominated purposively amongst the five appointed Board Members. The remaining Board Members will be assigned as Directors. Assignment of the Directors to undertake a “goal” will be deliberated amongst the Board Members and assigned accordingly after the President has been selected.

To ensure continuity and focus, the Past President will remain as a Board Member taking on the role of PHIN Distinguished Fellow for one more term to ensure a smooth transition and transfer of relevant knowledge for sustainability and continuity. The PHIN Distinguished Fellow will have no authority on the Board other than to provide guidance and promote strong PHIN advocacy.

### Board Rotation

The mechanics of appointing the Board are based on the following operating principles:

1. The Board will be responsible for the development and execution of the Strategy and Implementation Roadmap.
2. To give all PICT Country Representatives an equal chance to have a seat at the Board, a rotational schedule will be established that will ensure equal representation from Melanesia, Micronesia and Polynesia.
3. Under a 3 year-term, a new Board will be in place on the 2<sup>nd</sup> year of every Strategy term to execute the Network’s strategic action and plans. This same Board will also be responsible for developing the “new” Strategy on their 2<sup>nd</sup> year and will be responsible for implementing the “new” Strategy into its first year. In other words, Boards will span between two strategic periods to maintain flow, transition and progress.
4. The Board, before the end of their 3<sup>rd</sup> year, must go through a process of confirming the upcoming countries’ commitment to represent the Board under the Board rotational schedule and appointment criteria (see Section E. Roles and Responsibilities/ General Responsibilities)
5. The new Board Members will be officially introduced at the HOH Meetings every 3 years.

The Board rotation are as follows:<sup>36</sup>

Board Rotation Schedule	Countries
2019 – 2021	Fiji, Cook Islands, Tuvalu, Federated State of Micronesia, Guam
2022 – 2024	Solomon Islands, Kiribati, Samoa, American Samoa, New Caledonia
2025 – 2027	Vanuatu, Guam, Niue, Wallis and Futuna, Papua New Guinea
2028 – 2030	New Caledonia, Marshall Islands, Tonga, Tokelau, Nauru,
2031 – 2033	Commonwealth of Northern Mariana Islands, French Polynesia, Pitcairn Island, Papua New Guinea, Palau

## E. ROLES AND RESPONSIBILITIES

### General Responsibilities

The Board retains the responsibility for managing its own affairs, including the responsibility to:

1. Provide direction and general guidance
2. Annually review the skills and experience represented on the Board in light of the Network's strategic direction for the purpose of ensuring Board cohesion and to recommend the criteria for potential candidates in the next round of Board appointments
3. Appoint, determine the composition and set the terms of reference for the Board led Sub-committees or Working Groups
4. Implement an appropriate process for assessing the effectiveness of the Board at large, the President, the Directors and Sub-committees in fulfilling their responsibilities
5. Assume responsibility for the Network's governance practices and ensure they meet the needs of the Pacific region
6. Approve the terms of reference for the Board, the President and the Directors
7. Review the appointment of the administrative and technical secretariats to the Board
8. Review the appoint of the Honorary Board of Advisors

### Strategic Planning

The Board has the responsibility to develop the Strategy, including to:

1. Revisit its Vision, Mission, Core Values
2. Lead the development of, and ultimately the approval, of the its Strategy every 3 years
3. Approve the annual Sub-Committee plans and budgets to support the Network's ability to achieve its Strategy and Implementation Roadmap

<sup>36</sup> To give an even spread of regional representation and experience for each board term, the board is manned as follows during each of the five time periods:

1 experienced representative from Melanesia

1 inexperienced representative from Micronesia

1 experienced representative from Polynesia plus an inexperienced member from Polynesia

All countries were selected randomly according to which period under each criteria and within each sub-region.

The remaining countries that couldn't be paired up was Nauru and Palau (which happened randomly) which will fill the fifth seat during periods 4 & 5 respectively.

To ensure there are a total of 5 representatives during every period, 3 countries will need to repeat their participation. Therefore 1 representative has been randomly selected from every region, namely PNG (Melanesia - Periods 3 & 5); Samoa (Polynesia - Periods 2 & 4) and Guam (Micronesia - Periods 1 & 3).

Using this principal there is some degree of flex in who the 5th board member country representative while maintaining a balanced team.

### **Performance Measure**

The Board has the responsibility to monitor its performance, including to:

1. Monitor the Network's progress towards the approved Strategy
2. Provide an annual reporting system that accurately measures the Network's performance against its plans and activities - and alter its direction in light of changing circumstances as necessary
3. Review and approve significant changes to the Strategy

### **Ensuring Compliance**

The Board has the responsibility to ensure it complies to the needs of its broader stakeholders, including to:

1. Develop appropriate policies, practices and reporting processes
2. Comply with relevant legislation and regulation
3. Work with donor and technical agencies on work plans, performance measures, corrective action plans and ongoing monitoring and evaluation requirements and reporting

### **Financial Oversight**

The Board has the fiduciary responsibility to ensure the financial health of the Network, including to:

1. Ensure the solvency of the Network, safeguarding assets and ensuring the effective use of resources
2. Approve the annual operating budget or project budgets
3. Agree on any variation from the budgetary target
4. Ensure financial probity through the regular review of financial and accounting balance sheets and reports

### **Stakeholder Engagement**

The Board has the responsibility to engage all stakeholders that fall within its auspices and mandate, including to:

1. Steward relationships that will help realize the Strategy
2. Represent the Network to external stakeholders, representing members views and contributing to stakeholders' activities
3. Listen to the needs of the membership and direct any necessary changes that will enable the Network to serve the membership to the highest potential

## **F. FUNCTIONS**

**Operationally**, the Board shall:

1. Understand and fulfill the commitments of being a member of the Board
2. Commit to a 3-year term of office
3. Execute the Strategy
4. Participate in regular conference calls that will occur at least monthly
5. Manage the Administrative Secretariat
6. Work and closely collaborate with the Technical Secretariat
7. Attend the Annual General Meeting
8. Developing policies and procedures

**Strategically**, the Board shall:

1. Ensure the vision and mission statements reflect the current values and circumstances of the Network
2. Develop the Strategy and plans for the future development of the Network
3. Solicit the inputs and proactively engage the Honorary Board of Advisors and Donor Advisory Committee
4. Build and maintain relationships with key strategic partners and stakeholders

**Administratively**, the Board shall:

1. Ensure the terms of references are maintained and met by the President and Directors
2. Ensure Board member turnover is completed and that adequate time is allotted for transition handoff to the new Board
3. Ensure the completion of the Annual Report
4. Ensure the planning and execution of the Annual General Meeting
5. Build and grow the membership base across the Pacific

## **G. POSITIONS**

The Board will be comprised of five members: the President and four Directors. Each Board member will be a Country Representative appointed by their respective Heads of Health. Board members will be appointed on a rotational basis every 3 years. The President is to be nominated and decided within the appointed Board members.

### **President**

As funds allow, the President will represent the Network at all relevant events and functions and will be the key contact for PHIN for their time in office. If the President is on leave for extended periods or is unable to continue in this capacity, the President will assign the delegation of authority to one of the Directors.

### **Directors**

The Directors will be fully accountable for a specific goal from the Strategy and the portfolio of responsibilities to carry out and achieve the “goal”. The assignment of goals will be deliberated between the appointed Board members. Delegation of responsibilities can be lateral to other Directors.

### **Country Representatives**

Country Representatives that are not appointed to the Board will be responsible for establishing and growing PHIN’s Chapter in their respective countries or territories. Country Representatives not sitting on the Board will actively work with the Board as needed. There will only be one Country Representative per country or territories, unless a PICT is also represented by a PHIN Distinguished Fellow (i.e. Past PHIN President) in the same period.

### **Eligibility Requirements of Country Representatives/ Board Members**

The qualification criteria are as follows:

1. Be an active member in good standing
2. Senior leadership experience who have served at senior-level manager positions (Permanent Secretariat, CEO, Deputy Minister, Assistant CEO, Director, Manager levels) within the health sector for at least 5 years
3. Strong strategic thinking, problem solving and leadership skills
4. Solid understanding of the health sector spectrum and digital health
5. Demonstrated track record as a community leader
6. Official letter of endorsement from the Heads of Health as the PHIN Country Representative

## **H. REPORTING**

The Board reports formally to the PHIN membership through the provision of the PHIN Annual Report, which includes an assessment of the Network’s overall performance against the objectives of the Strategy.

The Annual Report will be available via its website.



## I. DELEGATION

The Board is an operating board and therefore can delegate their authority in a variety of ways – to its peers on the Board, to the administrative secretariat, to a sub-committee leader or other members. Through effective internal controls and reporting mechanisms, these designates are accountable to the Board on a regular basis, thus ensuring provision of appropriate checks and balances are maintained across the entire decision-making cycle.

The Board also retains authority to utilize volunteer expertise by constituting sub-committees for the purpose of:

1. Informing good governance, business development, membership drive and operational strategy
2. Contributing to the delivery of in-country support on donor projects, events, content and wider membership services
3. Responding to strategic and operational management
4. And other purposes deemed noteworthy and relevant from the perspective of the Board

Sub-committees are ordinarily subject-specific or time-limited in their purpose unless explicitly stated otherwise. Sub-committees at the Network will be enduring, will have an advisory role and will make recommendations for decisions by the Board.

## J. TECHNICAL SECRETARIATS

The Technical Secretariat to PHIN, represented jointly by the World Health Organization (WHO) and the Pacific Community (SPC), was established to provide planning, technical and administrative support to PHIN in order to assist the Network in achieving its purpose and objectives.

The Technical Secretariat will be responsible for planning, coordinating and providing technical and administrative support. Its primary functions will include:

Function	Responsible
1. Implementing the instructions of the Board	WHO, SPC
2. Arrange agendas and briefing materials	WHO
3. Facilitate Board meetings or other meetings as requested by the Board	SPC
4. Present information and recommendations in a timely and complete fashion	WHO, SPC
5. Facilitate the exchange of information and communication amongst the Board, its members and broader stakeholders	WHO, SPC
6. Proactively liaise with Heads of Health on PHIN matters	SPC
7. Work with the Honorary Board of Advisors to assist the Board in moving the Network's agenda forward	WHO, SPC
8. Liaise with the Donor Advisory Committee on as needed basis to strengthen donor participation	WHO, SPC
9. Proactively assist in securing donor funding for the Network	WHO, SPC
10. By being ambassadors of PHIN, assist the Board by working with non-DAC donors on matters related to regional and donor coordination	WHO
11. Strengthen the linkages between PHIN and the HIMF initiative	WHO, SPC
12. Coordinate requests for technical advice and assistance on digital health	WHO

13. Facilitate access to specific expertise	WHO, SPC
14. Provide logistical support for Board meetings and PHIN events	WHO
15. Assist the President (i.e. Board Chair) to draft meeting documents, including minutes and decision documents	WHO
16. Establish and maintain records of the Network's meetings correspondence	WHO
17. Design and implement communication strategies on behalf of the Network	WHO, SPC
18. Provide direction and guidance to sub-committees established by the Network, including reviewing, providing feedback and approval of work plans and guidelines developed by the sub-committees	WHO, SPC
19. Provide administrative and clerical support to the Board and sub-committees	WHO
20. Collaboratively working with the Board members, lead or assist in developing PHIN policies	WHO, SPC
21. Provide direction and review the activities and output of contractors hired by the Network	WHO, SPC
22. Develop work plans to guide the activities of the Technical Secretariat on an annual basis for the consideration of the Network	WHO, SPC
23. Manage PHIN electronic assets including website, email and social media	WHO
24. Receive, screen and manage membership applications	WHO
25. Manage PHIN knowledge products and related documents	WHO
26. Maintain the schedule for PHIN meetings and events	WHO
27. Distribute documents to all interested parties	WHO
28. Receive, record, forward and track all issues identified	WHO
29. Maintain a reference center for all technical secretariat documentation	WHO
30. Develop and publish the annual financial statement	WHO

### Reporting Relationship

The Technical Secretariat will report on its activities at several levels. Ultimately, the joint Technical Secretariat is only and fully accountable to the President.

### K. ADMINISTRATIVE SECRETARIAT

The Administrative Secretariat should be a permanent and funded position for 3 years. The Administrative Secretariat's position can be extended for another 3 years pending individual performance and budget availability.

Until this position is filled, the Administrative Secretariat will be assumed by the WHO Technical Secretariat.

### L. BOARD MEETINGS

#### Chair

The Board Chair will be the PHIN President.

#### Secretariats

The Board Secretariat will be the Technical Secretariats (i.e. WHO and SPC) and an Administrative Secretariat. One of the Technical Secretariats (i.e. WHO) will take on the role of the Administrative Secretariat until this position can be hired.

### **Meeting**

The Board convenes for regular meetings via teleconference at least once a month (or as often as necessary).

If funding permits, the Board also convenes annually in person to build relationship and strengthen the team, to formally review progress against the Strategy and to agree on the priorities for the year ahead.

The purpose and principles of the Board Meetings are as follows:

1. To agree on strategy and assess performance
2. To ensure the Network's activities remain aligned with the Strategy and that sub-committees or volunteers are not straying into activity areas that are not identified in the Strategy
3. To monitor financial performance against agreed budget
4. To ensure procedural and compliance issues are dealt with. For example, any issues arising from donor concerns.
5. To use the time together to explore new ideas for growth, to source alternative approaches to problems and funding and to harness opportunities for PHIN

### **Quorum**

Quorum shall be represented by having all members of the Board, unless a delegation of authority has been established amongst the missing members. The Chair (i.e. the President or the delegated Chair) will have the right to determine as to whether the quorum exists and will consult with the Technical Secretariats prior to the approval of the agenda for the meeting.

### **Time**

The Board convenes for an average of 24 hours per year. This does not include time spent by the President and Directors in managing their respective portfolios and sub-committees. The Board are expected to read documents in advance. The Board members should join the meeting, must be well briefed and should be prepared for strategic conversations about important and relevant items.

Furthermore, the President should always have an update from the Heads of Health and the PHIN Chapters across the PICT, while the Directors are in touch with their sub-committees and volunteers. With the assistance of the Administrative Secretariat, meeting agenda and corresponding documents are made available to the Board, the Honorary Board of Advisors and Donor Advisory Committee one week in advance of a meeting.

### **Decision Making**

PHIN Board Meetings benefit intentional design and good facilitation. Routine matters are handled quickly and the most pertinent items are placed at the top of the agenda. The Board is free to discuss information brought forward by the Director, Secretariats or members, but only as a precursor to broader conversations that is relevant. Sometimes the Board can decide during the meeting but can also defer the decision within 30 days or to the next Board Meeting. The Board can defer deciding beyond 30 days provided there is a clear reason. The Board shall strive for consensus when making decisions. If consensus cannot be achieved, the Board must always agree on how to deal with the outstanding issue before adjourning the meeting.

The Board are expected always to ask strategic questions and to challenge the status quo, probing to ensure they are drawing on information that is accurate, insightful and useful.

## **Minutes**

The Administrative Secretariat shall take minutes at the committee meetings. If there is no Administrative Secretariat, the minutes will be taken by the Technical Secretariat (i.e. WHO). Minutes shall be approved at subsequent meetings. Minutes will be kept and stored as official documents.

## **M. HONORARY BOARD OF ADVISORS**

The Honorary Board of Advisors (also known as “HBA”) is a trusted group of advisors that provide non-binding strategic advice to the Board and the Network as a whole. The HBA is to provide mentorship, expertise, strategic thinking, focus (and impose challenges) to the Board members. They must have the experience and distinct knowledge of the different aspects of digital health and the underlying Strategy. Given that the Network will have different needs at different stages of development, it is to be left to the discretion of the Board members to seek and appoint the HBAs they feel will compliment and strengthen the Board. HBAs can serve multiple terms pending the approval of the Board.

### **Selection Criteria of Honorary Board of Advisors**

The selection parameters of HBAs are subjective at best. However, the following are three simple criteria:

1. Passionate advocates of the Network
2. Considered well respected industry luminaries
3. Willing to participate in monthly Board meetings

### **Size of the Honorary Board of Advisors**

The size of the Honorary Board of Advisors influences the efficiency and effectiveness of delivering value to the Board. Therefore, it is recommended that the HBA begins with a small number and to grow to its ultimate number. There should be no more than five, but no less than three. The Board members can nominate or suggest HBA. Past President (i.e. Distinguished Fellow) is not considered to be a member of the HBA.

### **Composition of the Honorary Board of Advisors**

Due to its limited size (between three to five), a strong HBA should be represented from different operating disciplines that reflect the needs of the Network such as strategy; marketing and branding; professional development and capacity building; legal and regulatory; fund raising; and digital health in general.

### **Other Considerations**

Honorary Board of Advisors (HBA) do not represent the companies they work for, but rather represents their wisdom, profession, discipline and expertise they embody. HBAs shall act on a voluntary altruistic basis and shall not be entitled to any remuneration.

HBAs will require to sign a Conflict of Interest Declaration.

HBA members must not miss more than two consecutive Board meetings or they will be asked to re-examine their availability to participate in future PHIN meetings.

Furthermore, it should be highlighted that HBA strengthens the existing Board. However, it cannot interfere with authorities of the Board.

#### **N. DONOR ADVISORY COMMITTEE**

The Donor Advisory Committee (DAC) is a body whose members are committed to advancing the Network's agenda by providing guidance and funding. Members represented are not only committed to the success of the endeavors they invest in, but also in the overall success of the Network.

The DAC, at their discretion, will participate monthly at the Board Meetings. Therefore, confirmation of their attendance will be required in advance. The DAC will be invited by the Board to participate after internal matters discussions have been concluded. The Board also has the discretion to invite the DAC at any time during the meeting. However, a time will be established from the outset before the meeting.

The DAC responsibilities will be as follows:

1. To present and align donor agenda with PHIN's goals and activities to promote clarity and strengthen the accord
2. To provide observations, updates and advice on current and emerging donor trends and development that may be relevant to the Network's strategies and plans
3. As applicable, to review and make recommendations regarding donor specific areas of interest and on the funds provided

The eligibility criteria to sit as a member of the DAC are as follows:

1. Provided funding to help support PHIN's activities
2. Participants in digital health activities in the Pacific
3. Willing to participate in the DAC regularly to provide advice and guidance to the Network
4. A member of the United Nations (UN) and UN agencies; multilateral financial institutions; bilateral agencies; NGOs or individual philanthropists and foundations.

Similar to the Honorary Board of Advisors, the DAC cannot interfere with authorities of the Board.

#### **O. MEMBERSHIP AND GUESTS**

Membership of PHIN will be free for full members but will be charged a fee for affiliate members. All members must be officially registered with the Network.

Members are encouraged to recommend other colleagues across the health sector. To broaden and strengthen the Network's reach and influence, members are also encouraged to recruit members from other government sectors that are stakeholders of digital health in the region.

Membership renewal will be sought annually through email verification. Members will be asked to respond to an email providing up-to-date contact details for their membership to remain active.

#### **Membership Categories**

There are two membership categories:

1. Full membership: Full membership is only open to the following:
  - Individuals who work in digital health, in a health information-related field or in the delivery, management or administration of health care
  - Employee of a publicly funded healthcare system

- Based in a PICT
- 2. **Affiliate membership:** Affiliated membership is open to the following:
  - Individuals working in other government sectors
  - Private sector-based healthcare professional
  - Employees of international development agencies, donors and NGOs
  - For those who are not based in a PICT

As a full member, the individual will be expected to actively participate in PHIN events, and are eligible to attend all PHIN meetings, conferences and workshops. Full members are also eligible to apply for scholarships to cover professional education or the costs of attending PHIN-related activities. Full membership will be free of charge.

Affiliate members cannot be nominated to the Board. However, affiliate members are eligible to attend all PHIN meetings, conferences and workshops. Affiliate membership fee will be decided by the Board.

### **Management of the Membership**

The management of the membership will be handled by the Administrative Secretariat and will be responsible for the following:

1. Developing the membership application guidelines
2. Receiving and following up the membership application
3. Screening and categorizing the membership application
4. Communicating with the members, including providing regular communications
5. Managing the membership database

### **Guests**

The Board may invite guests to attend meetings as a resource as required. Sub-committees may also bring guests to the meetings.

### **P. Fund Raising**

Board members must be eager solicitors of donors and must be willing to lead fund-raising efforts. In the end, the success of fund-raising campaigns hinges on leadership, and that leadership starts with the Board. Therefore, one of the Director on each term will be responsible for setting up a “Sub-Committee for Fund Raising” and will require to develop a 3-year Fund Raising Roadmap.