



Health Information Exchange Strategic and Operational Plan Profile

Overview

The Commonwealth of the Northern Mariana Islands (CNMI) seeks to improve patient safety and care, as well as the effectiveness and efficiency of their health care system, through the use of Health Information Technology (HIT). Specifically, the CNMI seeks to encourage the use of Electronic Health Record (EHR) systems by health care providers and public health agencies. The CNMI will also plan, implement, and sustainably maintain a secure CNMI Health Information Exchange (HIE) capability connected to the Nationwide Health Information Network (NwHIN).

The CNMI is an archipelago chain of fourteen islands, of which three are populated with building infrastructure (i.e., Saipan (capital), Tinian, and Rota). Located on the island of Saipan, the Commonwealth Health Center (CHC) is the only hospital in the CNMI and the sole provider of most health services. With respect to the use of EHRs, the CHC has been using the Indian Health Service's (IHS) Resource and Patient Management System (RPMS) for over fourteen years. The overall strategy of CNMI Health Information Exchange (CHIE) is to implement all applications of the RPMS, including key ancillary systems such as laboratory, pharmacy, and radiology/imaging applications, to all the providers in CNMI.

The CNMI Department of Public Health (DPH) already uses the RPMS system for its Master Patient Index (MPI) and about 90% of the residents in the CNMI have both registered in the MPI and accessed CHC services. Services provided by the CHC include those related to: birth, immunization, employee screening examinations, outpatient, ancillary services, and inpatient services.

Model and Services

The first phase will begin by implementing the core RPMS system, which includes the DPH's multidivisional system. The use of the RPMS system will ensure:

- Electronic eligibility and claims transactions
- Electronic prescribing and refill requests
- Electronic clinical laboratory ordering and results delivery
- Electronic public health reporting
- Quality reporting
- Prescription fill status and/or medication fill history
- Clinical summary exchange for care coordination and patient engagement

The CHIE will install an RPMS encryption upgrade to enable the secure transmittal of data. This upgrade is a Simple Mail Transfer Protocol (SMTP)-based secured messaging service that works like Direct. It will be used by those with RPMS to push records to those not using RPMS, especially those on other islands, states, and countries. Providers can receive encrypted messages through SMTP based e-mail clients. There is one laboratory on Saipan, DLS, which is based in Hawaii and plans to provide a Health Level Seven (HL7) interface to RPMS.

State: Northern Mariana Islands



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Award Amount: \$ 800,000

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In phase two, the CHIE will focus on developing network infrastructure. It will work directly with the Public School System (PSS) to ensure that the CNMI HIE and PSS have separate networks, thus ensuring the privacy and security of information.

In phase three, the use of the RPMS EHR will be expanded to the Rota and Tinian Health Care providers, the private clinics, the laboratories, and the pharmacies. Due to funding issues, all of these entities are interested in participating. After phase four and the implementation of the HIE, phase five will focus on the development of a clinical and public health reporting repository.



Highlights

- **Provider directory:** The CNMI HIE will work with the HIE entities in Guam, American Samoa, Hawaii, and the Hawaii-Pacific REC to develop directories of providers in the Pacific region. The CNMI HIE will also work with local and regional organizations, including the Pacific Island Health Officers Association (PIHOA), Affiliated Pacific Nursing Association, and others.
- **Technical infrastructure:** Although the Pacific territories of American Samoa and Guam are separated by the Pacific Ocean, collaboration with the CNMI is logical due to RPMS' identical hardware base. American Samoa is also very similar to the CNMI in its use of federal software for EHR, the large populations covered by a single EHR, and both the Veterans Administration and IHS developed and tested NwHIN connectors. The Guam e-Health Collaborative and their HIE consultants have also met with the CNMI to discuss potential venues for cooperation.
- **Collaboration with the Pacific Island territories, UH TIPG, Hawaii-Pacific REC, and federal partners:** In addition to close collaboration with the other Pacific Islands, the CHIE will work with the University of Hawaii Telecommunications and Information Policy Group (UH TIPG) to identify requirements, process design, functionality development, project management, and program evaluation and reporting of the CNMI HIE activities. The CHIE is also working collaboratively with the Hawaii-Pacific REC to provide outreach and communication to providers. The plan also identifies opportunities to leverage support from other grants to enable territory-wide EHR adoption. An example of this would be the CNMI Rural Network Grant, which will help with EHR licensing fees and expand the use of RPMS to private providers.



Meaningful Use

	<u>Landscape</u>	<u>Strategy</u>
<u>E-Prescribing</u>	<p>CHC and all clinics dispense some pharmaceuticals, and CHC operates an inpatient pharmacy.</p> <p>There are two private pharmacies: Brabu and PHI. PHI has 3 physical locations. Brabu uses McKesson Enterprise RX and PHI uses QS/1. Both are ready to receive orders via Surescripts for outpatient drugs.</p> <p>100% of private pharmacies are able to receive electronic prescriptions and refill requests (Surescripts & McKesson Enterprise RX Web based system and service).</p> <p>0% of providers are sending electronic prescribing through their EHR and none of the private pharmacies are receiving e-prescribed orders.</p>	<p>The CNMI is working with PHI to determine the best approach for pharmacy orders, as the RPMS and pharmacy systems will need to be able to interface with each other.</p>
<u>Structured Lab Results</u>	<p>0% of labs are able to delivery results electronically, receive orders electronically, or receive structured lab results.</p>	<p>There is only one laboratory on Saipan, DLS, which will provide an HL7 interface to RPMS.</p> <p>For CHC’s internal laboratory, the Department of Public Health will assist in providing the in-kind resources to ensure implementation. The RPMS module for labs will be implemented to provide structured lab results.</p>
<u>Patient Care Summary</u>	<p>Currently, there are no systematic clinical summary discharge statements or summaries provided for care coordination and/or patient engagement.</p> <p>There are seven private providers, all located on Saipan where there is the largest concentration of people. (FHP Take Care, Saipan Clinic, Marinas Medical Center (3 locations – Tanapag, Garapan, and soon to be at the CHC hospital), Medical Associates of the Pacific, Modern Solutions, and Marianas Eye Institute).</p> <p>0% of providers are able to share a summary record through their EHR with unaffiliated providers.</p>	<p>Through implementation of RPMS modules, CNMI is planning to share the use of RPMS with private providers who would like to use it. Once a patient registers in a clinic which uses RPMS, the clinical data will automatically be available.</p> <p>CNMI is exploring remote data views for providers that also practice with the hospital and trained in the use of RPMS. For the providers that do not have access to the RPMS, the CHIE will provide the information for clinical summaries.</p>



HIE Inventory

Standards		Quality Improvement	
Nationwide Health Information Network Exchange Specifications	X	Care Coordination	
Nationwide Health Information Network CONNECT	X	Quality Reporting	X
Nationwide Health Information Network DIRECT	X	Behavioral Health Information Exchange	X
Plans to exchange with federal agencies or other states via Nationwide Health Information specifications	X		
Public Health		Lab Strategy	
Electronic lab reporting of notifiable conditions		Translation services	
Syndromic surveillance		EHR interface	X
Immunization data to an immunization registry	X	Policy strategy	
Patient Engagement		Order Compendium	
Patient Access/PHR		Bi-Directional	
Blue Button		Alignment with CLIA	
Patient Outreach		E-Prescribing	
Privacy and Security		Medication History	X
Privacy and Security Framework based on FIPS	X	Incentive or grants to independents	
Individual choice (Opt In/Opt Out/hybrid)	Opt Out	Plan for controlled substance	
Authentication Services		Set goal for 100% participation	X
Audit Log		Controlled substance strategy	
Administrative Simplification		Care Summaries	
Electronic eligibility verification	X	Translation services	
Electronic claims transactions	X	CCD/CCR Repository	
Vendor		Directories	
Planning		Provider Directory	X
Core Services		Master Patient Index	X
Plan Model		Record Locator Services	
Identified model(s)	TBD	Health Plan Directory	
		Directory of licensed clinical laboratories	

Information for this profile was obtained from the approved Operational and Strategic Plan submitted to the National Coordinator for Health Information Technology as a condition of the Health Information Exchange Cooperative Agreement. The complete plan can be downloaded at: <http://statehieresources.org/>

