

Indian Health Service HEALTH INFORMATION TECHNOLOGY MODERNIZATION PROJECT

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IHS Vision

Vision definition – where we see ourselves in the distant future (5-20 years).

The IHS vision is healthy communities and quality health care systems through strong partnerships and culturally responsive practices.

IHS Strategic Goals and Objectives





Access

Goal 1: To ensure that comprehensive, culturally appropriate personal and public health services are available and accessible to American Indian and Alaska Native people.

Objectives:

- 1.1: Recruit, develop, and retain a dedicated, competent, and caring workforce.
- 1.2: Build, strengthen, and sustain collaborative relationships.
- 1.3: Increase access to quality health care services.

Quality

Goal 2: To promote excellence and quality through innovation of the Indian health system into an optimally performing organization.

Management and Operations

Goal 3: To strengthen IHS program management and operations.

Objectives:

- 2.1: Create quality improvement capability at all levels of the organization.
- 2.2: Provide care to better meet the health care needs of American Indian and Alaska Native communities.

Objectives:

- 3.1: Improve communication within the organization with Tribes, Urban Indian Organizations, and other stakeholders, and with the general public.
- 3.2: Secure and effectively manage the assets and resources.
- 3.3: Modernize information technology and information systems to support data driven decisions.

Updates

- **Program Management Office**: IHS has partnered with the MITRE Federally Funded Research and Development Center(FFRDC) to support ongoing governance, tribal stakeholder engagement and acquisition planning. MITRE is providing initial capacity and we will continue to hire and contract for additional support.
- Interoperability Pilot: Interoperability and legacy data will be hosted in the IHS Four Directions HUB currently being piloted for eHealth Exchange connectivity to the VA, DoD, and Office of the National Coordination for Health IT(ONC) certified commercial EHRs.
- The Federal Electronic Health Record Modernization (FEHRM) Program Office: The IHS, DoD, and VA team has establish ongoing line of communication with VA and DoD for a shared line of sight into project status, lessons learned, coordination of efforts and leverage established methods
- Listening Sessions: IHS hosted listening sessions on December 17th and January 14th regarding the Modernization Approach.

Current Funding

- FY2020 appropriations provided **\$8M** to begin the project management office in FY2020.
- The CARES Act of 2020 provided **\$65M** to accelerate the project based on the FY2021 request.
- FY2021 appropriations provided **\$34.5M** for the Health IT Modernization project.

The Health FFRDC—A Strategic Asset

Key Health FFRDC Attributes

- Created by government a federal entity
- Addresses problems of considerable complexity; focuses on *key challenges*
- Analyzes technical questions with a high degree of objectivity
- Provides *innovative and cost-effective solutions* to government problems
- Does not develop commercial products or compete
 with industry
- Can perform functions that are "close to inherently governmental"
- Operated by independent, private, not for profit allowing broad stakeholder engagement



The Health FFRDC Team for HIT Modernization

MITRE

- Acquisition & Program Management
- Systems Engineering
- FFRDC Operator

Grant Thornton

- Operational and Organizational Transformation
- Healthcare

Kauffman and Associates, Inc

- Communications
- Organizational Transformation
- Indian Country Reach

SafetyNet Operational Solutions

- Health Data and Information Technology
- Community & Tribal Health

Relevant Experience

- I/T/U Experience: Physicians, Area Directors, Data Interoperability (Meaningful Use)
- Health Policy & Information Technology (IT)
 - National Health Roadmap
 - COVID Coalition
- Electronic Health Record (EHR) Planning, Acquisition, Integration, and Implementation
 - Department of Defense (DoD), Department of Veteran Affairs (VA), US Coast Guard (USCG)
 - Kaiser Permanente, Alaska Native Tribes
 - Centricity, Cerner, NextGen
- Large, Complex IT Modernization & Acquisition
 Innovation
 - Navy 55-to-1 Transformation
 - Air Force Kessel Run



The Work of the Program Management Office (PMO)



Research Project Site Visits/Data Collected



Current State – User Perspective



Note: the diagram is scaled to reflect volume of comments for each theme

Current State – User Perspective

A Data Call was conducted and received responses from 1,381* HIT end users. Results showed that:

42%	60%
of users are either somewhat or very dissatisfied with how well RPMS helps them do their jobs	of users think RPMS needs significant improvements
60%	93%
of RPMS sites feel they are <i>far from having the</i> <i>necessary hardware</i> to	of all users agree that now is the time for IHS to deploy a new HIT system

*Of 1,381 responses, 1,037 respondents answered all questions within the Data Call

Data Call Takeaways

- Capitalize on the desire for change and readiness of end users
- Address technological infrastructure concerns as part of the modernization effort
- Focus modernization on improving end user experience in 3 areas:
 - 1. Interoperability
 - 2. Reporting
 - 3. Usability and data entry

complete their work

RPMS is More Than Just An EHR

- The IHS EHR is one spoke connected with multiple push and pull dependencies to many other RPMS applications
- The EHR provides a graphical user interface (GUI) to the vast underlying architecture of RPMS
- The EHR is part of a complex health information technology environment and every modification made requires an analysis of impacts to dependent applications



How should IHS approach Health IT Modernization?

The Analysis of Alternatives (AoA) identified and assessed four high-level options for IHS HIT modernization. Stabilizing RPMS (Option 1) is a foundational requirement but falls short of a modernized HIT solution. However, all these options, including Stabilization, require additional funding.

1	2	3	4
Stabilize RPMS	Renew RPMS	Selective Replacement	Full Replacement
 Maintain current technical architecture and deployment approach Enhance applications as needed and as resources allow, including new graphical user interfaces Improve training and support resources to optimize utilization 	 Apply state-of-the-art methods to "wrap & renew" legacy apps with APIs/service tier Allow creation of new functions and user interfaces using "modern" technologies and languages Migrate to consolidated databases and cloud hosting 	 Identify preferred "best of breed" COTS solutions for specific domains (e.g. Lab, Billing, etc.) Selectively integrate these using standards-based service tier technologies Retain and enhance preferred RPMS apps/functions using "wrap and renew" approach 	 Identify and implement preferred pre-integrated "best of suite" offerings Determine approach to retention/transfer of legacy data to new system Some features of RPMS unique to IHS may need to be retained or redeveloped

High-level Timeline

Modernization Planning Phase One 2020	Modernization Planning Phase Two 2021	Modernization Implementation 2022+
FY 2020	FY 2021	FY 2022+
RPMS Stabilization & Early Wins 2020-2022 Address immediate patient and user needs and standardize databases Address Data Governa Interoperability 2020-2022 Establish data sovereignty improve interoperability		Infrastructure Assessment & Build-out 2020-2022+ Assess current state and address gaps by engaging federal

and industry partners

Future State HIT Vision

IHS Vision: Healthy communities and quality healthcare systems through strong partnerships and culturally responsive practices.

IHS Office of Information Technology (OIT) Vision: To meet customer needs by providing excellent, reliable, interoperable health information services that protect privacy while connecting patients, providers, and payers, enabling improved patient outcomes and controlled costs in support of the IHS mission.

IHS HIT Modernization Project Vision: Support the Indian Health Service (IHS) mission to raise the physical, mental, social, and spiritual health of American Indians and Alaska Natives (AI/AN) to the highest level through modern, innovative, and practical health information technology.

Components of a Modernized I/T/U HIT System



Additional Information and Reference:

Tribal Consultation and Urban Confer regarding Modernization Approach on 12/10/2020:

The Director writes to Tribal Leaders and Urban Indian Organization Leaders to provide an update and invite input on next steps for health information technology modernization at the Indian Health Service. [PDF - 331 KB]

The Final Report and the Technology Roadmap were published on 11/2019:

The Principal Deputy Director writes to Tribal Leaders and Urban Indian Organization Leaders to share updates on recent developments associated with modernizing Agency Health Information Technology. [PDF - 226 KB]

Link to published artifacts from HHS/IHS HIT Modernization Research Project:

https://www.hhs.gov/cto/initiatives/public-health-innovation/indian-health-service-health-itmodernization/index.html



Contact Information



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IHS Health Information Technology Modernization (HITMod) Listserv:

- <u>Email Address: HITMod@listserv.ihs.gov</u>
- <u>Sign-Up URL: https://www.ihs.gov/listserv/topics/signup/?list_id=611</u>

