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## Project Focus Areas

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Site Visits</th>
<th>Literature Review</th>
<th>Technical Advisory Commission (TAC)</th>
<th>Capability Maturity Model</th>
<th>Community of Practice</th>
<th>Roadmap</th>
<th>Human Centered Design</th>
<th>Legacy Assessment</th>
<th>Data Call</th>
<th>HIMSS</th>
<th>Analysis of Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative Analysis: Personnel and Processes at I/T/U sites; end-user experience and impact of HIT systems on clinical care and performance</td>
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<td>Academic: Review publications about HIT modernization and use in resource-constrained areas; conduct interviews with Indian Health and non-Indian Health facilities that have transitioned to a new EHR for lessons learned; summarize results and distribute findings to project stakeholders</td>
<td>Review data and outputs generated across project workstreams to produce independent recommendations for IHS EHR modernization for the project team and relevant stakeholders identified by IHS and HHS leadership</td>
<td>Development of a Capability Maturity Model that identifies critical domains that support successful HIT and patient care in resource-constrained environments</td>
<td>Work with key IHS stakeholders to develop a Whitepaper that provides proposed direction on how to enhance HIT peer support and the training infrastructure throughout the I/T/U</td>
<td>Review the qualitative and quantitative data gathered from project workstreams to develop a strategic plan that defines goals and desired outcomes and the major steps or milestones needed to reach the goals</td>
<td>Use design thinking tactics and strategic discovery to identify the core concepts and functional needs of a modern HIT system, and develop use cases that can be tested in the field and used to evaluate solutions</td>
<td>Assess and evaluate current state of RPMS HIT in use at I/T/U sites; review RPMS architecture - M/Caché, FileMan, application interdependencies, multiple GUIs; summarize potential opportunities, implications, and requirements for modernization of RPMS</td>
<td>Quantitative Analysis: Questionnaire sent to hundreds of sites; results summarized and shared with project stakeholders</td>
<td>As part of a pilot, facilitate HIMSS Analytics Electronic Medical Record Adoption Model (EMRAM) and Outpatient EMRAM (O-EMRAM) assessments for specific IHS sites</td>
<td>Qualitative evaluation of four (4) broad approaches to IHS HIT modernization, scored against multiple criteria across several domains such as Project Management and IHS-specific Business Requirements.</td>
</tr>
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</table>
Capturing and incorporating the voice of all stakeholders is vital to the success of the HHS // IHS HIT Modernization Project. The I/T/U community has had / will have the opportunity to engage in the following ways:

- Engage in Community of Practice discussions
- Participate in HIMSS Activities
- Participate in Subject-specific Focus Sessions
- Participate in HCD Interviews
- Representation on Technical Advisory Commission
- Complete Data Call Questionnaire
- Participate in Site Visits

Stakeholder Engagement
Project Highlights

- Completed HIMSS Analytics Electronic Medical Record Adoption Model (EMRAM) and Outpatient Electronic Medical Record Adoption Model (O-EMRAM) Pilot Program with 7 IHS sites
- Completed the Legacy Assessment to understand RPMS architecture and potential path forward for RPMS modernization
- Completed the Data Call / Qualitative Survey – received feedback from
- Completed Site Visits and Listening Sessions – 24 sites visited across 11 IHS areas; 10+ listening sessions have been held with groups including attendees at the TSGAC Annual Conference, Tier 2 Area IT Support, and various IHS groups and Councils
- Completed and submitted the Analysis of Alternatives (AoA) to the HHS Secretary to support the FY2021 budget ask to support IHS HIT modernization efforts
- The Technical Advisory Commission is preparing to make it’s final recommendations to the project team on considerations for IHS HIT modernization
- Kicked-off the Roadmap workstream; the project team is closely collaborating with IHS and ONC
- Kicked-off the Human Centered Design workstream to generate User Stories and Journey Maps to understand interactions with HIT and support future modernization efforts
- Community of Practice Whitepaper is being composed to provide support on how to enhance HIT peer support and the training infrastructure throughout the I/T/U
Sites Visited

24 Sites in 11 Areas | Current as of 7.12.2019

- **ALASKA AREA**
  - Alaska Native Medical Center
  - Chief Andrew Isaac Health Center
  - Dena’ina Wellness Center
  - Maniilaq Health Center
  - Sally Harvey Memorial Center

- **BEMIDJI AREA**
  - Forest County Potawatomi
  - Grand Traverse Band of Ottawa & Chippewa Indians

- **BILLINGS AREA**
  - Missoula Urban Indian Health Center
  - Northern Cheyenne Service Unit

- **CALIFORNIA AREA**
  - Round Valley Indian Health Center

- **GREAT PLAINS AREA**
  - Pine Ridge Service Unit
  - Rapid City Service Unit

- **NAVAJO AREA**
  - Crownpoint Service Unit

- **NASHVILLE AREA**
  - Cherokee Indian Hospital Association
  - Kanwotiyi Regional Treatment Center
  - Unity Healing Center

- **OKLAHOMA CITY AREA**
  - Muscogee Creek Nation
  - White Eagle - Ponca Nation

- **PHOENIX AREA**
  - Phoenix Indian Medical Center
  - Whiteriver Service Unit

- **TUCSON AREA**
  - Pascua Yaqui Yoeme Health Center

- **ALBUQUERQUE AREA**
  - Albuquerque Indian Health Center
  - Jicarilla Service Unit
  - Zuni Comprehensive Health Center
These themes evolved from the insights collected from users at site visits and are used to categorize and track responses.

This list is not exhaustive and is always growing and evolving. Themes and sub-themes do not exist in a vacuum and frequently overlap.

<table>
<thead>
<tr>
<th>Support Structure</th>
<th>Interoperability</th>
<th>System Design</th>
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<tbody>
<tr>
<td>Top-Down Communication</td>
<td>Facility-to-Facility (outside system)</td>
<td>Unmet Functional Needs</td>
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<tr>
<td>Bottom-Up Communication</td>
<td>App-to-App (within system)</td>
<td>Templates</td>
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<tr>
<td>Tech Support</td>
<td>Interface with equipment</td>
<td>Reporting/Data Extraction</td>
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<tr>
<td>Data Ownership</td>
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<td>Log-in</td>
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<tr>
<th>Available Technology</th>
<th>Training</th>
<th>Spectrum of Care</th>
<th>Staffing</th>
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<tbody>
<tr>
<td>Internal Mobility (Wifi)</td>
<td>No available training</td>
<td>Unique to Tribal Health</td>
<td>Telemedicine</td>
</tr>
<tr>
<td>External Mobility (VPN)</td>
<td>Training available but not clear</td>
<td>Wellness</td>
<td>Patient Safety Issues</td>
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<tr>
<td>Equipment</td>
<td>Process</td>
<td>Expansion of Services</td>
<td></td>
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<tr>
<td>System Performance</td>
<td>Understanding Access</td>
<td>Trust</td>
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<td>UI/UX</td>
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<td>Alerts/Notifications</td>
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<td>Glitches or Lost Information</td>
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<td>Telemedicine</td>
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<td>Patient Access</td>
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**Overview of High-Level Site Visit Themes**

These themes evolved from the insights collected from users at site visits and are used to categorize and track responses. This list is not exhaustive and is always growing and evolving. Themes and sub-themes do not exist in a vacuum and frequently overlap.
The Technical Advisory Commission (TAC) will review data and outputs generated across project workstreams to produce independent recommendations for IHS EHR modernization for the project team and relevant stakeholders identified by IHS and HHS leadership. TAC membership includes representatives from the I/T/U (TSGAC, DSTAC, and NCUIH) and industry and academic thought leaders.

TAC Membership

- Brandy Cunningham – TSGAC Representative, Health Informatics Manager at Muscogee Nation Department of Health
- Richard Tiger Peone – DSTAC Representative, Spokane Tribal Councilman at Spokane Tribe of Indians
- Jerimy Billy – NCUIH Representative, Chief Executive Officer at United American Indian Involvement, Inc.
- Dr. Julia Adler-Milstein – Director, Center for Clinical Informatics and Improvement Research; Associate Professor in the School of Medicine at the University of California San Francisco
- Dr. Marty LaVenture – Public Health Informatics Advisor, Independent Adjunct Core Faculty, Health Informatics, University of Minnesota
- Dr. John Mattison – Chief Medical Information Officer and Assistant Medical Director at Kaiser Permanente
- Dr. Shafiq Rabb – Senior Vice President & Chief Information Officer at Rush System for Health and Rush University Medical Center
- Dr. Lauren Thompson – Director of the Department of Defense/Department of Veterans Affairs Interagency Program Office
The Analysis of Alternatives (AoA) evaluated four options for HIT modernization across the IHS enterprise:

- Option 1 – Stabilize RPMS
- Option 2 – Renew RPMS
- Option 3 – Selective Replacement of RPMS Components
- Option 4 – Full Replacement of RPMS

Each option was assessed along 4 categories / domains – Business Requirements, Program Management, Technical Considerations, and Modernization of the Environment.

Analysis and the resulting report were based on information learned from the work of the project team, including Site Visits, Stakeholder Interviews, Data Call, Legacy Assessment, Literature Review, and feedback from the TAC.

Note: the AoA is a comparison of approaches to modernization, not solutions.

The AoA was submitted to the HHS Office of the Secretary as a supporting artifact for the IHS FY2021 Budget Request.
Roadmap Workstream

• The Roadmap for IHS HIT Modernization will be designed to:
  • Identify and visualize what actions are needed to help support and achieve the outcome desired
  • Help delineate potential next steps for IHS
  • Develop and endorse a plan that describes the likely development/identification and implementation of the HIT Modernization Process over the next period of time

• Key inputs into the Roadmap include:
  • Expertise of industry thought leaders including Info-Tech and Gartner
  • Federal Subject Matter Experts
  • Findings from Site Visits, Data Call, Literature Review, and other project workstreams

• The Roadmap workstream requires close collaboration with IHS and ONC to understand organizational goals, Key Performance Indicators (KPI’s) and to ensure that the final Roadmap is suitable for use by IHS

The Roadmap is the final major deliverable of the project team
Summary & Expectations of Results

• The project team continues to actively work with the I/T/U community and will continue to engage stakeholder groups for initiative-centric feedback
• The project team is focused on both qualitative and quantitative analysis with the priority of aligning the communities’ needs with innovative solutions
• Final recommendation(s) and Roadmap(s) will be delivered directly to the HHS Office of CTO and shared with IHS Executive Management and stakeholder groups
• NIHB, DSTAC, TSGAC, and NCUIH have played a very helpful role in identifying and connecting the right tribal partners, which we value and hope for continued support
We Want to Hear From You!

Your feedback would help improve healthcare technology for American Indian and Alaskan Native communities

We are interviewing healthcare staff, tribal leaders and people who use healthcare facilities in American Indian and Alaskan Native communities to seek insight and perspective from your viewpoint to help government and congress understand our needs and challenges.

We Want to Hear From You!

Roles Sought

<table>
<thead>
<tr>
<th>Patients</th>
<th>Caregivers</th>
<th>Community Leaders</th>
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<tbody>
<tr>
<td>I/T/U Staff Roles</td>
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<tr>
<td>Locum tenens</td>
<td>Specialty Providers</td>
<td>Fitness trainer/coach</td>
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<tr>
<td>Traditional Healer</td>
<td>Cultural Liaison</td>
<td>Community Health Worker</td>
</tr>
<tr>
<td>Patient Registration (IHS-run)</td>
<td>Case Managers</td>
<td>Dentist</td>
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<tr>
<td></td>
<td></td>
<td>IHS Run: Billing, Quality and Referrals</td>
</tr>
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</table>

Maia Z. Laing, MBA
Office of the Chief Technology Officer | Immediate Office of the Secretary
U.S. Department of Health and Human Services

Susy Postal, DNP, RN-BC
Chief Health Informatics Officer
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