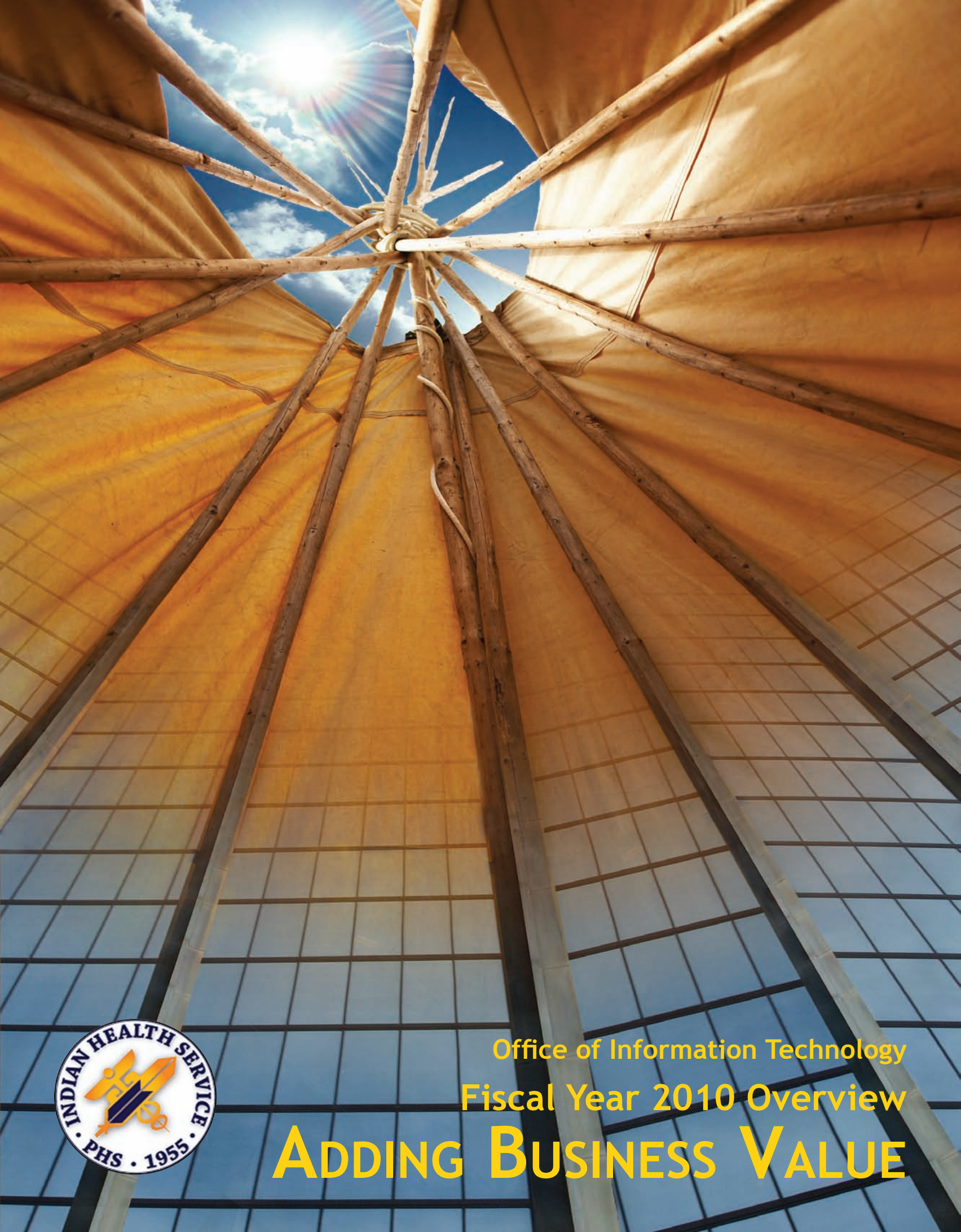


Office of Information Technology

Fiscal Year 2010 Overview

Adding Business Value

OIT Mission

Provide a highly reliable and efficient health information system to support the delivery of healthcare to the American Indian and Alaska Native People whom the Indian Health Service (IHS) serves.

Vision Statement

Meet customer needs by providing excellent, reliable, and 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 Agency Priorities

1. To renew and strengthen our partnership with Tribes
2. In the context of national health insurance reform, to bring reform to IHS
3. To improve the quality of and access to care
4. To make all of our work accountable, transparent, fair, and inclusive

With the intent of sharing information about Office of Information Technology (OIT) activities, accomplishments, and challenges, we are pleased to present this overview of Fiscal Year 2010. OIT continues to add value to the business of healthcare delivery to the Indian health system.

Everyone who uses and benefits from IHS information technology is an OIT stakeholder and a beneficiary of our continued success. This overview provides a broad spectrum of information about OIT with the intent of reaching all stakeholders.

Sections of this overview explain the current OIT environment, the projected future environment, as well as challenges that the OIT faces. The Accomplishments and Contributions section of the overview shows benefits to stakeholders as a result of OIT efforts. OIT activities provide business value to the healthcare delivered to IHS, Tribes, and Urban Programs through:

- Increased systems efficiency and capability
- Increased application performance and efficiencies
- Improved information security
- Improved communications and network capability

Message from the Chief Information Officer

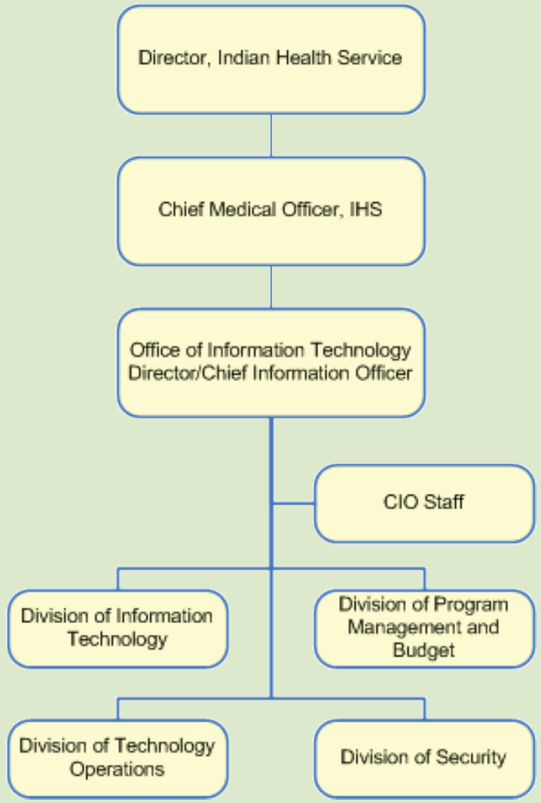
Working together, we continue to advance Information Technology within IHS to achieve many successes on behalf of the American Indian and Alaska Native People, the Agency, and the Department of Health and Human Services during fiscal year 2010.

OIT supports the Agency's overall mission by providing proven and cost effective technology for the Indian health system. We ensure that resources are properly used to support the technology needs of healthcare and administrative programs. The OIT made substantial progress during 2010. Specific accomplishments and future plans are highlighted in the following pages.

Your feedback will help us to improve this overview and better serve you, our customers. Thank you for your continuing support!

Theresa Cullen, M.D., M.S.
RADM, U.S. Public Health Service
Chief Information Officer, IHS
Director, Office of Information Technology

Our Environment



IT Investments are managed and supported by the Office of the Director (CIO), CIO Staff, and four supporting Divisions.

External and Internal Strategic Drivers and guiding legislation impact the direction of IHS IT.

External Drivers and Legislation

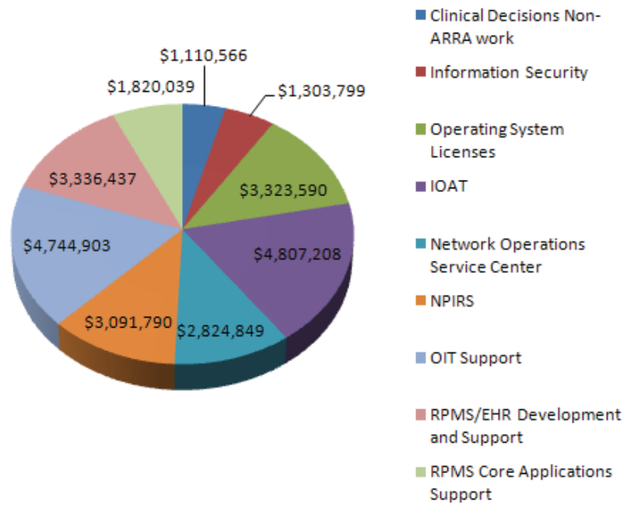
- Health and Human Services (HHS) Secretary's Priorities
- HHS IT Strategic Plan
- Office of Management and Budget Directives and Guidance
- The Clinger-Cohen Act of 1996
- 25 Point Implementation Plan to Reform Federal Information Technology Management
- National Institute of Standards and Technology (NIST)

IHS Drivers

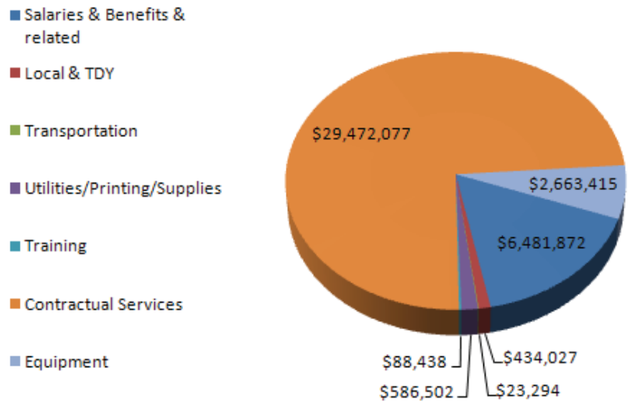
- Agency Priorities
- Health Needs of the American Indian and Alaska Native People
- Tribal Input and Consultation
- IHS Strategic Plan
- IHS Business and IT Needs
- Customer Satisfaction
- Cyber Security Plan

OIT Contracts Budget Allocation

IHS awards contracts for infrastructure and security support, Resource and Patient Management System (RPMS) and other development, OIT support, and data warehouse development and support.



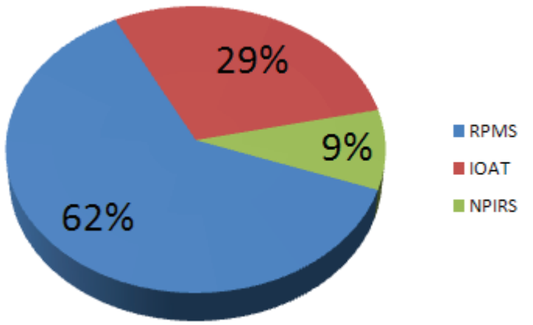
OIT Support Contracts



The vast majority of the budget was allocated to contracts, many of which supported critical infrastructure, security, and RPMS development. The next largest section of the budget is dedicated to salaries and benefits of Federal staff. Equipment was the third largest expense for FY2010.

IHS Investment Spending by Percentage

The IHS has three major investments: RPMS; Infrastructure, Office Automation, and Telecommunications; and the National Patient Information Reporting System. RPMS is the IHS Health Information System and consequently is the largest investment.



Who We Are

FY2012-2013 Information Systems Advisory Committee Priorities

- *Practice Management (Revenue Generation, Cost Avoidance, ICD-10)*
- *Interoperability and Health Information Exchange*
- *Electronic Health Record*
- *Infrastructure and Architecture*
- *Clinical Decision Support*
- *Meaningful Use*
- *Workforce Development*
- *Telemedicine Coordination*
- *Tribal Shares Calculation*
- *Data Quality and Accuracy*
- *IHS Master Patient Index*
- *Administrative Management Tools*
- *Bandwidth*
- *Security and Regulatory Compliance*
- *Innovation of Technical and Business Practices*
- *Patient Communication*
- *Environmental Health*

Information Systems Advisory Committee

The Information Systems Advisory Committee (ISAC) is chartered by the IHS to help guide the development of a co-owned Indian health information infrastructure and information system.

RPMS

The IHS Resource and Patient Management System (RPMS) has served for over 25 years as the health information system for all Federal and most Tribal and Urban facilities. It supports the entire process from patient registration through the billing cycle. RPMS:

- Includes a fully capable Electronic Health Record (EHR)
- Supports a broad range of clinical and business processes at IHS, Tribal, and Urban (I/T/U) healthcare facilities
- Evolves to meet customer requirements
- Supports clinical, public and population health, and administrative programs

IOAT

The Infrastructure, Office Automation, and Telecommunications (IOAT) investment is the essential backbone of the organization's IT structure and supports virtually every aspect of the Agency's data storage and exchange requirements. IOAT provides:

- Network services that connect all participating I/T/U facilities
- Authentication services management on the IHS network
- Web services (including Web applications)
- Help Desk and user assistance

NPIRS

The National Patient Information Reporting System (NPIRS) hosts the IHS National Data Warehouse (NDW). NDW is the national enterprise-level database that is custom-designed to meet the unique administrative and clinical needs of IHS management and Tribal health program customers. NPIRS:

- Provides a broad range of retrospective clinical and administrative information to assist managers and clinicians at all levels of the Indian health system
- Enables IHS management to furnish legislatively required reports to the Administration and Congress

Telehealth

Telehealth tools bring state-of-the-art technology to remote locations to reduce barriers between communities and healthcare providers. Telehealth activities range from direct clinical service to infrastructure development to business planning, and include:

- Providing multiple improvements in clinical service across Indian health through Telehealth specialty consultation (e.g. behavioral health, pediatrics, rheumatology, and others)
- Enabling improved emergency care and referral decisions for patients who experience trauma and other serious conditions
- Expanding capabilities for quality health care delivery and improved access to care, education, and training

Information Security

Information Security is designed to reduce the risks to IHS IT operations while ensuring the Agency's ability to do business and serve the American Indian and Alaska Native People. The IHS Information Security Program provides:

- Direction for the integration of information security across IHS
- Maintenance of an information security program to protect information collected or maintained by or on behalf of the IHS whether by the IHS or by a contractor or other organization
- Safeguards to protect the confidentiality, integrity, and availability of patient health and other critical information

CPIC

Capital Planning and Investment Control (CPIC) is a structured approach to managing IT investments. CPIC ensures that IT investments align with the IHS mission, strategic goals, and objectives; and support business needs while minimizing risks and maximizing returns throughout the investment's life cycle. CPIC:

- Improves business processes by making information widely available
- Reduces the cost of providing essential Government services
- Facilitates provider productivity through improved acquisition of technology

Enterprise Architecture

The Enterprise Architecture (EA) program ensures alignment of IT resources with IHS enterprise business needs to assist in the execution of the IHS core mission. EA is focused on:

- IHS Business needs and technology alignment
- Standardization, business processes, and return on investment
- Strategic planning and other key planning activities
- Collaboration and communications to increase IHS awareness of the IT role in meeting the business needs

Accomplishments and Contributions

Congratulations!

In recognition of the outstanding work performed throughout the OIT, the Armed Forces Communications and Electronics Association awarded its 2010 Outstanding Achievement Award in Health Information Technology to RADM Theresa Cullen, M.D., M.S., Director, OIT

The Electronic Health Record and Meaningful Use

The Health Information Technology for Economic and Clinical Health (HITECH) Act authorized the Centers for Medicare and Medicaid Services (CMS) to provide financial incentives for the "meaningful use" of an EHR.

To qualify for Stage 1 incentives, the EHR must be certified to standards set by the Office of the National Coordinator for Health Information Technology and the provider or hospital must use the EHR in specified ways. OIT developed an IHS Meaningful Use (MU) program to certify the RPMS EHR and to help providers and hospitals achieve MU.

MU-driven improvements in electronic access to personal health information, electronic prescribing, health information exchange, and measures of the quality of clinical care are aimed at improving patient care. Providers will benefit from increased use of Health Information Technology (HIT) to aid decision-making and speed access to patient records, regardless of location. Public Health agencies will benefit from increased surveillance activity and transmission of reports. Immunization registries will benefit from enhanced exchange of data. Providers receiving transfers of care will benefit from standardized health information.

The coordinated national effort of the IHS MU Program has spread awareness of MU benefits throughout Indian Country. Certification of the RPMS EHR paves the way for eligible providers and hospitals to earn Medicaid incentives in 2011 and beyond. Investment in secure health information exchange benefits all programs interested in exchanging health information. Development of clinical quality measures and reports for tracking MU progress are facilitated by a centralized IT program.

The American Recovery and Reinvestment Act

During fiscal year (FY) 2010 OIT was able to stay consistent with the estimated spending schedule and the overall goal of working to achieve MU at Tribal and Federal IHS facilities in 2011. OIT plans to have RPMS certified as both an inpatient and an ambulatory EHR in time for Federal and Tribal customers to qualify for MU by the third quarter of FY2011.

OIT obligated virtually 100 percent of its allotted American Recovery and Reinvestment Act (ARRA) funds by the end of FY2010 and expended 72 percent; 36 percent was spent on infrastructure, 34 percent on RPMS field enhancements, 21 percent on HIT field enhancements, and 2 percent on ARRA administrative duties. OIT sent 7% of ARRA funds directly to the tribes for non-RPMS interfaces. ARRA projects are designed to have a comprehensive, direct, and immediate impact on the Indian health system.

Most of the network and infrastructure equipment has been purchased and installed or is in the process of being installed, including upgrades to the network routers and domain controllers, expansion of the storage area network, and improvements to network security. OIT funded several software projects in FY2010, including an open source Personal Health Record (PHR), Patient Registration and Scheduling graphical user interface (GUI), MU and EHR Certification Support, and EHR deployment. These hardware and software projects will be essential to providers and facilities seeking to achieve MU.

FY2010 ARRA resources improved average uptime of the wide area network from 99.4 percent to 99.8 percent. OIT also measured its ARRA project performance by monitoring the percentage of computerized provider order entries that utilize the EHR; at the end of 2010, OIT had reached its goal of 66% and is on pace to see at least 75% of all orders being electronically entered by the end of FY2011.

ARRA funds enabled OIT to modernize and extend IHS's electronic HIT thereby improving the access, quality, safety, and overall health status of the American Indian and Alaska Native People.

Accomplishments and Contributions

Guiding Principles

- *Provide technology services and support that will allow the IHS to achieve its mission and strategic goals.*
- *Provide leadership, policy guidance, and strategic direction for the IT enterprise.*
- *Develop and maintain efficient and effective technology assets to support the technology needs of clinical and administrative programs.*
- *Provide technical direction for the reform of IHS business processes, delivering timely business solutions through IT.*
- *Provide a secure, interoperable health information system resulting in controlled costs and reduction of dangerous medical errors.*

Healthcare Delivery

RPMS development focused on the ability to share patient health information with external systems, modernization of user interfaces for several applications, and MU. HITECH allows healthcare providers and hospitals to recover much of the cost of the adoption of EHR systems if they successfully adopt and "meaningfully use" systems that meet stringent certification requirements.

Other development includes new or enhanced GUIs, such as those for behavioral health and well child care, with additional interfaces in the works for admission, discharge, transfer, and pharmacy, among others.

A fully capable, comprehensive EHR system provides immediate access to the patient's health information at the point of care. Safety checks and decision support tools ensure that medication orders are as safe as possible and that providers receive appropriate reminders of needed services. Patients at facilities using RPMS will soon have access to their own health information via a PHR that includes information that may be stored at multiple I/T/U facilities. Continued PHR development will allow our patients to become increasingly active participants in their own care.

TELEHEALTH activities benefit many care teams, patients, and communities within the Indian health system, and evolving models of service foster cooperation with other IHS and Tribal offices and programs. Moreover, collaboration with organizations outside Indian health advances Telehealth planning and services, including expanded cardiology service for the IHS Phoenix and Navajo Areas through tele-cardiology consultation and multiple improvements in clinical service through Telehealth specialty consultation (e.g. behavioral health, pediatrics, and rheumatology).

Regular consultation with I/T/U sites and program teams disseminates information about Telehealth capability and service planning, implementation, and evaluation. Emphasis is placed on the integration of Telehealth tools with Agency initiatives, such as Improving Patient Care, and regional specialty service programs (e.g. The Native American Cardiology Program). Telehealth also advises in matters of reimbursement policy (e.g. State Medicaid programs).

Telehealth continues an important role in expanded infrastructure development, videoconferencing, store-and-forward Telehealth, remote monitoring, and mHealth services along with data integration and interface work with EHR. Telehealth further expanded regional and national clinical services, such as the IHS Joslin Vision Network Tele-ophthalmology program and the Phoenix Indian Medical Center Tele-dermatology service.

Technical Support

IOAT activities in support of the IHS technical infrastructure are managed centrally by the Division of Information Technology Operations. The core network administration and authentication services are centrally administered while local services are provided by personnel in field locations. IOAT provided operational leadership and direction via published standards and the adoption of supported technology. These published standards of support are provided as a roadmap for Area and site decision makers.

The focus on consistent delivery of reliable services has made IOAT a steadfast component of IHS information technology services. IOAT provides reliable and efficient IT services to the IHS community. IHS transitioned e-mail services from an HHS enterprise solution to the IHS Central Email Service in 2010. This transition increased reliability, reduced costs around $800K annually, and provides the flexibility to enhance service capabilities that best serve the IHS mission.

IOAT continues to provide a safe environment for data storage and transmission.

Accomplishments and Contributions

Congratulations!

The IHS Acting Chief Enterprise Architect is now a Certified Enterprise Architect, following completion of a certification program administered by the Federal Enterprise Architect Certification Institute

Business Solutions

NPIRS provided guidance and testing of data exports from new sending sites, maintained and improved customer access to data, assured data integrity, and educated customers on the meaning of the data. Customers benefited from appropriate access to the national level databases stored and maintained by NPIRS, and were able to access the data directly through the General Data Mart to create reports for conditions of interest to a specific program; data was scrutinized at multiple levels of detail as required by the report being produced. A new General Data Mart web site is tailored to better meet these needs.

Customer requests for special analyses, reports and data extracts were approved and processed in a timely manner. NPIRS personnel also provided valuable advice and interpretation of data. NPIRS provided approved, secure access to national level IHS healthcare data to the benefit of customers seeking analyses, reports, and data to meet individual needs. Customers included the Center for Disease Control, the Department of Justice, the University of New Mexico, and the Johns Hopkins University School of Medicine.

INFORMATION SECURITY implemented several enterprise-wide security controls, including vulnerability scanning, antivirus and spam filtering, virtual private network, secure socket layer applications, intrusion prevention, Internet policy enforcement, and automated centralized patching. The IHS information security environment now has multiple controls in place, including System Security Awareness training and Rules of Behavior, Security Authorization program, incident response team, and access control tracking though the online Information Technology Access Control application.

Enterprise-wide security projects greatly improved the IHS security posture and helped to meet the requirements of the Continuous Monitoring phase of the NIST Security Authorization process and the MU security and privacy requirements. IHS has dramatically reduced the amount of high risk vulnerabilities throughout the enterprise.

The Division of Information Security has implemented security solutions for the use and benefit of all facilities (e.g., the Vulnerability Management, Penetration Testing, and Intrusion Detection programs benefit both IHS and Tribal facilities). OIT has implemented solutions for encrypting both data-in-motion and data-at-rest, ensuring that patient data is encrypted.

CPIC provided support to IHS Offices and Area staff in the development of Business Needs Statements and Business Cases, and orientation and training sessions on the CPIC, Enterprise Performance Life Cycle (EPLC), and IT Governance processes. This outreach helps to ensure that IT investments align with the IHS mission, strategic goals, and objectives, and support business needs while minimizing risks and maximizing returns. The CPIC process is an essential tool to meet budget and business needs.

The EPLC provides necessary checks and balances to ensure that vital IT projects are completed within cost and schedule. IT projects that are not performing as planned are discontinued.

Use of earned value in IT projects has increased the visibility of underperforming projects. The monthly reporting of earned value to the IT Dashboard provides for improved visibility of IT project status. Earned value facilitated the allocation of ARRA funding.

Multiple IT projects have followed the IT Governance process, which includes technical review by the OIT Technical Review Board and approval by the IHS Information Technology Investment Review Board. Projects that are approved through IT Governance are generally more successful. A number of enterprise initiatives are in place to enhance IT project success rate, including implementation of EPLC for all OIT projects, reporting to the IT Dashboard, and promotion of CPIC throughout IHS.

ENTERPRISE ARCHITECTURE continued developing program governance and infrastructure. The program is now a critical partner within the EPLC for review of all proposed and active IT projects. The EA program led the planning and development of the OIT Strategic Plan, and the ongoing development of a national IHS technical inventory and all related standards.

The development of the IHS technical inventory will be of tremendous value to the IT community and its business partners. It will provide a process whereby duplication of technology is minimized and the reuse of existing technology is maximized. The EA program has implemented an Annual Planning Cycle (APC) that will integrate all critical OIT planning requirements into a continuous, repeatable process. The APC will be of a direct benefit to the OIT customers as it facilitates enhanced resource planning and usage.

Challenges

Today's healthcare delivery environment presents IHS with many opportunities to be innovative and creative. As healthcare delivery requirements become more complex and demanding, the need for increased capability and sophistication in health information technology grows.

OIT's challenge is to meet the increasing demands for expanded and improved IT capability while remaining within allotted resources. This situation demands constant collaboration among the IHS and the Tribes to set priorities and agree on appropriate allocations of valuable resources.

RPMS will continue to face major challenges moving forward, with ongoing needs for successful implementation and meaningful use.

The rapid pace of HIT advances driven by regulatory changes and marketplace demands challenges RPMS in several key areas:

- Ever-growing clinical and population health requirements
- Increasing expectations to meet meaningful use in 2013
- Transition to ICD-10

Healthcare's focus on collecting and accessing health information efficiently and rapidly challenges RPMS to constantly innovate in sharing data in a secure and transparent manner.

IOAT is faced with increased demand for services, which means that additional capacity must be added to maintain a high level of performance. Advances in technology can help reduce challenges faced in delivering services to locations that are often geographically and digitally remote. IOAT challenges include:

- Adequate staffing: 112 IT personnel support over 21,000 users
- Operational control of local solutions
- Achieving standard solutions and harmonization through effort and communication

NPIRS has three main challenges: funding, staffing, and NDW equipment relocation. Adding data elements to the system will require changes to both the RPMS export and internal NPIRS processes and databases. Major changes required:

- Movement of the NDW hardware to a new location while maintaining a high level of operational performance
- Increased functionality, additional data elements, data types, sources of data, and improved interfaces to the data

NPIRS has developed detailed risk mitigation strategies and plans to overcome the obstacles faced.

TELEHEALTH is a set of tools that improve healthcare delivery; implementation requires a multi-faceted and interdisciplinary approach that relies on clinical, technical, and administrative expertise. Varied challenges surround the successful integration of Telehealth tools within expanding and changing service models. These include:

- Telehealth Service Network requiring adequate funding
- Additional resources to continue service expansion, infrastructure development, training, and support

Programs and divisions within Indian health must be educated on the changes that Telehealth tools will precipitate and the new opportunities that these tools will create. In collaboration with OIT, programs and division policies and procedures will be reviewed and updated to facilitate successful use of the tools.

INFORMATION SECURITY faces significant challenges, including:

- Defending against increasingly sophisticated cyber-attacks and preventing rogue system interconnections
- Meeting the security and privacy requirements for MU
- Mitigating high risks identified in the 3-Year Cyber Security Plan
- Securing wireless networks and gaining control over medical devices

Each of these challenges requires significant resources, including manpower, time, and funding.

CPIC faces several challenges including:

- Lack of maturity of IT project management practices throughout IHS
- Decentralized IT project budgets
- Decentralized nature of the organization

Each of these challenges hampers collaboration within the Agency. For example, the decentralized nature of IHS IT projects makes it difficult to achieve economies of scale. CPIC has incorporated methods to overcome such obstacles and to improve IT collaboration across I/T/U.

ENTERPRISE ARCHITECTURE is challenged to maintain compliance with the Federal Enterprise Architecture requirements. These challenges include:

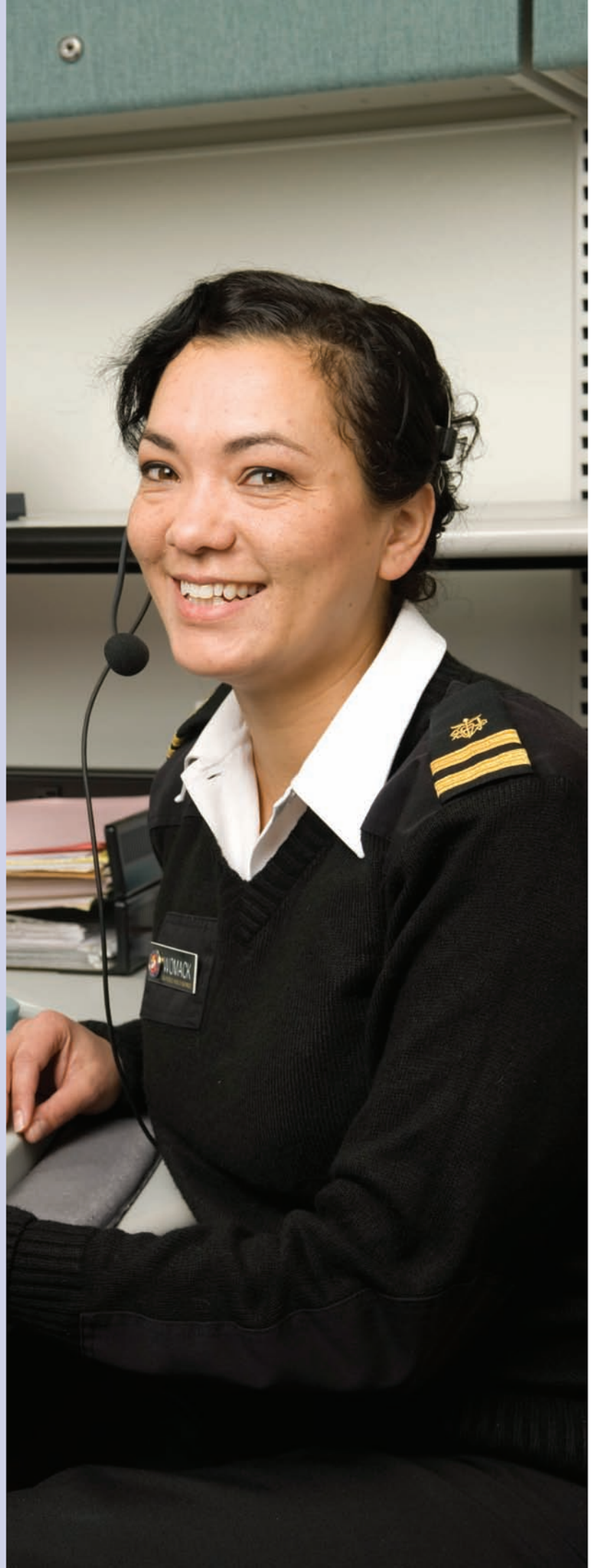
- Refresh of EA program, governance, and policy documentation to reflect changes in the EA Program
- Commit agency time and resources to the EA program development and to the EA Repository
- Introduce the IHS pro¬grams to the value that EA can provide

EA continues to collaborate with OIT stakeholders to meet its challenges throughout IHS.

Looking Ahead

Information Technology-based business solutons make a unique contribution to the success of healthcare delivery. OIT is committed to remain on the leading edge of technological innovation thereby improving the delivery of healthcare to Native American and Alaska Natives.

As we move towards the future, we shall work collaboratively with the IHS, Tribal, and Urban Programs, and with all of our constituents.



RPMS will continue to innovate in the arena of clinical, as well as public and population health IT. Activites focused on meeting these goals include:

- Remaining current with the requirements for MU
- Finishing the work required to implement ICD-10
- Completing the development, testing, and release of the work begun under ARRA, including a number of new GUI applications and substantial enhancements to the Practice Management suite of applications

Ultimately, the modernization of RPMS will include development of browser-enabled applications, facilitating the use of a "software-as-a-service" model and allowing remote hosting and support of RPMS if a site so chooses. RPMS strives to be in alignment with the priorities set forth by the ISAC.

IOAT plans to meet the demands of tomorrow with solutions implemented today. Through long-range planning and clear direction, the IOAT investment expects to move from the role of a simple provider delivering essential services to that of investment for foundational future activities.

NPIRS has a commitment to improve the quality, accuracy, availability, and delivery of NDW information. The objectives are to ensure faster, more comprehensive, and easier access to data, and to strengthen information security. NPIRS also plans for the integration of clinical and administrative data to improve healthcare operations and facilitate long term clinical accountability. This will be accomplished through increased collaboration with stakeholders and other agencies to pilot and establish an enterprise level multi-dimensional database environment for business intelligence.

TELEHEALTH is excited about what the future of the program can offer to Indian health in terms of great value and potential. One key area of focus for 2011-2012 will be strategic planning with clinical, administrative, business, technical, and other stakeholders on a plan to fund and implement Telehealth expansion across a broader segment of the Indian health system.

INFORMATION SECURITY is an ever-growing part of IT and patient privacy. Plans are in place to improve the enterprise information security posture to ensure the confidentiality, integrity, and availability of information and information resources. IHS Security will implement Agency-wide minimum security standards, consistent with Federal guidelines and best practices, and all standard hardware and software components and configurations will meet all Federal guidelines. IHS Security will ensure IT investments have documented plans for addressing security at each stage in the investment lifecycle, including incorporation of security into current IT capital plans.

CPIC will improve overall information capital planning to ensure that all IT spending is done efficiently and effectively. All IT development, modernization, and enhancement is consistent with the EPLC process and accurately identifies CPIC funding requirements. Budget requests will be responsive to CPIC priorities and planning will align with CPIC requirements. CPIC will also establish and maintain consistent Agency-wide policies and procedures to manage IT investments and projects.

ENTERPRISE ARCHITECTURE will create an IHS Blueprint to capture the business structure and the technical architecture in order to enhance healthcare operations. This will include the overall picture of IHS, gap analyses of business structure and technical architecture, and a transition strategy for attaining the future look of IHS. EA will establish, maintain, and share technical standards that will be integrated into the enterprise infrastructure and operations. An oversight process will be established to monitor and enforce enterprise standards compliance.

Annual Planning Cycle and GPRA

IHS recognizes the need to collaborate with others to continue improving its healthcare delivery capabilities.

Our long-standing relationships with the Tribes and other organizations, such as the Department of Veterans Affairs, allow for the leverage of resources and sharing of knowledge when it comes to clinical practice management and administrative reporting and interoperability.

Annual Planning Cycle

The OIT APC was developed to improve the planning and delivery of IT to its customers. Implementation of the APC will begin in FY2011 with production of the OIT Annual Plan.

The APC is a set of five repeatable planning events that are aimed at increasing the efficiency, effectiveness, and productivity of the OIT. As the planning cycle is executed, information is included from all previous planning activities to ensure that the planning process has up to date information and best practices and lessons learned from experience.

The goal of the annual process is to produce necessary planning documents for the OIT. The APC will create a constant flow of strategic and tactical information and activity based on customer input, and knowledge and insight gained from current and past work activity. It will provide consistency and continuity to the OIT planning process and ensure that all of the planning documents are interrelated, overlapping, and consistent.

Annual Planning Cycle Sequence Planning Activities and their respective Outputs are:

Sequence Planning	Activity Output:
Annual Report	Feedback into Strategic Plan
Customer Survey	Annual Report and Survey Results
Strategic Plan	Strategic Goals and Objectives
Tactical Work Plan	Strategic Milestones
Spend Plan	Funds Allocation

As the APC process is implemented, its work products will show the important relationships between planning, customer feedback, funding, operations, and performance.

Government Performance and Results Act

The Government Performance and Results Act (GPRA) requires each Federal Agency to demonstrate that it is using funds effectively to meet its mission. The law requires the Agency to have a five-year Strategic Plan in place and to submit Annual Performance Plans and Reports with its budget requests.

The IHS employs an enterprise-wide approach to Information Technology planning, investments, and standards. The Information Technology Strategic Plan provides a strong foundation for effective information resource and technology management in current and future years. IHS uses a collaborative strategic planning process that includes I/T/U technology stakeholders.

Achieving both the short- and long-term health goals in the face of the increasing health status disparities experienced by the American Indian and Alaska Native People represents a challenge for the IHS system.

The Clinical Reporting System (CRS) is the RPMS tool that the IHS uses to collect and report annual clinical performance results to the Department of Health and Human Services and to Congress. Each year, the OIT CRS Team updates the CRS software to implement whatever reporting changes may be required.

The 2010 clinical performance measures are compared to those from 2009 in the table below.

Measure Type	APC Closeout	2010 Results	2009 Results	Change
DIABETES MEASURES	Poor Glycemic Control	18%	18%	0%
	Ideal Glycemic Control	32%	31%	+1%
	Controlled Blood Pressure <130/80	38%	37%	+1%
	Low Density Lipoprotein Assessed	67%	65%	+2%
	Nephropathy Assessed	55%	50%	+5%
	Retinopathy Exam	53%	51%	+2%
DENTAL MEASURES	Dental Access	25%	25%	0%
	Sealants placed	275,459	257,067	+18,392
	Topical Fluoride-Patients	145,181	136,794	+8,387
IMMUNIZATIONS	Influenza 65+	62%	59%	+3%
	Pneumovax 65+	84%	82%	+2%
	Childhood Immunizations	79%	79%	0%
PREVENTION MEASURES	Pap Screening	59%	59%	0%
	Mammography Screening	48%	45%	+3%
	Colorectal Cancer Screening	37%	33%	+4%
	Tobacco Cessation	25%	24%	+1%
	Alcohol Screening (FAS Prevention)	55%	52%	+3%
	DV/IPV Screening	53%	48%	+5%
	Depression Screening	52%	44%	+8%
	CVD-Comprehensive Assessment	35%	32%	+3%
	Prenatal HIV Screening	78%	76%	+2%
	Childhood Weight Control	25%	25%	0%

In Closing...

For many people, the idea of a structured process represents change, which is often unwelcome; it is thought to be overly burdensome and even costly. In reality, successful project management offers important benefits to ensure goals are effectively accomplished for the benefit of the organization.

The IHS is facing some of the most profound changes in its history. It is simultaneously faced with the challenges of improving the health of the American Indian and Alaska Native People, providing for local control of resources to Tribes wishing to exercise their options of self-determination, and demonstrating performance results consistent with the IHS responsibilities to the American Indian and Alaska Native People whom we serve.

In the most fundamental ways, IT is transforming how we work:

- Tribal members are beginning to have direct access to their Personal Health Records.
- Telehealth is providing quality healthcare to remote locations previously underserved.
- Front-line workers access vast quantities of information near instantaneously.
- Decision support systems take employees through complex decision trees and logic.
- Customers may access remote information directly through integrated voice response systems, electronic bulletin boards, and the World Wide Web.
- IT enables fundamental change in IHS business processes to be made with a minimum of technical risk.

Not only are the IT needs of the customers changing, but the capability and breadth of information technologies are changing as well. Accordingly, the OIT will continue to develop and adapt information systems strategies and policies to meet these changing times; the current IHS information structure and network will continue to evolve.

The OIT plays a major support role in meeting the IHS health care mission by providing a broad spectrum of IT services. To optimize the value added by IT to the IHS, continuous communication and collaboration with the I/T/U customers about business needs is absolutely necessary. The OIT is responsible for fully supporting the business needs of the IHS through the application of appropriate technology. Strategic planning is a critical activity that prepares OIT to meet current business needs and to anticipate future IT needs.

The OIT strives to continually enhance its operational capabilities, improve the manner in which services are delivered, and upgrade the IHS IT infrastructure through judicious investment of available resources. Through collaboration with the Indian people, the IHS and Tribes are exploring innovative and creative ways to improve essential health programs and provide administrative support to Indian communities.

The OIT views each planning session, work activity, and accomplishment from the perspective of how will or how did the resulting action contribute value to the IHS and its ability to meet its mission. We are aware that an OIT accomplishment must be celebrated in terms of how it made a difference, not just as an achievement by the OIT.

This overview is one way of communicating how OIT's activities and accomplishments contribute added value to the IHS, Tribes, and Urban Programs.

Your comments and feedback are welcome!

Glossary of Terms

Access Control - The process of granting or denying specific requests for access to information, related information processing services, and specific physical facilities.

Antivirus Software – A program that monitors a computer or network to identify all major types of malware and prevent or contain malware incidents.

Business Case - A documented, structured proposal for business improvement that is prepared to facilitate a selection decision for a proposed investment.

Business Needs Statement - A statement identifying the business need for a proposed investment or project.

Capital Planning and Investment Control (CPIC) - A structured approach to managing IT investments.

Centralized Patching - A centralized system that allows an agency to remotely and automatically deploy critical security patch updates to computers on the network.

Continuous Monitoring - The process of maintaining a current security status for one or more information systems or for an entire suite of information systems.

Data-At-Rest - All data in computer storage.

Data-In-Motion - The transfer of data between all copies and versions of the original file.

Develop, Modify, Enhance (DME) – In the arena of IT activity, any project that involves development, modification, or enhancement to a process or a product.

Digital Divide – The gap between those with IT access and those with limited access or no access at all.

Earned Value Management (EVM) – An objective measurement of how much work has been accomplished on a project in relation to the project's schedule and budget.

Electronic Health Record (EHR) - A software product that uses a computer graphical user interface to display various clinical functions.

Encryption – The process of changing plain text into cipher text for the purpose of security or privacy.

Enterprise Performance Life Cycle (EPLC) – A framework to enhance IT governance through application of sound investment and project management principles and industry best practices.

Health Information Technology (HIT) - The use of computers and technology in a healthcare setting.

ICD-10 - Standard diagnostic classification for all general epidemiological, many health management purposes, and clinical use.

Information Systems Advisory Committee (ISAC) - develops priorities and provides guidance to the Director of the IHS.

Information Technology Investment Review Board (ITIRB) – The official IHS reviewing body for IT investments, including all major initiatives, funding, and expenditures.

Interoperability – The ability to share patient health information with external systems.

Intrusion Detection – The process of monitoring the events occurring in a computer system or network and analyzing them for signs of possible incidents.

Intrusion Prevention - Monitoring the events occurring in a system, analyzing for signs of possible incidents, and attempting to stop detected possible incidents.

IT Governance – An IHS process focused on IT investments and their performance and risk management.

IT Investment - An organizational initiative to employ or produce IT assets. It incurrs costs, realizes benefits, has a schedule of project activities and deadlines, and involves risks associated with engaging in the initiative.

Lines of Business - A set of one or more highly related products which service a particular customer transaction or business need.

Master Person Index - A computerized version of the traditional paper model used to store patient medical information.

Meaningful Use (MU) - Meaningful use of certified EHR technologies.

mHealth Services - The practice of medical and public health, supported by mobile devices.

Multi-dimensional Database - A type of database that is optimized for data warehouse and online analytical processing applications.

Penetration Testing – A test methodology in which assessors attempt to circumvent the security features of an information system.

Personal Health Record (PHR) - A functionality that allows patients to manage their health information in an on-line format.

Resource and Patient Management System (RPMS) - The IHS integrated solution for management of clinical, business practice, and administrative information in healthcare facilities.

Secure Socket Layer (SSL) – A protocol used for protecting private information during transmission over the Internet.

Steady-State Operations - An operational variable that does not change with time.

Store and Forward Telehealth - The ability to acquire, store, and forward digital images for healthcare reporting.

Technical Review Board (TRB) – A board responsible for evaluating and scoring the technical soundness of proposed projects and identifying opportunities to leverage and reuse existing projects.

Indian Health Service
Office of Information Technology
Rockville, Maryland