INDIAN HEALTH SERVICE
American Recovery and Reinvestment Act

Implementation Plan for Health Information Technology ($85 million)

Recovery Act funds will modernize and extend electronic health information technology in the Indian Health Service (IHS) thereby improving access, quality, safety and overall health status of American Indian/Alaska Native (AI/AN) patients and populations. Approximately 95% of Recovery Act funded activities will be carried out through commercial contracts and through Indian self-determination (P.L. 93-638) contracts with a Tribe or Tribal organization. IHS will use up to 5% of the funds for administrative costs, project management, and Recovery Act transparency reporting. Approximately 20% of the funds will be competitively awarded to acquire new hardware and network services to modernize security, communications, and infrastructure. In addition, acquisitions for software development and related services will be awarded via appropriate contract vehicles and through existing Tribal contracts as appropriate. Several existing competitively awarded General Services Administration (GSA) contracts will be accelerated to expedite Recovery Act funded activities.

a Funding

Recovery Act funding for major health information technology activities

Funding Table For Discretionary Programs, Health Information Technology:

(dollars in millions)

	Total Appropriated	Planned Obligations FY 2009	Planned Obligations FY 2010
Certified Electronic Health Record	**$61.7**	**$34.8**	**$26.9**
• Comprehensive Health Information	TBD	TBD	TBD
• Provider Order Entry	TBD	TBD	TBD
• Clinical Decision Support	TBD	TBD	TBD
• Quality and Performance Reporting	TBD	TBD	TBD
• Health Information Exchange	TBD	TBD	TBD
• Certification	TBD	TBD	TBD
• Deployment	TBD	TBD	TBD
Personal Health Record Adoption	**$2.5**	**$1.7**	**$0.8**
Telehealth and Network Infrastructure	**$16.7**	**$12.7**	**$4.0**
Administration	**$4.1**	**$1.1**	**3.0**
Total	**$85.0**	**$50.3**	**$34.7**

b Objectives

accomplishments expected from spending Recovery Act funds

- Invest in health information technology within IHS, directly benefiting the economy through the expenditure of funds in the private sector for goods and services.
- Contribute to the revitalization of the American economy through a significant expansion in the use of IT service companies and purchases of hardware from U.S. based information technology companies.
- Deploy enhanced electronic health information technology to expand services, improve patient care quality, decrease service disparities, and expand access by Indians to out-of-network services and reimbursements.
- Modernize and enhance network hardware and software capacity so that all Indian health care sites enhance the delivery of care and benefit from new health care information tools and security.

- Improve network infrastructure, including:
  - Network security enhancements to provide additional protection for patient data.
  - Network upgrades to improve speed, reliability, and redundancy of the network.
  - Video conferencing upgrades to support future telehealth initiatives.
- Improve and leverage the capabilities of the Resource and Patient Management System (RPMS), which is the electronic health information technology solution used by IHS, and the associated network infrastructure.
- Continue RPMS ambulatory certification and achieve RPMS patient certification by the non-profit U.S. certification authority.
- Expand use of the RPMS certified solutions in outpatient and inpatient settings; ensure meaningful use, once it has been defined.
- Improve the RPMS application, including:
  - Modernize the RPMS Electronic Health Record (EHR).
  - Acquire a personal health record capability for RPMS.
  - Improve the existing population health application.
  - Acquire a practice management system.
  - Develop a behavioral health EHR.

c

Activities

major categories of work and investment for Recovery Act funds

Health Information Technology Activities
• *Expand* ***Use of Certified Electronic Health Record*** o Comprehensive Health Information- Improving capabilities across the RPMS suite, including clinical care, support services, and practice management, including activities to address the ease of implementation, support, and usability of the system. o Provider Order Entry- Continued improvements to applications that support the communication of orders and consultations among members of the health care team both on site and remotely, including electronic prescribing. o Clinical Decision Support- Creating and acquiring clinical decision support tools that build additional intelligence into RPMS, supporting quality of care and patient safety. o Quality and Performance Reporting- Expanding existing quality and performance reporting capabilities, and ensuring that quality and performance data are transparent and accessible to consumers of IHS health care services. o Health Information Exchange- Activities to ensure that RPMS meets national interoperability standards, and that facilities using RPMS are positioned to participate in exchanges such as the Nationwide Health Information Network. o Certification- Ensuring that RPMS receives national certification as a qualified EHR for inpatient use and for behavioral health settings, and continued certification as an outpatient EHR solution. o Deployment- Intensive support for the deployment of RPMS EHR in all Federal and Tribal inpatient facilities, and optimization of implementation in outpatient settings as well. o Meaningful Use – Ensure that RPMS can be used by providers to demonstrate they meet the requirements of "meaningful use" of electronic health records, once defined. • ***Personal Health Record Adoption*** Development and collaborations to create truly consumer-oriented tools for management and portability of personal health information. • ***Telehealth and Network Infrastructure*** The telehealth and network infrastructure activity is comprised of a number of discrete projects. All of these projects are related to improvements to the IHS network or support of future telehealth initiatives. These projects include a complete upgrade of the network routers, upgrade of network domain controllers, improvement and expansion of the storage area network, network security improvements; installation of an emergency diesel generator for data center backup power, and upgrade and expansion of video conferencing infrastructure and the purchase of video conference devices for provision of telehealth services.

The scope of the activities and projects extend to all native populations across the United States and impact the lives of AI/AN people regardless of tribal affiliation or geographic dispersion.

d
Charact-eristics
categories of recipients to perform the work and methods of selection

Types of Recipients

- Private-sector firms for computer and networking hardware.
- Private-sector software development and project management firms.
- Tribal organizations offering needed technology products and services.

Types of Financial Awards

- Commercial contracts (estimated funding: $57 million)
- Tribal self-determination contracts (estimated funding: $0 million)
- GSA contracts (estimated funding: $28 million)

Methods of Selection

- New competition – Merit based competition among vendors offering products that meet the specified requirements. Approximately 20% ($17 million) will be competed for hardware and infrastructure modernization relating to security, networking, communications, and health information technology. Competitive contracts will also be awarded for new software development activities not covered under the scope of existing contracts.
- Supplements to standing contracts – Several competitively awarded GSA contract vehicles can accommodate rapid expansions for work in the near term, consistent with the goal of the Recovery Act to stimulate the economy in as timely a manner as possible.

e
Delivery Schedule
timing of major phases of work

Activities	*Contract Supple-ments*	*New Awards*	*Work Milestones*	*Delivery*
Certified Electronic Health Record - Comprehensive Health Information	April-June, 2009	October-December 2010	• Acquire practice management solution (October-December, 2010) • Release of EHR Web interface (July-September, 2011)	July-September, 2011
Certified Electronic Health Record -Provider Order Entry	April-June, 2009	October-December 2010	• Release pharmacy multiple drug file enhancement (January-March, 2010) • Deploy Consolidated Mail Outpatient Pharmacy (April-June, 2010)	January-March, 2011
Certified Electronic Health Record -Clinical Decision Support	April-June, 2009	None	• Release care management functionality (April-June, 2010) • Implement ER dashboard application (January-March, 2010)	July-September 2011
Certified Electronic Health Record -Quality & Performance Reporting	April-June, 2009	None	• Add 2 performance measures to the Clinical Reporting System's Selected Measures Report	July-September 2010
Certified Electronic Health Record Health Information Exchange	April-June, 2009	October-December 2010	• EMPI deploy master patient index (January-March, 2010) • Complete connection of Nationwide Health	July-September 2010

			Information Network (July-September, 2010)	
Certified Electronic Health Record - Certification	April-June, 2009	October-December 2010	• Complete DHR inpatient certification (July-September, 2010)	July-September 2010
Certified Electronic Health Record- Deployment	April-June, 2009	None	• Implement use of RPMS in at least eighty (80) Alaska Village Clinics (July-September, 2010)	July-September 2011
Personal Health Record Adoption	April-June, 2009	October-December 2010	• Complete requirements for initial PHR (October-December, 2010)	April-June, 2010
Telehealth and Network Infrastructure	April-June, 2009	July-September 2009	• Implementation plans complete (July-September, 2009) • Begin Implementation (July-September, 2009) • Complete (April-June, 2010)	April-June, 2010

Note: The above activities are a combination of multiple projects.

f Environmental Compliance

- All Recovery Act projects will be reviewed for environmental compliance. Projects will comply with National Environmental Policy Act and National Historic Preservation Act and other environmental regulations as applicable

g Measures

how benefits expected from spending Recovery Act funds will be measured

Outputs	*Frequency*	*Measures Available for Public Access*
Uptime of IHS data center network circuits	• Quarterly	• Recovery Act reports on Recovery.Gov • Supplemental information on HHS.gov/Recovery

Explanation: Data circuit uptime is one of the most common methods used for measuring network reliability and availability to users. Uptime is a measure of the time a circuit is operational and available to carry data communications across the network. This measurement is made as a percentage of time. For example, 99% uptime means the network is non-operational 1% of the time or roughly 87.4 hours per year. By contrast, a 99.9% uptime means the network is only non-operational 8.5 hours per year. IHS plans to reach the goal of 99.9% uptime by the 4th quarter of FY 2010, and will report progress toward achieving this goal on a quarterly basis.

Outcomes	*Frequency*	*Measures Available for Public Access*
Percentage of all orders that are electronically entered into the EHR	• Quarterly	• Recovery Act reports on Recovery.Gov • Supplemental information on HHS.gov/Recovery

Explanation of Measure: Electronic order entry (medication, laboratory, and radiology) is an indicator of how completely the EHR is being utilized at a health care facility. It is a proxy outcome measure for the impact of EHR deployment because it is well established that electronic order entry contributes to quality of care and patient safety. For example, electronic medication orders improve the quality of care by preventing medical errors such as incorrect dosage, medication allergy complications, and unintended drug interactions. An increase in electronic order entry is expected as a result of EHR enhancements and expanded deployment funded by the Recovery Act. IHS plans to reach the goal of 75% of all order that are entered electronically into the EHR by the 4th quarter of FY 2011, and will

report progress toward achieving this goal on a quarterly basis.

h

Monitoring/ Evaluation

steps to identify risks, high & low performance

- All recovery Act programs will be assessed for risk and to ensure that appropriate internal controls are in place throughout the entire funding cycle. These assessments will be done consistent with the statutory requirements of the Federal Manager's Financial Integrity Act and the Improper Payments Information Act, as well as OMB's circular A-123 "Management's Responsibility for Internal Control."
- IHS will incorporate implementation of Recovery Act into its FY 2009 Management Control Plan, which is the agency's management control system for ensuring compliance with the Federal Managers' Financial Integrity Act.
- Proposed activities over $100,000 are presented to the IT Investment Review Board (ITIRB) for approval. This approval is based on a published quantitative, criteria-based selection process to ensure alignment with strategic goals, technical feasibility, and that all benefits and risks have been appropriately considered.
- Each of the planned development and deployment projects under the ARRA umbrella will be documented and monitored according to the Enterprise Performance Life Cycle (EPLC) process.
- Contracting Officer Technical Representatives review recipient monthly progress reports to confirm the accuracy of all invoices.
- Project Managers use Earned Value Management (EVM) to monitor project progress and performance.
- Indian Health Service plans on using the inventory management systems to monitor equipment purchase. Our plan is to do bulk buys at the national level, with delivery and transfer of the equipment to the local facility. Equipment will be distributed to tribal, urban and direct operated programs. At the time of delivery to programs operated by IHS, equipment will be entered on the local inventory log. Tribal programs do not use the HHS inventory management system.

i

Transparency

plans to assure Recovery Act implementation is open and transparent to the public

- Indian Health Service Office of Information Technology (IHS-OIT) will be open and transparent in all of its contracting activities and regulations that involve spending of Recovery Act funding consistent with statutory and OMB guidance.
- All tribal and Federal contracts will include relevant reporting requirements for use of Recovery Act funds.
- Indian Health Service Office of Information Technology (IHS-OIT) will ensure that recipient reporting required by Section 1512 of the Recovery Act and OMB guidance is made available to the public on Recovery.gov by October 10, 2009. IHS-OIT will inform recipients of their reporting obligation through standard terms and conditions, grant announcements, contract solicitations, and other program guidance. IHS-OIT will provide technical assistance to grantees and contractors and fully utilize Project Officers to ensure compliance with reporting requirements.

j

Account-ability

steps to hold managers and recipients accountable for Recovery Act

To ensure that managers are held to high standards of accountability in achieving program goals under the Recovery Act, Indian Health Service Office of Information Technology (IHS-OIT) will build on and strengthen existing processes. Senior IHS-OIT officials will meet regularly with senior Department officials to ensure that projects are meeting their program goals, assessing and mitigating risks, ensuring transparency, and incorporating corrective actions. The personnel performance appraisal system will also incorporate Recovery Act program stewardship responsibilities for program and business function managers.

implementation

- Incorporate Recovery Act into IHS FY 2009 Management Control Plan.
- Health Information Technology projects will comply with:
  - Expedited reviews by IHS' Information Technology Investment Review Board.
  - Monthly reviews by IHS Capital Planning and Investment Control to detect project variances, including cost and schedule.
  - Centralized equipment purchase and distribution to enhance control, timeliness, and volume.
  - Request For Proposal (RFP) processes will include review of vendor capabilities and ramp-up time.
- Incorporate Recovery Act implementation in:
  - Director's Performance Plan and cascade to responsible Recovery Act managers.
- Track quantifiable outcomes and outputs for Recovery Act projects.
- Track Recovery Act funds in the IHS Unified Financial Management System.
- Track and report use of funds for administration.

k

Barriers to Effective Imple-mentation

potential legal, regulatory, processing capacity or other matters which could impede effective implementation

- Timely obligation of funding.
- The increase in OIT acquisition requests will result in an additional workload. OIT plans to mitigate this risk through the use of multiple avenues for acquisitions. This includes the use of GSA for some acquisitions and use of existing competitively bid contract vehicles such as the GSA Supply Schedule contract. In addition, OIT will fund the hiring of additional IHS contracting personnel.
- Filling federal vacancies.
- OIT will require additional staff to oversee and manage ARRA activities. OIT will minimize this barrier by hiring additional HR support.
- Requirement for specialized skill sets.
- The sudden increase in project activities will result in a need for additional qualified personnel. Some of the skill sets required are highly specialized and difficult to find. OIT plans to reduce this risk by using both the federal hiring process and contractors to fill vacancies.

l

Federal Infrastructure Requirements

steps toward sustainability, efficiency, and reduced environmental impacts

- IHS has implemented a standard life cycle replacement program for desktops and laptops to allow the use of the most energy efficient devices.
- IHS has included language in its contracting mechanisms to require the procurement of energy efficient computer equipment.
- IHS is a partner in the Federal Electronics Challenge (FEC). The FEC is managed by the Environmental Protection Agency and provides partners with resources and technical assistance for improving electronics management practices.
- Computers and monitors purchased by IHS meet the Electronic Product Environmental Assessment Tool (EPEAT) standards, where applicable.
  - EPEAT evaluates electronic products in relation to 51 total environmental criteria, 23 required criteria and 28 optional criteria.
- Energy Star features and Power management settings are implemented and required to be used on all commodity desktops, monitors and laptops.