

Current Events in the Office of Information Technology

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Agenda

- ISAC Priorities
- Matrix of Priorities
- OIT efforts in support of Priorities
- Budget
- Challenges

ISAC Priorities for 2012-2013

- Practice Management
- Interoperability
- EHR
- Infrastructure & Architecture
- Clinical Decision Support
- Meaningful Use
- Workforce Development
- Telemedicine Coordination
- Tribal Shares Calculation
- Data Quality & Accuracy
- Master Person Index
- Administrative Management Tools
- Bandwidth
- Security & Regulatory Compliance
- Innovation
- Patient Communication
- Environmental Health

IHS INFORMATION SYSTEMS ADVISORY COMMITTEE 2012-13 IT PRIORITIES

PRIORITY DESCRIPTION	2012 – 2013 RANKING	SUPPORTS IHS DIRECTOR'S PRIORITIES
PRACTICE MANAGEMENT (REVENUE GENERATION, COST AVOIDANCE, ICD-10)	1	2
INTEROPERABILITY / HEALTH INFORMATION EXCHANGE	2	3
ELECTRONIC HEALTH RECORD	3	3
INFRASTRUCTURE/ARCHITECTURE	4	2
CLINICAL DECISION SUPPORT	5	3
MEANINGFUL USE	6	3
WORKFORCE DEVELOPMENT	7	2
TELEMEDICINE COORDINATION	8	3
TRIBAL SHARES CALCULATION	9	1
DATA QUALITY/ACCURACY	10	3
IHS MASTER PATIENT INDEX (MPI)	11	2
ADMINISTRATIVE MANAGEMENT TOOLS	12	2
BANDWIDTH	13	3
SECURITY AND REGULATORY COMPLIANCE	14	3
INNOVATION OF TECHNICAL AND BUSINESS PRACTICES	15	4
PATIENT COMMUNICATION	16	3
ENVIRONMENTAL HEALTH	17	2

ISAC Priority 1 – Practice Management

- New Practice Management Contract – awarded September 13, 2010
 - Federal Team working with contractor to set priorities to include:
 - Meaningful Use and Certification
 - ICD-10 development considerations
 - HIPAA 5010
 - Billing, AR, and POS Patient Account Enhancements
 - CHS Enhancements

ISAC Priority 1 – Practice Mgmt

- RPMS practice management applications to maximize collections for federal tribal & urban users
 - Patient Registration – GUI released; next version in development
 - Admission, Discharge, Transfer – new GUI in development
 - Scheduling – GUI released; new version in development
 - 3rd Party Billing
 - Accounts Receivable
 - Pharmacy Point of Sale

ISAC Priority 2 – Health Information Exchange and Interoperability

- OIT has developed a health information exchange that will interface with the Nationwide Health Information Network Connect Gateway
- Currently OIT is completing the planning phase of rolling out the Health Information Exchange (HIE) Interoperability that includes the Master Patient Index
- OIT has completed testing of Continuity of Care Document \from RPMS

ISAC Priority 2 – Health Information Exchange and Interoperability

- Required for meaningful use
- Pilot production testing is being coordinated with the New Mexico
- Issues remain about privacy and sharing of data

ISAC Priority 3 – EHR

- IHS has been using elements of an electronic medical record (RPMS) for over 25 years
- Fully capable RPMS Electronic Health Record (EHR) released in 2005 & deployed nationwide
 - Ambulatory and inpatient EHR certification testing completed for meaningful use – official notice in the next few weeks

RPMS EHR – Current Deployment (3/2011)

- Outpatient (may include partial use) – 247
 - Federal - 105
 - Tribal - 157
 - Urban - 9
- Inpatient (full implementation) – 20
 - Federal - 16
 - Tribal - 4
- Alaska Village Clinics – 32

ISAC Priority 4 - Infrastructure/Architecture

- Network Access via Secure Network
- Upgraded RPMS database Deployment
 - Almost completed; required for meaningful use in order to exchange data
- RPMS Encryption to share data securely

ISAC Priority 4 - Infrastructure/Architecture

- Consolidation of OIT Data center with the BIA Data Center in Albuquerque
 - Data Center consolidation required by federal government initiative
 - Completed 4/3/11

ISAC Priority 5 – Clinical Decision Support

- RPMS EHR and iCare offer numerous types of Clinical Decision Support, including order checks, Clinical Reminders, and Best Practice Prompts
- OIT ensured that RPMS met the CDS requirements for Certification and Meaningful Use
- Innovative options for the next level of CDS are being explored with colleagues in DoD and VHA.

ISAC Priority 6 – Meaningful Use

- Area support for MU and integration of MU requirements with Improving Patient Care (IPC) initiative
- Collaboration of IHS' MU Team, EHR Deployment Team and NIHB Regional Extension Center to form Indian Country MU Initiative
- RPMS EHRs (inpatient and ambulatory) are officially certified as of April , 2011.

ISAC Priority 6 – Meaningful Use

- Non-RPMS sites will be dependent upon their respective vendors to secure certification for their commercial-off-the-shelf (COTS) products –list of certified EHR products - <http://onc-chpl.force.com/ehrcert>
- OIT has developed MU performance reports for determining achievement of MU measures for eligible providers and hospitals. The reports will be available May 1.
- OIT is developing reports to calculate patient volumes for both eligible providers and hospitals to determine eligibility for the Medicaid EHR Incentive Program. It is estimated the reports will be available in mid-June for RPMS sites.

ISAC Priority 7 – Workforce Development

- **FY2010 – 426 Events/ 6,128 Learners**
 - includes WebEx events
- **FY2011 (Oct – Feb) 124 Events/ 2,195 Learners**
 - includes WebEx events

ISAC Priority 7 – Workforce Development

- IT Workforce Development Project
 - IHS is working with American Indian Higher Education Consortium, Navajo Community College, and NIHB REC for to try to develop a workforce strategy.
- NIHB Regional Extension Center (NIHB REC)
 - Collaborating with NIHB REC on HIT workforce training requirements throughout Indian Country.

ISAC Priority 8 – Telemedicine Coordination

- Infrastructure
 - Expanded videoconferencing infrastructure via ARRA funding
 - Ongoing planning and resource review of needs for telecommunication infrastructure

ISAC Priority 8 – Telemedicine Coordination

- Collaborations and partnerships. Examples:
 - Continued work to integrate telehealth into IHS initiatives and activities (e.g. remote monitoring project with IPC initiative)
 - Work with other federal agencies and departments
 - Inclusion of telehealth in new MOU between IHS and Veterans Health Administration
 - Work with Office of Minority Health concerning disparities
 - Participation in NIH and HHS mHealth collaborations

ISAC Priority 9 – Tribal Share Calculation

- Covered in separate presentation

ISAC Priority 10 – Data Quality/Accuracy

- Data Standardization – common mapping, dialogs and coding (LOINC)
- Implementing Code Set Versioning, resolving all unlinked codes
- Need to transition to ICD 10 by 10/1/13

ISAC Priority 11 – Master Patient Index (MPI)

- Enables us to share medical records
- Interfaces to Nationwide Health Information Network and Personal Health Record have been developed through our Health Information Exchange (HIE) Interoperability project
- National deployment of MPI is scheduled to begin by end of April, 2011

ISAC Priority 12 – Administrative Management Tools

- Practice management tools
- Business Intelligence Tools
- Support of the Data Warehouse

ISAC Priority 13 - Bandwidth

- The Federal Communication Commission's "National Broadband Plan" identifies critical needs in the Indian Health Service network
- Plan recommends \$29 million per year to upgrade the I/T/U Network- unfunded
- Staff providing feedback on ongoing proposed FCC reforms to expand broadband connectivity for health care providers.
- Currently over 110 Local Exchange Carrier upgrade requests being tracked by our Network Engineer

ISAC Priority 14 – Security and Regulatory Compliance

- The Security Authorization process (formerly C&A) is placing increased emphasis on continuous monitoring.
- Risk Assessment template being developed that will also meet MU requirements for IHS/Tribal/Urban facilities
- Continuous monitoring “Risk Analysis” simplified and leverages HHS/IHS provided tools i.e. SecureFusion

Risk Automation Suite Overview

Symantec Risk Automation Tool

- Risk Automation is being used to scan the IHS network for security vulnerabilities (e.g., out-of-date patching)
- Reports are issued monthly to Area Directors, ISSOs, and ISCs
- Vulnerability management is a component of the risk assessment required by MU

ISAC Priority 15 – Innovation of Technical and Business Practices

- Privacy and Security
- Telemedicine
- Practice Management
- Cloud Computing and Virtualization
- Extensible Data Warehousing
- Mobile Health/ Social Media
- Geographic Information Systems (GIS)
- Population Health
 - Early disease surveillance and notification
- Clinical Decision Support

ISAC Priority 16 – Patient Communication

- Patient Education
- Health Communications Tools
- Self-Management Support
- Access to Health Information
 - Patient Wellness Handout
 - Personal Health Record

Patient Education

- Adding “readiness to learn” to patient education code string
- New patient education code updating process developed
- Revising the IHS patient ed websites
- Updating education related Health Factors
- Developing and updating patient education handout database to align with patient education codes

peer/social pressure, stress, environments that are conducive to use of tobacco (bars, casinos, rodeos), availability of cigarettes.

2. Discuss methods (as appropriate to this patient) to avoid ever using tobacco.

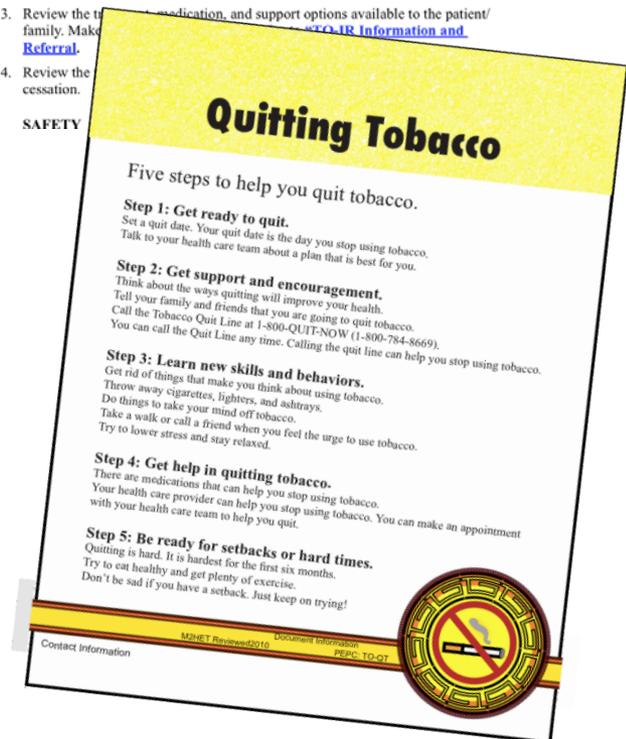
TO-QT QUIT

OUTCOME: The patient/family will understand that tobacco cessation will improve quality of life, that cessation will benefit health, and how participation in a support program may prevent relapse.

STANDARDS:

1. Advise the patient to quit.
2. Discuss that readiness and personal motivation are key components to quitting.
3. Review the tobacco cessation medication, and support options available to the patient/family. Make a referral to the [QUIT-IR Information and Referral](#).
4. Review the patient's readiness for tobacco cessation.

TO-S SAFETY



Health Communications

- New website
- Resources on health literacy and health communications information

U.S. Department of Health and Human Services www.hhs.gov

 **Indian Health Service**
The Federal Health Program for American Indians and Alaska Natives

A - Z Index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Search 

[IHS Home](#) [Support \(Non-Medical\) Programs](#)

Healthcare COMMUNICATIONS

- ◆ Home
- ◆ Internet Access
- ◆ Health Literacy
- ◆ Patient Education Materials
 - ◆ Patient Handouts
- ◆ Patient-Provider Communication Toolkit

Questions or Comments. Please contact the [Content Manager](#).



>Welcome to Healthcare Communications!

IHS divisions, in accordance with their individual missions, will develop, implement, and evaluate programs and provide resources to improve health communications.

IHS agency responsibilities include ensuring that health professionals can obtain and provide the public with accurate and appropriate health information. Healthcare Communications is one of the focus areas identified in [Healthy People 2010](#) ^{HP} (HP 2010). The goals of HP 2010 are to increase quality and years of healthy life and to eliminate health disparities among different segments of the population. Health communication is a focus area of HP 2010. The mission of the Indian Health Service is to raise the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level.

Culture and Linguistic Competency

Culture affects how people communicate, understand, and respond to health information. Cultural and linguistic competency of health professionals contributes to health literacy. Cultural competence is the ability of health organizations and practitioners to recognize the cultural beliefs, values, attitudes, traditions, language preferences, and health practices of American Indian/Alaska Natives and to apply that knowledge to produce positive health outcomes. Competency includes communicating in a manner that is linguistically and culturally appropriate. Healthcare professionals have their own culture and language. Many adopt the "culture of medicine" and the language of their specialty as a result of their training and work environment. This can affect how health professionals communicate with the public.

Self-Management Support (SMS)

- Providing assistance to the IPC program on documenting SMS
- Developing a RPMS and EHR component to facilitate patient goals
 - Assistance provided by the Agency for Healthcare Research and Quality (AHRQ)

The screenshot displays a software interface for managing patient goals. The main window is titled "Patient Goals" and includes the following elements:

- Goal Setting:** Radio buttons for "Goal Set" (selected) and "Goal Not Set".
- Goal:** A text field containing "Quit smoking cigarettes" and a "Goal #:" field with the value "3".
- Type of Goal:** A text field containing "Tobacco".
- Motivation:** A text field with a checkbox.
- Goal Start Date:** A date field showing "02/14/2008".
- Buttons:** "Add Step", "Add Education", and "Add Health Fa".
- Goal Complete:** Radio buttons for "Go" (selected) and another option.
- Step Details (pop-up window):**
 - Step:** "Talk to doctor about getting an Rx for Zyban"
 - Step Start Date:** "01/18/2008"
 - Step Follow-up Date:** "02/14/2008"
 - Step Complete:** Radio buttons for "Met" (selected), "Changed", and "Maintained".
 - Buttons:** "Save" and "Cancel".

Patient Wellness Handout

- Version 2 released
 - Many new fields added
 - Ability to select which components display
 - New reporting capabilities
 - Health summary display

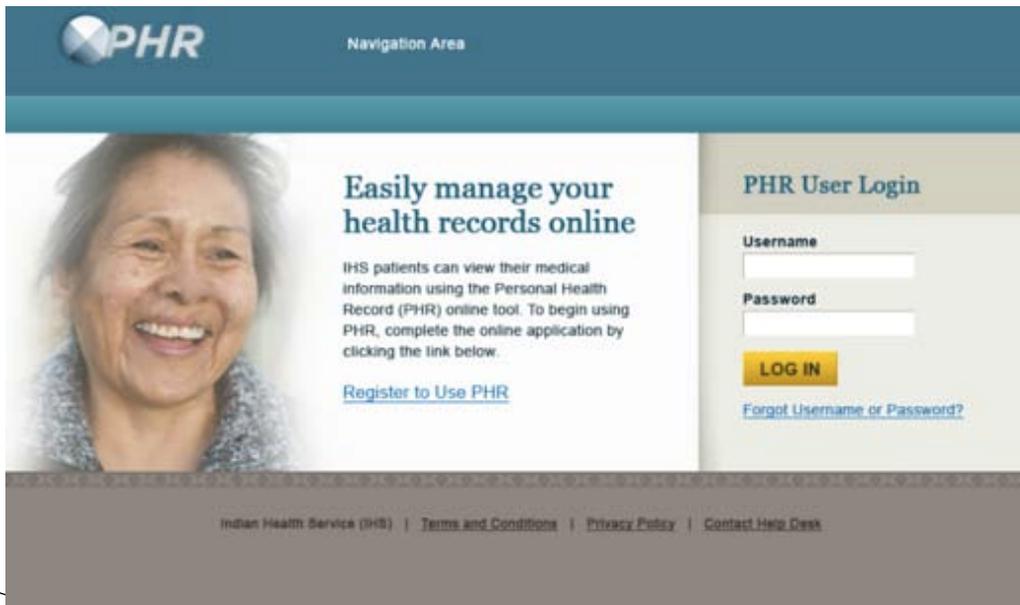
HEIGHT/WEIGHT/BMI - Weight and Body Mass Index are good measures of your health. Determining a healthy weight and Body Mass Index also depends on how tall you are. You are 5 feet and 1 inches tall. Your last weight was 214 pounds on Aug 03, 2010. You should have your weight rechecked at your next visit.

Your Body Mass Index on Aug 03, 2010 was 40.4. You are above a healthy weight. Ask your health care provider about a weight that is good for you.

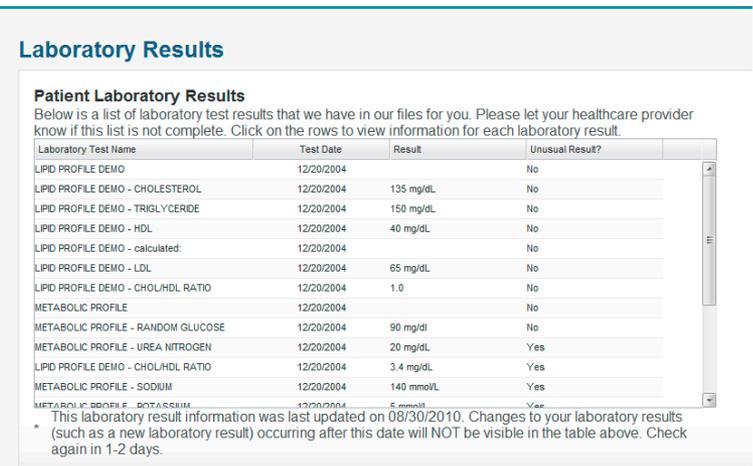
MEDICATIONS - This is a list of medications and other items you are taking including non-prescription medications, herbal, dietary, and traditional supplements. Please let us know if this list is not complete. If you have other medications at home or are not sure if you should be taking them, call your health care provider to be safe. 1. ALBUTEROL MDI (HFA) 6.7GM Rx#: 2856795 Refills left: 5 Directions: INHALE 2 PUFFS BY MOUTH EVERY 4 HOURS IF NEEDED FOR BREATHING; **SHAKE WELL BEFORE USING**

Personal Health Record (PHR)

- Integrates with Master Patient Index (MPI)
- Aligns with MU requirements to display patient medications, recent lab results, allergies, and problem list
- Requires in person authentication to create an account



The image shows the PHR user interface. At the top left is the PHR logo. Below it is a navigation area. On the left, there is a photo of a smiling woman. To the right of the photo, the text reads: "Easily manage your health records online". Below this, it says: "IHS patients can view their medical information using the Personal Health Record (PHR) online tool. To begin using PHR, complete the online application by clicking the link below." A blue link "Register to Use PHR" is provided. On the right side, there is a "PHR User Login" section with fields for "Username" and "Password", a yellow "LOG IN" button, and a link "Forgot Username or Password?". At the bottom, there is a footer with the text: "Indian Health Service (IHS) | Terms and Conditions | Privacy Policy | Contact Help Desk".



Laboratory Results

Patient Laboratory Results
Below is a list of laboratory test results that we have in our files for you. Please let your healthcare provider know if this list is not complete. Click on the rows to view information for each laboratory result.

Laboratory Test Name	Test Date	Result	Unusual Result?
LIPID PROFILE DEMO	12/20/2004		No
LIPID PROFILE DEMO - CHOLESTEROL	12/20/2004	135 mg/dL	No
LIPID PROFILE DEMO - TRIGLYCERIDE	12/20/2004	150 mg/dL	No
LIPID PROFILE DEMO - HDL	12/20/2004	40 mg/dL	No
LIPID PROFILE DEMO - calculated:	12/20/2004		No
LIPID PROFILE DEMO - LDL	12/20/2004	65 mg/dL	No
LIPID PROFILE DEMO - CHOL/HDL RATIO	12/20/2004	1.0	No
METABOLIC PROFILE	12/20/2004		No
METABOLIC PROFILE - RANDOM GLUCOSE	12/20/2004	90 mg/dl	No
METABOLIC PROFILE - UREA NITROGEN	12/20/2004	20 mg/dL	Yes
LIPID PROFILE DEMO - CHOL/HDL RATIO	12/20/2004	3.4 mg/dL	Yes
METABOLIC PROFILE - SODIUM	12/20/2004	140 mmol/L	Yes

* This laboratory result information was last updated on 08/30/2010. Changes to your laboratory results (such as a new laboratory result) occurring after this date will NOT be visible in the table above. Check again in 1-2 days.

Budget

- Continuing resolution based on FY 10 appropriation up till now
- Challenges to meet existing commitments
- Crosswalk of IT investments to performance investments

Three Investments

- Resource and Patient Management System (RPMS)
- National Patient and Information Reporting System (NPIRS)
- Infrastructure, Office Automation, and Telecommunications (IOAT)

Non-ARRA Spend

		Fiscal Year 2009	Fiscal Year 2010
RPMS	60%	\$21,194,380.79	\$29,077,003.22
IOAT	30%	\$10,597,190.39	\$14,538,501.61
NPIRS	10%	\$3,532,396.80	\$4,846,167.20
Total		\$35,323,967.98	\$48,461,672.03

RPMS

- RPMS modules are needed to support Meaningful Use
 - Core – Lab, Clinical Decision Support, EHR, Pharmacy, etc.
 - Interoperability
- Other modules include: Practice Management and Vista Imaging
- Development
- Training
- End User Support
- Uncertainty about what MU will require in 2013/2015

NPIRS

- Maintenance and Management
 - Workload and User Population Statistical Information
 - Detailed Formatting
 - Export Tracking Reports
 - Database Management
 - Historical Data Archives
 - Technical Assistance
 - Data Integrity
 - Security and Disaster Recovery

NPIRS

- National Application Processing
 - Data for Accreditation Purposes, GPRA, ORYX
 - Web based / Data Exchange with CMS/SSA
- Workload Support Kiosk Applications
 - Additional Special Report Development
 - Additional Analytical Tools (to be established)
 - Business Objects Web Intelligence
 - Web-based Dashboard Design
 - Business Objects Explorer
- Additional NDW Data Marts
 - The cost for design and production of a custom Data Mart is not covered by shares

IOAT

- Components of IOAT
 - Local Area Network (LAN)
 - Wide Area Network (WAN)
 - E-mail
 - Network Operations and Security Center (NOSC)
 - Information Security
 - Help Desk

Challenges

- **ARRA dollars enabled OIT to meet many of our previously identified priorities. However, additional challenges remain, including**
 - **Earning Meaningful Use - 2013 and beyond**
 - Interoperability
 - Sharing data
 - **Transition to ICD-10/ additional terminology needs**
 - ICD-10 is a diagnostic coding system implemented by the World Health Organization (WHO) in 1993 to replace ICD-9, which was developed by WHO in the 1970s.
 - IHS is required by the Centers for Medicare and Medicaid Services (CMS) to implement ICD-10 no later than **Oct. 1, 2013**.

Challenges

Access to Broadband Technology

- Federal Communications Commission (FCC) Broadband Plan
 - Released in March
 - FCC Commissioner specifically targeted the I/T/U network
 - Recommended \$29 million annual initial investment into the I/T/U health network
 - Ongoing work with the FCC Commissioner

Ensuring IT Security

- IHS IT Security Program developed and implemented a 3-year plan to meet increasingly sophisticated attacks
- Encryption of data at-rest and in-motion
- Protection of personally identifiable information
- IHS and Tribes must work together to continue to document Tribal interconnections using the Interconnect Security Agreement as quickly as possible.

For More Information on HIT Initiatives

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FY 2010 CROSSWALK TO BUDGET ACTIVITIES	Request
List Of Major Investments	
NIPRS	\$8.709
RPMS	\$109.496
IOAT	\$72.217
Total Major Investments	\$190.422
Total Non-Major Investments	
Exhibit 53 Total	\$190.422
CPIC	\$0.380
Enterprise Architecture	\$0.494
Security	\$5.200
UFMS	11.423
IT Fund	0.893
Total Non-Major Investments	18.390
Total IT Spending	208.812
NOTE: Performance budget totaled \$130,757,000. ARRA dollars in FY2010 were \$74,015,000 for a total of \$204,772,000.	

FY 2011 CROSSWALK TO BUDGET ACTIVITIES	Request
List Of Major Investments	
NPIRS	\$8.602
RPMS	\$93.567
IOAT	\$55.307
Total Major Investments	\$157.476
Exhibit 53 Total	\$157.476
UFMS	11.423
IT Fund	\$0.893
Enterprise Architecture	\$0.545
CPIC	\$0.440
Security	\$7.092
Total Non-Major Investments	\$20.393
Total IT Spending	\$177.869
<p data-bbox="382 1001 1161 1308">NOTE: Performance budget request totaled \$130,757,000 (continuing resolution from FY2010) - this crosswalk shows the additional FTE in IOAT from the data calls were not included in the performance budget.</p>	