# Exhibit 300 (BY2008)

	PART ONE
	OVERVIEW
1. Date of Submission:	2007-02-05
2. Agency:	009
3. Bureau:	17
4. Investment Name:	IHS Resource and Patient Management System (RPMS) - Maintenance & Enhancements
5. UPI:	009-17-01-06-01-1010-00
6. What kind of investment will	this be in FY2008?
Mixed Life Cycle	
7. What was the first budget year	ar this investment was submitted to OMB?
FY2001 or earlier	

Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap.

RPMS is a comprehensive electronic healthcare information system intended to improve the health status of American Indians/Alaskan Natives (AI/AN), the primary mission of the Indian Health Service, RPMS supports clinical and administrative services across the IHS network's 12 regional areas, including over 591 clinics and 48 hospitals. RPMS is a client-server system consisting of more than 60 clinical and practice management applications. Data is recorded and entered at each of the various service points and is available to all of its software applications. This ensures that any of the multidisciplinary providers who see a patient have quick and easy access to all pertinent information, including laboratory results, medications prescribed and other parts of the patient's medical history. Specific case management applications are designed to address the inordinate burden of certain diseases that are prevalent within AI/AN communities, as well as population health tracking. The IHS RPMS system is in the mixed life cycle phase of the capital investment lifecycle. To address performance gaps, IHS is implementing a graphical user interface (RPMS Electronic Health Record - EHR). EHR was developed in response to federal initiatives and local requests for improved clinician access to RPMS data. Recent requirements for improved dental case management have prompted the addition of development work on the Electronic Dental Record. Upgraded security measures, such as security event logging and monitoring and updating and testing contingency plans are planned in response to identified gaps. Additional GPRA measures are being added to the CRS tracking system in order to more accurately measure improvement in the health of the patient population. RPMS captures data that allows management to strategically distribute workforce while managing to operating budgets, supporting the Human Capital PMA initiative. RPMS supports the PMA E-gov strategy through electronic sharing of information with states, sharing of information internally among medical staff, and automating processes to reduce costs. RPMS directly supports the HHS goal to improve the quality of health care services by providing medical staff with up-to-date and accurate patient information. RPMS has recently been chosen by NASA as their electronic health record; West Virginia Primary Health Network clinics are also deploying a variant of RPMS to meet their health information technology needs.

9. Did the Agency's Executive/Investment Committee approve this request?

yes

9.a. If "yes," what was the date of this approval?

2006-06-23

10. Did the Project Manager review this Exhibit?

yes

12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project.

no

12.a. Will this investment include electronic assets (including computers)?

yes

12.b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)

no

13. Does this investment support one of the PMA initiatives?

yes

If yes, select the initiatives that apply:

**Expanded E-Government** 

**Human Capital** 

13.a. Briefly describe how this asset directly supports the identified initiative(s)?

Human Cap: RPMS automates the processing of patient records, saving over \$50.00 per chart review and allows managers to strategically redistribute the workforce through accurate forecasting. Elec Gov't: Electronic Health Record is expected to reduce medical errors through electronic ordering of medications and diagnostic tests, improve quality of care through automated clinical decision support, improve access to critical clinical information at remote facilities, and improve data quality.

14. Does this investment support a program assessed using OMB's Program Assessment Rating Tool (PART)?

ves

14.a. If yes, does this investment address a weakness found during the PART review?

yes

14.b. If yes, what is the name of the PART program assessed by OMB's Program Assessment Rating Tool?

2005: IHS - Resource and Patient Management System

14.c. If yes, what PART rating did it receive?

Effective

15. Is this investment for information technology (See section 53 for definition)?

yes

16. What is the level of the IT Project (per CIO Council's PM Guidance)?

Level 3

- 17. What project management qualifications does the Project Manager have? (per CIO Council's PM Guidance)
- (1) Project manager has been validated as qualified for this investment
- 18. Is this investment identified as high risk on the Q4 FY 2006 agency high risk report (per OMB's high risk memo)?

yes

19. Is this a financial management system?

no

19.a. If yes, does this investment address a FFMIA compliance area?

no

19.a.1. If yes, which compliance area:

Not Applicable

19.a.2. If no, what does it address?

Not applicable

19.b. If yes, please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A11 section 52.

Not applicable

20. What is the percentage breakout for the total FY2008 funding request for the following? (This should total 100%)

Hardware	5
Software	3
Services	92

21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities?

ves

22. Contact information of individual responsible for privacy related questions.

Name

William Tibbitts

Phone Number

301-443-0035

Title

Management Analyst (Agency Privacy Act Officer)

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23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval?

yes

## SUMMARY OF SPEND

1. Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated Government FTE Cost, and should be excluded from the amounts shown for Planning, Full Acquisition, and Operation/Maintenance. The total estimated annual cost of the investment is the sum of costs for Planning, Full Acquisition, and Operation/Maintenance. For Federal buildings and facilities, life-cycle costs should include long term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this report.

All amounts represent Budget Authority

(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 & Earlier	PY	CY	ВУ
	-2005	2006	2007	2008
Planning Budgetary Resources	26.590	7.122	7.378	7.283
Acquisition Budgetary Resources	117.360	17.735	18.395	18.249
Maintenance Budgetary Resources	174.990	17.088	25.248	39.917
Government FTE Cost	23.270	3.346	3.547	3.760
# of FTEs	200	29	29	29

Note: For the cross-agency investments, this table should include all funding (both managing partner and partner agencies).

Government FTE Costs should not be included as part of the TOTAL represented.

2. Will this project require the agency to hire additional FTE's?

no

2.a. If "yes," how many and in what year?

Not applicable.

3. If the summary of spending has changed from the FY2007 President's budget request, briefly explain those changes.

Spending levels for BY2007 and earlier stayed the same, as was authorized; however distribution changed. Additional funding has been added in response to requirements changes. The DME changes are in response to identified performance gaps, such as the need for the electronic health record and improved dental case management. The changes in the baseline have been approved by the IHS CPIC Council and the HHS ITIRB. The increases will be funding by IHS.

## **PERFORMANCE**

In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the

internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use Table 1 below for reporting performance goals and measures for all non-IT investments and for existing IT investments that were initiated prior to FY 2005. The table can be extended to include measures for years beyond FY 2006.

Table 1

	Fiscal Year	Strategic Goal(s) Supported	Performance Measure	Actual/baseline (from Previous Year)	Planned Performance Metric (Target)	Performance Metric Results (Actual)
1	2005	PMA Goal: Expanded Electronic Government. DHHS Strategic Goal 5: Improve the quality of health care services:	1. IHS GPRA Indicator #17: Expand the automated extraction of GPRA clinical performance measures and improve data quality. 2. IHS RPMS PART Long Term Measure 2: Derive national clinical performance measures from RPMS-EHR by FY 2008.	20 measures for GPRA reporting	Increase Increase number of measures by 2	Exceeded measures by increasing number by 4
2	2005	PMA Goal: Expanded Electronic Government. DHHS Strategic Goal 1: Preventing Disease and Illness:	GPRA Indicator #18: Expand the Behavioral Health Data System by increased use of appropriate software applications, determined by the number of sites that are submitting minimum BH data to the national data warehouse.	249 unique encounter locations.	Increase in number of sites reporting BH minimum data set from 2004.	Exceeded planned metric to 260 unique encounter locations.
3	2005	PMA Goal: Expanded Electronic Government. DHHS Strategic Goal 5: Improve the quality of health care services	GPRA Indicator #19: During FY 05, IHS will have in place contract and grant requirements for all urban Indian programs to provide the previously established specified data set in a standard format.	Baseline the current number of contracts & grants for Urban Programs that do and do not contain minimum GPRA reporting data set requirements.	Implement Contracts & Grants language that defines minimum data set that must be reported by all Urban facilities. Maintain the number of urban sites reporting clinical GPRA performance measures through the national clinical reporting process	Not Met - Contracts and Grants language not implemented
4	2005	PMA Goal: Expanded Electronic Government. DHHS Strategic Goal 5: Improve the quality of health care	Deploy RPMS to additional Urban sites.	18+ Urban sites currently running RPMS	Increase the number of Urban sites running RPMS by 4	Not Met - tied to Contracts and Grants language - not implemented

		services:				
5	2005	PMA Goal: Expanded Electronic Government. DHHS Strategic Goal 1: Preventing Disease and Illness:	IHS RPMS PART Long Term Measure 1: Improve compliance with clinical practice guidelines for five chronic diseases (diabetes, asthma, HIV, cardiovascular disease and obesity) through the development and deployment of an electronic health record to all IHS direct, Tribal and Urban sites using RPMS by FY 2008.	7 sites in beta test	Deploy IHS Electronic Health Record v1.0 to 20 additional sites.	Met goal of 20 sites.
6	2005	PMA Goal: Expanded Electronic Government. DHHS Strategic Goal 1: Preventing Disease and Illness:	Chart progress toward Healthy People 2010 immunization goals for children and adults for the AI/AN population served by IHS direct, tribal and urban (I/T/U) facilities.	In beta test	Deploy Immunization Data Exchange interface for automated data sharing between State Immunization registries (5 states) and IHS facilities	Met goal of five states
7	2005	PMA Goal: Expanded Electronic Government. DHHS Strategic Goal 1: Preventing Disease and Illness:	Collect and report on substance abuse- related clinical data to chart progress toward Healthy People 2010 substance abuse focus area goals.	FY04 target goal of 7%	Increase Proportion of female patients of childbearing age (i.e. 15-44) who have received annual alcohol screening to 11%.	Exceeded goal to 12%

All new IT investments initiated for FY 2005 and beyond must use Table 2 and are required to use the FEA Performance Reference Model (PRM). Please use Table 2 and the PRM to identify the performance information pertaining to this major IT investment. Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in the PRM. There should be at least one Measurement Indicator for at least four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov.

# Table 2

	Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
1	2006	Mission and Business Results	Health Care Delivery Services	Percentage of patients screened for depression through the annual clinical GPRA reporting process.	Baseline TBD in FY2006 (new measure)	Establish the baseline rate	
2	2006	Mission and Business Results	Health Care Delivery Services	Percentage of women screened at health care facilities for domestic violence	13% (FY2005)	Increase the rate to 14%	
3	2006	Mission and	Health Care	Percentage of	FY2005 rate	Maintain rate of	

		Business Results	Delivery Services	Childhood Immunizations ages 19-35 months	of 75%	75%
4	2006	Mission and Business Results	Health Care Delivery Services	Percentage of Adult Immunizations: Pneumovax vaccination among adult patients age 65 years and older	69% (based on FY2005 target)	Increase rate to 72%
5	2006	Mission and Business Results	Health Care Delivery Services	Percentage of appropriate female patients screened for Fetal Alcohol Syndrome	FY2005 rate of 11%	Increase the rate to 12%
6	2006	Customer Results	Customer Impact or Burden	Number of sites with Electronic Health Record	Baseline from FY2005 of 20 sites	Implement EHR at 40 additional sites
7	2006	Processes and Activities	Productivity	Percentage of National clinical performance data of registered population	86% of the registered population.	Increase by 1% over FY2005 levels.
8	2006	Technology	External Data Sharing	Number of states with which IHS currently exchanges immunization data	Baseline consists of 3 states.	Increase to 6 the number of states.
9	2006	Technology	Internal Data Sharing	Number of new electronic images and scanned documents available online.	Baseline to be determined by FY2006	Baseline to be determined in FY2006
10	2007	Mission and Business Results	Health Care Delivery Services	Percentage of at-risk patients who have a comprehensive assessment for all Cardiovascular Disease-related risk factors.	Baseline TBD in FY2007	Establish the baseline percentage
11	2007	Mission and Business Results	Health Care Delivery Services	Percentage of patients screened for depression.	Baseline TBD in FY2006	Maintain at the FY2006 rate
12	2007	Mission and Business Results	Health Care Delivery Services	Percentage of women screened at health care facilities for domestic violence.	14% (FY06 target)	Increase rate to 15%
13	2007	Mission and Business Results	Health Care Delivery Services	Percentage of Childhood Immunizations ages 19-35 months.	FY2005 rate of 75%	Maintain rate of 75%
14	2007	Mission and Business Results	Health Care Delivery Services	Percentage of Adult Immunizations: Pneumovax vaccination among adult patients age 65 years and older	72% (based on FY2006 target)	Increase rate to 76%
15	2007	Mission and Business	Health Care Delivery	Percentage of appropriate female	FY2006 target of	Increase the rate to 13%

		Results	Services	patients screened for Fetal Alcohol Syndrome	12%		
16	2007	Customer Results	Customer Impact or Burden	Number of sites with Electronic Health Record	Target from FY2006 (60 sites)	Implement EHR at 40 additional sites.	
17	2007	Processes and Activities	Productivity	Percentage of National clinical performance data of registered population	86% of the registered population.	Increase by 1% over FY2006 levels.	
18	2007	Technology	External Data Sharing	Number of states with which IHS currently exchanges immunization data	FY2006 target of 6 states	Increase to 8 the number of states	
19	2007	Technology	Internal Data Sharing	Percentage increase in the number of new electronic images and scanned document available online	Baseline to be determined in FY2006	10% over baseline	
20	2007	Technology	Data Reliability and Quality	Number of sites with patient safety measurement system	3 reporting areas	Deploy to 10 sites	

# EΑ

In order to successfully address this area of the business case and capital asset plan you must ensure the investment is included in the agency's EA and Capital Planning and Investment Control (CPIC) process, and is mapped to and supports the FEA. You must also ensure the business case demonstrates the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency's EA.

1. Is this investment included in your agency's target enterprise architecture?

yes

1.a. If no, please explain why?

Not applicable.

2. Is this investment included in the agency's EA Transition Strategy?

yes

2.a. If yes, provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment.

IHS Resource and Patient Management System (RPMS) - Maintenance & Enhancements

2.b. If no, please explain why?

Not applicable.

3. Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to http://www.whitehouse.gov/omb/egov/.

Component: Use existing SRM Components or identify as NEW. A NEW component is one not already identified as a service component in the FEA SRM.

Reused Name and UPI: A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.

Internal or External Reuse?: Internal reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. External reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.

Funding Percentage: Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the funding level transferred to another agency to pay for the service.

	Agency Component Name	Agency Component Description	Service Type	Component	Reused Component Name	Reused UPI	Internal or External Reuse?	Funding %
1	Customer/Account Management	Provides for patient registration and collection and storage of demographic data.	Customer Relationship Management	Customer / Account Management			No Reuse	2
2	Partner Relationship Management	Provides commitment and coordination of care for a patient with external providers.	Customer Relationship Management	Partner Relationship Management			No Reuse	2
3	Process Tracking	Status and location of patient and ordered services are available.	Tracking and Workflow	Process Tracking			No Reuse	1
4	Case Management	Consolidates and manages episodes of care for single or multiple patients.	Tracking and Workflow	Case Management			No Reuse	2
5	Inbound Correspondence Management	Collects new or updated information with each visit or encounter.	Routing and Scheduling	Inbound Correspondence Management			No Reuse	2
6	Outbound Correspondence Management	Provides discharge summaries and education for health maintenance and self-care.	Routing and Scheduling	Outbound Correspondence Management			No Reuse	2
7	Quality Management	Internal checks are performed for proscribed services.	Management of Processes	Quality Management			No Reuse	1
8	Change Management	Longitudinal record is maintained and available for display/review.	Management of Processes	Change Management			No Reuse	5
9	Risk Management	Alerts can be configured to notify provider of either	Management of Processes	Risk Management			No Reuse	2

		planned or calculated activity to mitigate risk.				
10	Configuration Management	Utilities are standardized for reporting of configuration, and for installation of new applications, versions, and patches.	Management of Processes	Configuration Management	No Reuse	1
11	Requirements Management	Utilities are used for reporting on current configurations and data structures, and can compare with drafts and report differences.	Management of Processes	Requirements Management	No Reuse	1
12	Procurement	Requisitions and purchase orders can be entered and moved through an electronic sequence of approval.	Supply Chain Management	Procurement	No Reuse	2
13	Invoice/Requisition	Can inquire to status of documents, including Receiving reports when products arrive.	Supply Chain Management		No Reuse	2
14	Tagging and Aggregation	Records can be identified according to discipline need. Can be sorted by attributes, saved in templates for further analysis.	Content Management	Tagging and Aggregation	No Reuse	2
15	Document Imaging and OCR	Adapted VHA's application, VistA Imaging, for use at IHS-EHR sites.	Document Management	Document Imaging and OCR	No Reuse	2
16	Document Review and Approval	Both clinical and administrative documents can	Document Management	Document Review and Approval	No Reuse	2

		be routed for review and approval.				
17	Information Mapping/Taxonomy	Taxonomy application provides for this capability.	Knowledge Management	Information Mapping / Taxonomy	No Reuse	2
18	Document Retirement	Records on individual patients can be marked for historical purposes; medical records can be archived.	Records Management	Document Retirement	No Reuse	2
19	Graphing/Charting	Trend charting, e.g., blood pressure.	Visualization	Graphing / Charting	No Reuse	2
20	Imagery	Scanning capability in VistA Imaging application.	Visualization	Imagery	No Reuse	2
21	Data Mining	Query application provides for sorting, retrieval, saving of cohorts, and further analysis by Query application and other applications.	Knowledge Discovery	Data Mining	No Reuse	2
22	Decision Support and Planning	Historical data available for trending.	Business Intelligence	Decision Support and Planning	No Reuse	2
23	Demand Forecasting/Management	Use of medical equipment and supplies, e.g., vaccines.	Business Intelligence	Demand Forecasting / Mgmt	No Reuse	2
24	Modeling	Clinical information available over years, for epidemiological trending and identification of historical population and individual events.	Knowledge Discovery	Modeling	No Reuse	5
25	Ad Hoc	DBMS allows user to create sorted and printed reports	Reporting	Ad Hoc	No Reuse	2

		based on existing data				
		structures and fields.				
26	Standardized/Canned	Approx 95% of RPMS applications have pre- written reports, either based on user requirements or technical concerns.	Reporting	Standardized / Canned	No Reuse	2
27	Data Exchange	RPMS applications are the source of all data exported to higher systems. Billing applications require and use EDI between multiple systems. Application interchange varies from file sharing to messaging.	Data Management	Data Exchange	No Reuse	5
28	Data Cleansing	Typical fields in all files support transforming data input by User into a defined character set.	Data Management	Data Cleansing	No Reuse	2
29	Extraction and Transformation	These rules can be implemented at the data dictionary level, and executed by the DBMS, or by applications.	Data Management	Extraction and Transformation	No Reuse	2
30	Loading and Archiving	Records can be received and processed against existing documents, e.g., Explanation of Benefits Reports, which contain clinical and financial	Data Management	Loading and Archiving	No Reuse	2

		data from contracted health care.					
31	Travel Management	Travel orders can be entered, edited, and routed for approval and processing.	Human Resources	Travel Management		No Reuse	2
32	Billing and Accounting	Applications include Third Party Billing and Accounts Receivable.	Financial Management	Billing and Accounting		No Reuse	2
33	Credit/Charge	IMPAC transactions are supported, including EDI for payment.	Financial Management	Credit / Charge		No Reuse	2
34	Expense Management	This can be done through travel vouchers and other documents.	Financial Management	Expense Management	No Reus		2
35	Internal Controls	Reports are available in the financial applications, and are exported to a web-based reporting system.	Financial Management	Internal Controls		No Reuse	2
36	Property/Asset Management	Financial applications maintain status of some physical assets.	Asset / Materials Management	Property / Asset Management		No Reuse	2
37	Asset Cataloging/Identification	Reports are available from supply and financial applications.	Asset / Materials Management	Asset Cataloging / Identification		No Reuse	2
38	Identification and Authentication	Network location of user can be recorded; ID and passwords are required for access to RPMS.	Security Management	Identification and Authentication		No Reuse	2
39	Access Control	Manager can provide and control access, down to individual menu options	Security Management	Access Control		No Reuse	2

		of applications.				
40	Customer Analytics	Users are uniquely identified by name; times and duration of access are audited.	Customer Relationship Management	Customer Analytics	No Reuse	2
41	Audit Trail and Capture Analysis	Audit reports for users are available; auditing can be implemented for entries in files.	Security Management	Audit Trail Capture and Analysis	No Reuse	2
42	Email	Network Mail is available based on local configurations and needs.	Collaboration	Email	No Reuse	1
43	Threaded Discussions	VistA application, MailMan, supports threaded discussion by topic.	Collaboration	Threaded Discussions	No Reuse	2
44	Query	Both the RPMS DBMS, and an application named Query Manager support user- defined queries that can be saved.	Search	Query	No Reuse	2
45	Software Distribution	Utilities can report on current configurations, installed versions and applications, and check if environment is correct for installation of applications and components.	Systems Management	Software Distribution	No Reuse	1
46	Forms Creation	Templates of existing fields in files can be associated, formatted into a form, and saved for subsequent retrieval and use.	Forms Management	Forms Creation	No Reuse	2

47	Forms Modification	Templates can be retrieved and modified to suit local or individual needs.	Forms Management	Forms Modification			No Reuse	2	
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<sup>4.</sup> To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

FEA SRM Component: Service Components identified in the previous question should be entered in this column. Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications.

Service Specification: In the Service Specification field, Agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.

	SRM Component	Service Area	Service Category	Service Standard	Service Specification (i.e., vendor and product name)
1	Customer / Account Management	Service Access and Delivery	Access Channels	Collaboration / Communications	Patient Care Component (M)
2	Partner Relationship Management	Service Access and Delivery	Access Channels	Collaboration / Communications	Patient Care Component (M)
3	Process Tracking	Service Access and Delivery	Access Channels	Collaboration / Communications	Patient Care Component (M)
4	Case Management	Service Access and Delivery	Access Channels	Collaboration / Communications	Patient Care Component (M)
5	Inbound Correspondence Management	Service Access and Delivery	Access Channels	Collaboration / Communications	Patient Care Component (M)
6	Outbound Correspondence Management	Service Access and Delivery	Access Channels	Collaboration / Communications	Patient Care Component (M)
7	Quality Management	Service Interface and Integration	Interoperability	Data Types / Validation	Patient Care Component (M)
8	Change Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Patient Care Component (M)
9	Risk Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Patient Care Component (M)
10	Configuration Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	VA Kernel Toolkit
11	Requirements Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	VA Kernel Toolkit
12	Procurement	Service Access and Delivery	Access Channels	Collaboration / Communications	X12 with HL7
13	Invoice / Requisition Tracking and Approval	Component Framework	Data Management	Reporting and Analysis	X12 with HL7
14	Tagging and Aggregation	Component Framework	Data Management	Reporting and Analysis	SNOMED

15	Document Imaging and OCR	Service Platform and Infrastructure	Delivery Servers	Media Servers	VistA Lexicon Utility (UMLS)
16	Document Review and Approval	Service Access and Delivery	Access Channels	Collaboration / Communications	Fileman (Forms Editor)
17	Information Mapping / Taxonomy	Service Interface and Integration	Interoperability	Data Format / Classification	SNOMED
18	Document Retirement	Service Interface and Integration	Interoperability	Data Format / Classification	SNOMED
19	Graphing / Charting	Component Framework	Data Management	Reporting and Analysis	Open GL, CGM, and GKS standards, DICOM 3
20	Imagery	Service Platform and Infrastructure	Delivery Servers	Media Servers	DICOM 3
21	Data Mining	Component Framework	Data Management	Reporting and Analysis	SQL
22	Decision Support and Planning	Component Framework	Data Management	Reporting and Analysis	SQL
23	Demand Forecasting / Mgmt	Component Framework	Data Management	Reporting and Analysis	Fileman
24	Modeling	Component Framework	Data Management	Reporting and Analysis	SNOMED
25	Ad Hoc	Component Framework	Data Management	Reporting and Analysis	Fileman
26	Standardized / Canned	Component Framework	Data Management	Reporting and Analysis	Fileman
27	Data Exchange	Service Interface and Integration	Interoperability	Data Format / Classification	EDI
28	Data Cleansing	Service Interface and Integration	Interoperability	Data Types / Validation	EDI
29	Extraction and Transformation	Service Interface and Integration	Interoperability	Data Transformation	EDI
30	Loading and Archiving	Component Framework	Data Management	Database Connectivity	Fileman
31	Travel Management	Component Framework	Data Management	Database Connectivity	Fileman
32	Billing and Accounting	Component Framework	Data Management	Reporting and Analysis	Fileman
33	Credit / Charge	Service Interface and Integration	Interoperability	Data Format / Classification	EDI
34	Expense Management	Component Framework	Data Management	Reporting and Analysis	Fileman
35	Internal Controls	Component Framework	Data Management	Reporting and Analysis	Microsoft Explorer 6.x
36	Property / Asset Management	Service Interface and Integration	Integration	Enterprise Application Integration	Tivoli
37	Asset Cataloging / Identification	Service Interface and Integration	Integration	Enterprise Application Integration	Tivoli
38	Identification and Authentication	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	Tivoli
39	Access Control	Component Framework	Security	Supporting Security Services	PKI

40	Customer Analytics	Component Framework	Security	Supporting Security Services	Patient Care Component (M)
41	Audit Trail Capture and Analysis	Component Framework	Security	Supporting Security Services	Patient Care Component (M)
42	Email	Service Access and Delivery	Access Channels	Collaboration / Communications	Mailman
43	Threaded Discussions	Service Access and Delivery	Access Channels	Collaboration / Communications	Mailman
44	Query	Component Framework	Data Management	Reporting and Analysis	SQL
45	Software Distribution	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	VA Kernel Toolkit
46	Forms Creation	Service Access and Delivery	Access Channels	Collaboration / Communications	Fileman (Forms Editor)
47	Forms Modification	Service Access and Delivery	Access Channels	Collaboration / Communications	Fileman (Forms Editor)

5. Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc)?

yes

5.a. If yes, please describe.

IHS participates in the eGov initiative known as Consolidated Health Informatics (CHI). CHI is a "Government to Business" initiative aligned with the President's 2004 National Health Information Technology Strategy. The CHI initiative has adopted health data standards to allow health information to be shared securely across government agencies and healthcare organizations, including HL7, NCPDP, IEEE1073, DICOM and LOINC. IHS participation is via workgroups under the Federal Health Architecture (FHA) PMO. The project will leverage the Federal Health Information Exchange (FHIE) initiative. FHIE provides a set of interfaces and a model to allow knowledge sharing with other government agencies like DoD and VA. FHIE manages the transfer of information while addressing privacy and security concerns. FHIE will also maximize the potential for standardizing health records and sharing information about emerging health concerns.

6. Does this investment provide the public with access to a government automated information system?

no

6.a.1. If yes, provide the specific product name(s) and version number(s) of the required software and the date when the public will be able to access this investment by any software (i.e. to ensure equitable and timely access of government information and services).

Not applicable.

# PART TWO

## **RISK**

You should perform a risk assessment during the early planning and initial concept phase of the investment's life-cycle, develop a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment's life-cycle.

Answer the following questions to describe how you are managing investment risks.

1. Does the investment have a Risk Management Plan?

yes

1.a. If yes, what is the date of the plan?

2006-05-26

1.b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?

no

1.c. If yes, describe any significant changes:

Plan was reviewed and minor revisions were made for the update on 5/26/2006.

3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule: (O&M investments do NOT

need to answer.)

Project slack has been built into DME schedules to accommodate schedule variations and uncertainties. Where possible, firm fixed price contracts have been used to limit government risk and maintain the stability of life cycle cost estimates. Performance-based statements of work are generally in place for IHS contracts and allow the government more control over outcomes and costs versus outcomes. Life cycles costs are risk adjusted; some of the development work carries more risk due to the nature of unfolding requirements and changing technologies. These development costs have been adjusted to accomodate the risk. Steady State work carries much less risk, and the costs have been estimated accordingly.

**COST & SCHEDULE** Does the earned value management system meet the criteria in ANSI/EIA Standard 748? yes 2.a. What is the Planned Value (PV)? 183.827 2.b. What is the Earned Value (EV)? 182.146 2.c. What is the actual cost of work performed (AC)? What costs are included in the reported Cost/Schedule Performance information? Contractor and Government 2.e. As of date: 2006-12-31 3. What is the calculated Schedule Performance Index (SPI= EV/PV)? 4. What is the schedule variance (SV = EV-PV)? 5. What is the calculated Cost Performance Index (CPI = EV/AC)? 1.06 6. What is the cost variance (CV = EV-AC)? 9.635 7. Is the CV or SV greater than 10%? 7.b. If yes, explain the variance. Not applicable. 7.d. What is most current Estimate at Completion? 337.246 8. Have any significant changes been made to the baseline during the past fiscal year? no