
DRAFT Strategic Plan for Information Resource Management Information Systems Advisory Committee

October 6, 1999

Vision

The IHS' IRM vision is to enhance the delivery of health care to customers by providing the premier health information technology environment in the world.

Mission

Provide integrated information technology solutions that exceed the needs of the I/T/U customers.

Goals and Objectives

Goal 1: To facilitate the interoperability with commercial systems, institute an open standard based health information system for the I/T/U's.

Objectives:

- A. Develop HL7 interfaces to all applicable RPMS applications.
- B. Utilize recognized and emerging standards related to data interchange, security, message handling, and data transmission.
- C. Develop a report on the evaluations of current health open standards and other future relevant standards on the horizons to be interfaced with the RPMS (i.e. GCPR)
- D. Publish an open standards document that specifies the alternatives for interfacing with the RPMS.

Goal 2: Develop an annual operational plan based upon a survey of the I/T/U customer's wants.

Objectives:

- A. The CIO (HQ) will develop, print and distribute a survey to information technology customers.
- B. The CIO with other appropriate technical assistance will analyze and rank the survey results.
- C. The CIO will report the survey results and recommendations to the ISAC.
- D. In support of the ELG work-plan, the CIO, with ISAC collaboration, will develop the operational plan incorporating the results and recommendations of the customer survey.
- E. The CIO will implement the annual operational plan.

Goal 3: Make accessible high-speed connectivity for all I/T/U customers to a secure common network that facilitates the transmission of voice, video and data services in an acceptably responsive and reliable manner.

Objectives:

- A. Establish a Virtual Private Network (VPN) Gateway to the IHS that meets HIPAA standards for data transfer.
- B. Publish technical document detailing available methods for connecting to the IHS wide area network (WAN), detailing the costs and benefits for each connection.
- C. Provide classes on LAN/WAN connectivity emphasizing the WAN connectivity to the IHS.
- D. Publish guidelines for minimal acceptable service and obtain tools to measure and monitor network performance and availability.
- E. Implement voice-over-data and video-conferencing solutions at Headquarters and each Area Office, which will save costs by enabling toll-free calls and travel-free meeting between the entities, and will aid in promoting and justifying the technologies to the rest of I/T/Us.

Goal 4: Provide a quality Billing and Cost Accounting/General Ledger system that is integrated to our Health Information System.

Objectives:

- A. In consultation with constituent groups, develop a report that evaluates commercial billing and accounting systems and examines the feasibility of enhancing our current systems to match their functionalities. The report will include a cost-benefit analysis of the alternatives.
- B. Develop and implement a generic HL7 data interface to existing RPMS applications (refer to Goal 1)
- C. The ISAC will submit a recommendation to IHS Director for an integrated billing & accounting system.

Goal 5: Provide effective Information Technology & Data Management Training at all levels.

Objectives:

- A. Establish - Appoint Nat'l technical training coordinator / manager
- B. Assess and evaluate current information technology training capabilities and capacities at all I/T/U levels
- C. Define scope of training program i.e. target groups at fields & area levels
- D. Identify and assess I/T/U training needs. (Training assessment)
- E. Match current training need to existing capacity i.e. site manager training. Data entry training.
- F. Through customer survey, identify new areas for training development, i.e. Data management, data quality.
- G. Decision to either Build / Buy training course work.

- H. Expand existing and develop new training course work using both didactic and distance learning methodologies.
- I. Evaluate target audience progress for program modifications.
- J. Maintain training program.
- K. Establish a website that serves on-demand prerecorded training sessions using streaming video technologies.

Goal 6: Provide effective technical support for the current Health Information System.

Objectives:

- A. Establish and maintain a website available to the I/T/U's for the distribution of RPMS applications and patches, with information retrievable by both application and date.
- B. Establish a formal (Web-based) technical support feedback system between Health Information System developers and field support staff, with status reports viewable by both.
- C. Establish a formal technical support training schedule (refer to Goal 5) for supported Health Information System hardware platforms (AIX, SCO, NT, etc.) and current Health Information System architecture (i.e. Fileman, Kernel)
- D. Coordinate with specific provider groups a training and support schedule and publish on a recurring basis for discipline - specific Health Information System applications
- E. Establish a mechanism for continued maintenance of hardware, peripherals and operating system software for existing large (RS6000-based) RPMS operating platforms.

Goal 7: Provide universally accessible decision support information that positively impacts the management and delivery of health care.

Objectives:

- A. Establish data warehouses, which use open standards compliant Relational Database Management Systems with state-of-the-art tools available for on-line analysis.
- B. The data warehouses will be scalable from a facility level up to a regional level and shall contain information aggregated from the I/T/U's administrative systems, healthcare systems and other external data sources such as Medicare, Medicaid, and Private Insurance entities.
- C. The integrated data-warehouses will be specifically designed to help meet the cost accounting and healthcare management needs of the I/T/U's.

Goal 8: Institute a graphical user interface (GUI) for the RPMS.

Objectives:

- A. Define an IHS standard GUI toolbox that includes a module-based framework for attaching independently developed modules.
- B. Create a web access toolbox for interfacing with the RPMS.
- C. Retool core RPMS applications to be GUI based.

Goal 9: Promote adequate computer systems for all I/T/U employees to perform their job.

Objectives:

- A. Define and publish, the technical standards and infrastructure for a recommended operating environment.
- B. Provide a tool for assessment and resource planning.
- C. Insure that cost effective procurement sources are known and accessible.

Goal 10: Promote adequate staffing at all levels to support the information technology functions:

Objectives:

- A. Develop model Human Resource assessment profile for every level, i.e. large and small clinics, hospital, Area and Urban Program i.e.
 - 1) Number of staff
 - 2) Grade levels
 - 3) Position Description
 - 4) Contractor and personnel skill sets
 - 5) Types
 - 6) Roles
 - 7) Responsibilities
 - 8) Supporting contracts
- B. Assess & Report current capabilities comparing model to existing staff.
- C. Assess & Report on Recruitment & Retention (R&R) Rates for targeted functions.
- D. Develop R&R plan for those targeted functions.
- E. After approval - Implement the R&R plan.

Goal 11: Promote partnerships between the I/T/U's and other agencies to work collaboratively on projects of mutual beneficial.

Objectives:

- A. Identify and prioritize areas where potential exists for establishing partnerships.
- B. Create a clearinghouse for information systems projects that will facilitate the sharing of locally developed software.
- C. Actively participate with other agencies and I/TU entities in areas of common benefit.
- D. Active involvement of I/T/U representatives in partnership activities
- E. Identify resources needed to support priority partnership activities.

- F. Establish a competitive process, amongst the I/T/U's, for performing the projects contained in the annual operational plan.

Goal 13: Ensure national comparability of public health data for all I/T/U's.

Objectives:

- A. Incorporate the findings and recommendations of the Public Health Support Workgroup, Charge #3
- B. Identify "standard data set" manager to be responsible for maintaining/updating "data set"
- C. Assess and compile completed work and recommendations regarding standard data sets
- D. Panel a constituent I/T/U workgroup to review recommendations and provide consultation.
- E. Prepare document for submittal to Federal Register for publication and review and comment period.
- F. At the completion of the Federal Register process, incorporate the new or modified data elements into RPMS and the GCPR development process.
- G. Develop annual mechanism for review of and feedback on "standard data set" by I/T/U's

Goal 14: Ensure quality public health and administrative data for all I/T/Us.

Objectives:

- A. Identify Data Quality coordinator manager to be responsible for data quality policy and procedures
- B. Assess and compile completed work and recommendations regarding data quality efforts
- C. Develop model Data Quality Assurance program.
- D. Panel a constituent I/T/U workgroup to review recommendations and provide consultation.
- E. Areas implement plan for monitoring quality of data from local I/T/U's, which must include training, and assessment of needed activities at all levels.
- F. Develop mechanism for feedback to the NPIRS in relation to data reports.
- G. Develop annual mechanism for review of and feedback on "data quality policy" by I/T/U's

Goal 15: Institute a state-of-the-art Computerized Patient Record (CPR) with the ability to manage clinical alerts/pathways and contains data integrated from the various facilities that a patient has visited.

Objectives:

- A. Create a detailed cost-benefit analysis of using the VA's Vista CPRS, or a commercial based system.

- B. Continue supporting the GCPR project and establish a national implementation plan that would have it installed at those I/T/Us that desire to participate, within one year of its release.

Goal 16: Institute a state-of-the-art administrative environment throughout the I/T/Us.

Objectives:

- A. Pursue electronic commerce solutions for: soliciting contracts and purchase orders; transmitting awards, notices, and payments; and accommodating online vendor inquiries.
- B. Conduct a cost-benefit analysis on acquiring an Enterprise Resource Planning (ERP) system that provides a uniform solution to the corporate administrative processes (i.e. human resources, payroll, finance, procurement, etc).
- C. Promote for a modern and efficient paperless office environment with document processing and workflow capabilities that integrate with the I/T/U's financial and personnel systems.

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