ACTIVITY/MECHANISMS BUDGET SUMMARY
Department of Health and Human Services
Indian Health Service - 75-0390-0-1-551
INFORMATION TECHNOLOGY INFRASTRUCTURE

Program Authorization:
Program authorized by 25 U.S.C. 13, Snyder Act, P.L. 83-568, Transfer Act 42 U.S.C. 2001, and P.L. 102-573, Title II, Section 214.

	FY 2000 Actual	FY 2001 Appropriation	FY 2002 Estimate	2002 Est. +/- 2000 Actual	2002 Est. +/- 2001 Approp.
Budget Authority	$35,750,000	$42,750,000	$46,985,000	+$11,235,000	+$4,235,000

PURPOSE AND METHOD OF OPERATION

The following summarizes the Information Technology (IT) infrastructure environment highlighting public health information systems, the telecommunications network, and data management capabilities within the IHS.

Current I/T/U Information Systems Environment

The Resource and Patient Management System (RPMS) is a decentralized automated information system consisting of over 60 integrated software applications. The system is designed to operate on micro and mini-computers located at over 400 IHS, tribal, urban Indian health and public health nursing sites/facilities. RPMS software modules fall into three major categories: patient-based administrative applications, patient-based clinical applications, and financial and administrative applications. The patient-based administrative applications include software that performs patient registration, scheduling, billing, and interface functions. The patient-based clinical applications include packages that support the various health care programs including immunization, laboratory, pharmacy, radiology, and diabetes. Thirdly, the financial and administrative applications include application packages that keep track of finances, billing, and equipment inventory/repair. The Division of Information Resources (DIR) develops and tests new software and then distributes the RPMS application suite to IHS Headquarters, each Area Office and other federal partners. Each Area Office releases the RPMS application suite to the appropriate hospitals, clinics, health aid, and State public health nursing sites. Each site may load the full suite of applications or only a subset of the applications (as determined by the size and function of that location). The RPMS applications are highly integrated. This allows the RPMS to store patient data in a core set of centralized files rather than in a number of discipline-specific or program-specific files. This structure allows core data, such as patient visit data, to flow to the necessary software applications without having the system access multiple files or requiring duplicate data entry. Based on this single database structure, RPMS has a set of IHS/Department of Veterans Affairs (VA) tables that are shared by all applications. Sets of data files are shared by related groups of applications as appropriate.

The IHS DIR maintains a centralized data warehouse for patient encounter and

administrative data. Through the wide-area network (WAN) each health care facility feeds select information about patient encounters to the national data repository. The national database is used to provide reports for statistical purposes; performance measurement for GPRA and accreditation; public health and epidemiological studies; third party revenue generation; national equipment inventories; and support for development of the IHS budget process.

The IHS telecommunications infrastructure connects IHS, tribal, and urban (I/T/U) facilities together and to the national data repository. This infrastructure is used for data transmission, voice traffic, and Intranet/Internet access. The capacity to support data transmission as well as new telehealth applications varies greatly and the need exists to upgrade the capacity overall.

The IHS currently uses separate systems for billing, materiel management, financial and personnel management. Since these systems are not integrated, actuarial and cost accounting data is not a reality within the IHS for revenue generation, cost containment, work efficiencies and benchmarking comparisons.

For over fifteen years the IHS has had collaboration with the Department of Veterans Affairs in the development of software and sharing of resources. Recently, this federal health care collaboration has included both VA and Department of Defense on the Government Computer-based Patient Record (GCPR) Framework project. The FY 2002 proposed increase would rollout major improvements in hardware, software, telecommunications and support to rural sites. This step of a multi-year plan would enable the IHS to continue the upgrade of critical components of the information technology infrastructure.

Following are the funding levels for the last 3 fiscal years:

Year	Funding	
1999	$25,750,000	
2000	$35,750,000	
2001	$42,750,000	Enacted

RATIONALE FOR BUDGET REQUEST

Total Request -- The request of $46,985,000 is a net increase of $4,235,000 over the FY 2001 enacted level of $42,750,000 for information technology infrastructure costs necessary to improve data quality. The net increase is essential to accomplish multiple goals including program accountability and operations, to improve public health surveillance, and to increase third party collections. The net increase includes the following:

Built-in Increases - +$235,000

The request of $235,000 for Federal personnel related cost would fund the built-in increases associated with on-going operations. Included are the FY 2002 pay raise and within grade increases. These funds will be shared with Title I and Title III tribes, as well as Federal programs.

IHS continues to strive to increase access to the IHS patient population. It is extremely critical that the IHS maintains the FY 2001 level of service to

prevent any further decline in primary health services. Maintaining the current I/T/U health systems is necessary in eliminating disparities in health status between AI/AN and the rest of the U.S. population.

Information Technology Infrastructure - +$4,000,000

RPMS Upgrades and Interfaces: +$2,000,000

In addition to upgrading software required to improve the RPMS infrastructure, specific emphasis will be placed upon data quality, billing and accounts receivable packages, as well as clinical support components. Upgrading data set exports will include the Patient Statistical Record, ORYX and GPRA measures. These upgrades will provide the ability to extract clinical and financial data to determine best practices. This includes improved security features regarding patient confidentiality, electronic data transmission, and executive and clinical decision making tools for management engineering, bench marking, and best practice measurement (as required by GPRA, HIPAA, OMB, etc.). The enhancements will improve the capability to interface internal and external data systems with the RPMS to improve the validity and completeness of national databases. These investments will pay off with improved I/T/U clinical care, performance measurement, cash flow and work efficiencies. This will provide 24 hour, seven-day-a-week national and area support to I/T/U facilities. It will provide significant improvements in RPMS user training through on-site instructor led courses, web-based training and correspondence courses. It will also provide information technology professional training through national on-site instructor lead courses, Commercial-Off-The-Shelf (COTS) vendor courses and self-paced instruction.

Telecommunications Infrastructure Improvement: +$1,000,000

Upgrades to telecommunication infrastructure to meet the needs of both urban and rural healthcare programs dependent upon the transmission of voice, data, or images (e.g., x-rays) between smaller, primary care health facilities and larger referral medical centers. The infrastructure would provide a secure environment and allow sufficient bandwidth for the potential benefit of advancing telemedicine and teleradiology programs. Improvements target support for hardware, software, and staffing to more effectively utilize available technologies.

Data Collection, Analysis, and Quality Improvements: +$1,000,000

Upgrade hardware and purchase software to increase the ability of all internal and external customers to extract demographic, clinical, financial, and epidemiologically significant trends in a secure environment. This project combined with the RPMS upgrade and telecommunications improvements will improve data quality and will satisfy the multiple goals of program accountability, improved public health surveillance, and increased third party collections.

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