

Kennedy Health System

by Emilio DeCesaris

The Kennedy Health System (KHS) is an integrated healthcare delivery system providing a full continuum of healthcare services, ranging from acute-care hospitals to a broad spectrum of outpatient and wellness programs. Kennedy is a multi-site healthcare provider serving the residents of southern New Jersey.

Kennedy's mission is to enhance the health status of the communities it serves. It is further expanded through its educational commitment and affiliation with the University of Medicine & Dentistry of New Jersey. Kennedy provides the largest non-public physician training program in the state of New Jersey.

Kennedy Memorial Hospital has been a Bronze Distinguished Member or Institutional Member of MTA since 1990.

The Kennedy Health System's Information Systems Department has been using M since 1984 for internal development and ongoing enhancement of its health care information systems.

M's elegant structures, modest syntax, uncomplicated procedural language, database management, I/O device control and refined power made it the language of choice when KHS performed an analysis of programming languages to use for its ongoing internal development efforts in 1988. A recent reassessment of that decision confirmed the validity of the conclusion.

The roster of M-developed applications includes: patient registration, patient accounting, medical records, DRG/abstracting, medical administration, materials management, order control, laboratory, medical imaging, cardiology, pulmonary, medical staff, clinical user inquiry and surgical services information systems.

The power of the Micronetics implementation of M running on networked IBM RS/6000 processors under AIX/UNIX has provided Kennedy's IS department the ability to construct an integrated information system with seamless access across all ancillary departments and applications. The information system's consolidation allows total data sharing and integration, thus eliminating any need for redundant data entry and providing an enterprise-wide view of patient data in the continuum of care.

The open systems capability of IBM's AIX/UNIX has provided the platform for successful integration of MSM with off-the-shelf UNIX products such as WordPerfect for patient report transcription, VSI-FAX for automatic patient report

faxing to physician offices, and PC MONARCH for end user sorting/manipulation of standard IS reports that are downloaded to a PC format.

Also, the combination of MSM and AIX/UNIX is the technological backdrop for a single user sign-on to the KHS network, which provides the ability to access both M and non-M applications from a single, standard user menu.

MSM's Remote Volume Group (RVG) and Distributed Data Processing (DDP) capabilities have allowed KHS to develop and deploy applications across multiple RS/6000s while maintaining a singular, virtual machine view of all systems and data to the end users.

CyberTools' CYBER M screen generation tool has been used for all new application development since 1993. CYBER M has added user-friendly functionality to the medical imaging, cardiology, pulmonary, medical staff, clinical user inquiry and surgical services information systems.

KB Systems' KB_SQL product has been used to map more than 10,000 data elements in KHS's applications database. The EZQ report generation tool and its extended industry standard SQL functionality provide ad hoc report writing and data querying capabilities to the KHS end user community.

Current efforts are focused on the development of an ambulatory clinic information system and pharmacy information system, along with the ongoing enhancement and functional expansion of the existing information systems.

Additionally, not-too-distant efforts will focus on investigating the integration of M and JAVA on Network Computers, and Web-enabling data retrieval from the vast wealth of information contained in the KHS M database.

The power of M, particularly the MSM implementation and its UNIX integration capability, CyberTools' development environment, and the KB Systems' report generator have provided the Kennedy Health System information systems department with the necessary technological platform to develop functionally robust applications, both past and in the future. **M**

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