Enterprise Imaging Systems: Imaging Outside of Radiology & Cardiology

MTC can assist Enterprise Imaging projects at any stage of the project. MTC services cover the entire project life cycle: strategic planning, needs assessments, technology assessments, work flow analyses, requirements generation, proposal assessment, contracting, implementation, and project management support.

Enterprise Image System acquisition, storage, and distribution comprises a complex and multi-faceted problem. Many sources of images exist within the enterprise. Each of these have unique acquisition, workflow, and storage requirements. In addition, each image generating department has image sharing needs outside the enterprise and may have a telehealth program as well.

The healthcare system often has a requirement to image enable the EMR. The system may also need to image enable its patient portal and share images with an HIE.

MTC facilitates a process that allows the stakeholders to make an informed decision in selecting the technology and vendor that best satisfies their objectives. Each step of the process is documented and reviewed to obtain input and consensus of all involved. The specific process is adjusted to match the needs of the individual institution and project.

Strategic Planning

MTC helps define the healthcare system objectives for its Enterprise Image System insuring that all aspects are covered. Key first steps in the Enterprise Imaging System plan will include sizing the project, establishing a governance structure, and laying out a roadmap.

MTC identifies the image generating departments and collects data quantifying their requirements. We can share information on how other organizations have structured their organization when addressing Enterprise Imaging Systems. Criteria for defining a roadmap for the Enterprise Imaging System will be developed to meet the needs of your health care system.

Enterprise Imaging is not one project but a series of projects.

Needs and Technology Assessments

Once the strategic plan is in place, we utilize the roadmap to create a detailed project plan. The first step is to perform a more detailed assessment of the departmental imaging needs and assess the acquisition technologies currently in place.

Some systems will be able to interface to the enterprise systems while others will need to be upgraded or have intermediate systems added to be able to upload their images. Not all acquisition technologies will be digital, have ADT feeds, or use standards.

Work Flow Analyses

MTC performs current and future work flow analyses of each imaging process encompassing the full process: acquiring images, associating images with meta data, image viewing and analysis within the department and across the enterprise, association with like priors from other sources, and storage and retrieval.

Requirements Generation

From the data gathered during strategic planning, the needs and technology assessments, and the work flow analyses, MTC generates RFP documents. The RFP's documents cover: the enterprise storage and workflow system, the departmental workstation and associated image cache, and any acquisition devices required.

Proposal Assessment

MTC works with the vendors submitting proposals to assure that all requirements have been fullly and clearly addressed.   Comparison summaries are generated for side by side comparisons of the proposals to facilitate decisions by the steering committee. References are interviewed and documented and site visits are coordinated. Following a selection, contracting support is provided mostly in determining parameters for system acceptance and mitigating the terms and conditions.

Implementation

MTC support continues throughout the implementation, training and turnover phases. A primary activity is trouble shooting and problem resolution.

MTC Principal

Larry Sieb has been consulting with healthcare systems for 20 years on imaging informatics projects. These projects have included Enterprise Imaging, radiology PACS, and Cardiovascular Information Systems(CVIS).   Prior to his consulting work, he led engineering groups at GE Healthcare developing new medical imaging products. As a systems engineer, his expertise and experience include every phase of the project life cycle starting with strategic planning and continuing to implementation and support.