Migration from MEDITECH MAGIC to 6.0
An interview with Rick Lang, Vice President & CIO, and Robin Hall, Director of IS, Doylestown Hospital, PA

Doylestown Hospital, located 20 miles northwest of Philadelphia, is a comprehensive, community-focused healthcare facility that has grown into a regional healthcare resource encompassing more than 500 acute and long-term care beds in three locations. The hospital's medical staff is comprised of more than 380 physicians, dentists, and specified professional personnel in 42 specialty areas. The hospital was the only Philadelphia area hospital to receive all three 2009 cardiac specialty excellence awards-cardiac care, cardiac surgery, and coronary intervention from HealthGrades®, the leading independent healthcare ratings company. These awards place Doylestown Hospital's clinical outcomes in the top 10% percent nationally for each recognized area of care.

Doylestown Hospital was the first organization to embark upon an ambitious project to migrate its Healthcare IT System from the MEDITECH MAGIC platform to MEDITECH's new 6.0 platform. The migration project included a new infrastructure design, technology selection, 6.0 implementation, and a self-hosted disaster recovery solution. Perot Systems and MEDITECH worked in conjunction with Doylestown Hospital's staff and engineered a successful migration and backup solution in just 14 months. Perot Systems consultants are also providing additional consulting services for the implementation support on the Clinical implementations.

Doylestown Hospital Vice President and CIO, Rick Lang, and IS Director, Robin Hall, spoke with our editors about the project and the many factors involved in making the migration a success.

Q. How did the migration from MAGIC to Client Server 6.0 fit into the hospital's long term strategic objectives?
A: Our long term strategy is to ensure the highest level of quality of healthcare at the hospital through a number of computerization initiatives and by advancing our advanced clinical automation systems. These initiatives will help us meet the national standards for Computerized Physician Order Entry and online documentation. It will also advance our progress in the HIMSS Analytics 7-stage model for Electronic Medical Records. We also saw these efforts as a way to re-engage our physicians with a new level of automation that was easy to learn and use.

We felt that we needed to upgrade from the MAGIC platform to achieve these objectives. We also recognized that we would need to ensure systems continuity and have data backup and recovery systems in place, which led to the concurrent design and implementation of a self-hosted disaster recovery system.

Q. Did you consider others options before deciding to implement MEDITECH's 6.0?
A: We did an objective evaluation of several systems and vendors, and in the end, we thought MEDITECH 6.0 offered the foundation we would need to get us to the next level of automation. From a financial standpoint, the MEDITECH solution offered a substantially better Total Cost of Ownership and Return on Investment in the long term over the other vendors. Further, we already had a good

relationship with MEDITECH and understood where they were going with their Advanced Clinical System capabilities and these seemed most in line with our healthcare delivery goals.

Q. What were some of the major challenges that you faced during the migration?
A: We performed a rigorous gap analysis to see if MEDITECH 6.0 could meet our needs and identified a few areas where MEDITECH would need to develop software enhancements to handle deficiencies in the 6.0 applications. In every case, they worked closely with our staff and were able to deliver the software needed to ensure a successful integration.

With a completely new software architecture, we also knew that hardware design and infrastructure would be critical and probably the greatest challenge. Even though we engaged in parallel testing throughout the process, we were concerned that there really was no way to test the configuration in a real world, high volume scenario, which meant that we had to get it right the first time around. Perot Systems worked closely with our staff and MEDITECH and performed a thorough analysis of our hardware and infrastructure requirements as well as our continuity initiatives and disaster recovery objectives. With their knowledge of our environment and in-depth understanding of MEDITECH, Perot Systems came through with a great design and execution.

Q. How did you address the potential impact of the new platform on your system users?
A: We knew that we would be taking away our end users' familiar MAGIC interface, introducing a new email platform, and implementing an entirely new file structure. We addressed these potential issues with a comprehensive educational and training program that involved all affected department heads, managers, and end users. We had a very strong internal IS liaison in place who was instrumental in communicating every facet of the implementation between our users and the MEDITECH and Perot Systems team.

The beauty of 6.0 is that it is very intuitive to use so training was relatively easy. We trained 150 physicians in 3 weeks and over 1,200 nurses and staff over a 2-month period. They learned all of the essential functions very quickly. The look and feel, and the ease of use of 6.0, was instrumental in the smooth migration.

To date, we've had great buy-in to the new system from our physicians, nurses, and clinicians.

Q. What steps did you take to ensure MEDITECH System backup and continuity?
A: With a new platform in place we knew that the reliance on computerized records, and advanced clinical applications required a system continuity and backup strategy. As part of the migration project, we worked with Perot Systems to develop and implement a self-hosted disaster recovery system that includes a redundant secondary data center to help ensure system continuity and recovery capabilities.

Q. How long did the entire project take and how many people were involved?
A: It was 16 months from the time that we signed our contract to go-live with 6.0. There were literally hundreds of people involved over the course of the project. We were very pleased with the overall implementation process; everyone involved was deeply committed to keeping the project on schedule. MEDITECH and Perot Systems have a disciplined and standardized implementation process that kept the project on track and we don't know of any other vendors who have the experience or resources to orchestrate such a complex project in such a short timeframe – 2 to 3 years would be the norm for a project of this magnitude.

Q. What advice would you offer other organizations considering migrating from MAGIC to the 6.0 platform?
A: First we recommend that they perform a thorough gap analysis to determine the software enhancements and interfaces that will need to be developed and include those discussions in the vendor contract. We would also advise CIOs to have a broad understanding of the process changes that will be required before going live. Finally, it is critical to have support resources sized appropriately and knowledgeable experts to drive the project.

Q: Now that 6.0 has been implemented, what's next on your IT agenda?
A: We are moving forward with additional Advanced Clinical System initiatives to support our long term healthcare goals. We are currently working to roll out Computerized Physician Order Entry (CPOE) and MEDITECH's Emergency Department (EDM) modules. Perot Systems is supporting us on some of those initiatives. We plan to have those systems online by June and July, respectively.