

# Inside Perspective

Helping you unleash the full power of MEDITECH

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“You’ve got to have a plan!”

Jim Fitzgerald, CTO

As I have met my new colleagues from Perot Systems in the last several months, a favorite expression of founder H. Ross Perot, Sr. is often repeated. It conjures up an image of a sincere look in the eyes, the voice of experience, and a reminder delivered with conviction that “if you’re going to accomplish anything, you’ve got to have a plan”. An important part of our mission at JJWild is bringing together necessary applications, operations, healthcare, and technical expertise to help our customers plan the next steps which will help them gain the most from their investment in the MEDITECH HCIS. For our many customers who find themselves at a crossroads, I’ve tried to bring together some of the common themes that have emerged in our planning, and in our conversations with our partners and customers.



1. *There is no single road from here to there.* If my math is right, there are around 8112 possible combinations of MEDITECH code families, applications, and release levels. This makes me immediately suspicious of someone who says “to get from where you are to 6.0 you are going to have to do x, y, and z.” For starters, who says 6.0 should be your next waypoint? Depending on what you have, and what you want to do with it, 6.0 might be 3 to 7 years or more down the road – or it might be tomorrow. Maybe the right thing for you to do is implement initiatives around advanced clinicals like CPOE and BMV now, in your current version of MEDITECH, to best capture organizational momentum towards patient safety. Maybe the right thing is to keep what you have, while you strengthen your workflows and technology infrastructure to prepare for whatever comes next. “You’ve got to have a plan!”, but it has to be the right plan for where your organization is today.

2. *It’s time to make an assessment.* What do you have? How is it working? Are you getting the results you expected? Ask yourselves these questions or have one of our consultants partner with you to assess and document your current status around applications, technologies, and workflows, or to create or refresh an IT Strategic Plan. Request a review from MEDITECH. Sit down with your HCIS coordinator and your contacts from JJWild and MEDITECH and discuss your different go-forward strategies. Share the results with your IT steering committee to gain organizational consensus. Identify and prioritize areas for improvement or positive change. Put them on a timeline with a budget, and consider how to get them done.

3. *Does your Data Center and Technology Infrastructure measure up?* Whether you are running MAGIC 5.4 or Client/Server (C/S) 5.5, or C/S 6.0, the new realities of advanced clinical computing are changing how we think about the Data Center in a healthcare organization. To ensure that life-sustaining clinical processes are not interrupted, Primary Data Centers (PDC) will need to be Tier 3 or Tier 4. You may want to consider fault-tolerant, highly-available server technologies to prevent loss of critical IT assets. You may want to virtualize MEDITECH and enterprise applications for more robust performance management, minimization of planned downtimes, and improved utilization of server and storage assets. You may even want to join your many peers who have worked with us to create their own Secondary Data Center (SDC) or who have subscribed to JSite for Operational and Disaster Recovery. Your technology direction needs to support your strategic plan.

4. *Are your people doing the most valuable things they can do to accomplish your organizations’ goals?* Your IT team represents your organizations’ investment in improving healthcare operations. Is your technical staff out there mobilizing data, improving security, and helping enable patient safety initiatives, or are they stuck in the back room, rebooting routers, babysitting finicky storage systems, and watching tape spindles spin, praying that another backup doesn’t fail? Are your application analysts out improving

workflows and helping users make the most of your MEDITECH applications, or are they running around shooting alligators while the swamp overflows? Even with the best of intentions, it is human nature to let the process or technology or application we are working on become the focus of our efforts, rather than our goal. Take a deep breath. Review your strategic plan. Is your team aligned behind it?

5. *Are you doing the same things in the same way and expecting a different result?* We all like to believe, especially technophiles like me, that technology is making things easier, and that we could invest our way out of a lot of technical or operational issues – but there are always trade offs. For a technical example, blade servers – widely available from all of MEDITECH's certified server manufacturers - standardize, consolidate, and reduce power, cooling, network, and storage cabling. Wicked cool, as we New Englanders would say. They can be a blessing. But if your one or two server administrator(s) are also expected to do some amount of network maintenance, and take a certain number of help desk calls, the appearance of blade servers in your data center may end up eliciting more curses than applause.

When the blade servers arrive, the sometimes bizarre but functional style adopted for managing the vanilla rack mount servers you used to have gets put on the back burner. Central management applications must be learned and applied consistently. Images of servers need to be validated and maintained. Firmware and BIOS levels must be carefully tracked, lest a well-intended “upgrade” take down an entire chassis. If you don't have a raised floor and a plenum ceiling some forceful redirection of existing cooling might be necessary to avoid creating a “hot spot”. I/O from chassis backplanes must be carefully monitored to avoid funneling effects.

This type of mainframe-class, strict attention to change control requirement is often not a good fit for the brilliant, caffeine-fueled, hard-working men and women who populate the system administration ranks of most community hospitals. It is unfair to expect them to deliver that type of sustained attention in their often necessarily jack-of-all-trades roles. Just as a sanity check, by the way, Google does not expect it of their administrators either – their data centers feature row after row of Rackmount servers in a simple, standardized configuration.

Why the long rant on blades? Not because I dislike them – they are wonderful under the proper circumstances. The real point is to take a look at the disabling effect the law of unintended consequences can have on the well-intentioned, and to underscore the need for planning. What could have been done to advance the uptake of new clinical applications with the 3 months and 90-120 days of direct labor that went in to adjusting to blade servers? What was really gained? What did it cost IT if end-users lost even a little faith in the IT group because of availability issues?

I could have easily illustrated this point by reviewing what happens when a mobility initiative doesn't have buy-in from the nurses, or what happens when Patient Care System is implemented without some advance attention to clinical workflows, but I sense I am at the edge of some of my readers' patience, so I will leave it to your imaginations and move on.

6. *Information Lifecycle Management (ILM) is no longer just a marketing term.* MEDITECH's Scanning and Archiving (SCA) and Data Repository loom large on every roadmap I have seen. The former acts as the healthcare organization's historical memory, the latter as a place where questions can be answered across the entire scope of enterprise data. Both raise important questions about where data should be managed, how long it should be managed, and how it should be protected. Add to these concerns the rising tide of imaging data and the growing awareness of how Sarbanes-Oxley (SOX) applies to healthcare email in every bit as compelling a manner as HIPAA, and it is clear that a plan is needed for managing data. The current, normal non-strategy of allowing data from HCIS, PACS, and email to grow independently in independently managed silos invites future problems that undermine backups and complete recoveries, and fail to differentiate useful data that needs to be protected from aged-out data that needs to be purged.

7. *You have choices.* Reviewing the totality of some of the potential initiatives that could come from a serious reading of items 1-6 above may seem staggering, but it doesn't have to be. Interestingly, there are levels of solutions to all of these issues that begin with a clear mind and a clean sheet of paper. From my perspective, one of the cool things about being a part of Perot Systems is that we now have not only the field experience of our consultants and engineers, or the lab experience of our development team, but we also have the real-world perspective of managing data center operations for many large MEDITECH customers. I encourage you to tap into those strengths.