Pitfalls to Avoid When Merging Information Systems

By Vince Ciotti & Jim Griffith

The pace of mergers and acquisitions in the Health Care industry continues at a torrid pace, with fully 53% of America's 5,200 hospitals either merging or affiliating with their neighbors in the past four years. The primary cause of this "merger mania" is usually ascribed to the equally ubiquitous Managed Care revolution, with its concomitant pressures to reduce costs. One of the most common targets for cost reduction during a merger or affiliation has been Information Systems (IS), which are growing rapidly in both capital and operating expenses. The potential benefits of merging IS functions are many:

- Reducing IS staff through sharing technicians & analysts
- Consolidating data centers to reduce operator costs
- Increased discounts from vendors through group purchasing
- Establish efficient, enterprise-wide systems & standards
- Spreading the cost of strategic IS planning, etc.

Unfortunately, however, this goal of reducing IS costs is often not met, frustrating hospital management and boards alike, as IS costs continue to creep upward despite the supposed consolidation efficiencies. Our firm has been involved in over two dozen hospital mergers, from planning, through implementation and, sadly, even turn-around situations at mergers that have gone awry. This article delves into some of the common pitfalls that can cause IS costs to creep upwards despite the best of intentions, and offer suggestions to hospital management to prevent or rectify IS cost creep.

MINIMIZE CORPORATE "TECHNOCRACY"

This first cause of increased IS costs is easily the most common situation we have observed, also one of the easiest traps to fall into: creating a corporate IS governance position. Take the simple case of two or three community hospitals merging, each with an MIS Director. A typical outcome in their merger is to appoint a corporate Chief Information Officer (CIO) for many laudable reasons: to give IS greater corporate visibility, show management commitment to IS and to provide a neutral manager to guide the standardization of systems. However, the cost of the new corporate CIO is totally additive to the merged system, increasing the immediate annual payroll expenses in IS by a six figure salary, plus benefits.

Worse yet, over time, the new corporate IS function tends to grow as well, first with a secretary, then with a "deputy" CIO (the latest trend promulgated by savvy recruiters), and eventually into a complete staff of "corporate" counterparts to the many IS positions in the hospitals: corporate system analysts over various applications, corporate network & PC specialists, corporate data base administrators, etc. Eventually, this burgeoning corporate IS staff can run into a seven figure payroll.

How to avoid this conundrum? There are several ways to at least minimize these cost increases, if not avoid them all together. First, question just how great is the need for a corporate CIO in the first place. As will be discussed further in this article, many merger IS choices are "no brainers," where the consolidation decision is straightforward, hardly calling for a high-paid staff of technocrats to debate what systems are best. If a corporate CIO truly needs to be appointed, make them a promotion of one of the existing hospital MIS Directors, to be replaced by their number two in situ, without hiring any additional personnel (and costs) from the outside. After all, every CIO started somewhere as an MIS Director, who eventually got the opportunity to be promoted. There are no God-given traits of a CIO recruited from outside of the organization over inhouse MIS Directors, except for large recruiting and relocation fees. The lame argument of needing to hire a "neutral" outsider to not offend the existing MIS Directors is just as fallacious as when applied to the corporate CEO, COO and CFO positions. If the purpose of a merger is to reduce costs, then tough personnel decisions need to be made, and shirking them by hiring from without is just weak management.

Second, question the creation of a corporate IS staff just as you would the creation of a Central Billing Office, shared Laboratory, or any other "merged" operational entity: what will it contribute to improve, rather than adversely impact, the bottom line? Unless a centralized IS resource is replacing a greater number of FTEs at the hospitals (for example, a single physician informaticist at corporate replacing 2 or more at the hospitals), don't allow the merged IS whole to become greater than the sum of its parts.

DON'T LET SIZE ALONE DICTATE THE HIS SYSTEM

In many mergers, there is frequently a dominant hospital, larger in size or political clout than the other facilities, which naturally tends to have more corporate input on most standardization decisions. Although there may be areas where the

largest facility should rule, such as centralized purchasing, insurance, banking, etc., IS is one area where size is often inversely proportionate to efficiency. A classic example is where the largest facility in a merged entity has a self-developed mainframe system with a large staff of inhouse programmers. Such IS operations are often characterized by their high cost, lengthy development cycles, and relatively lower functionality than installations of commercial HIS vendors. Yet, we have seen mergers where the greater political clout of the larger organization enables them to displace far more modern, functional and cost-effective turnkey minicomputer systems at smaller members of the merged organization.

The prevention or cure? Have a neutral, outside organization with no ax to grind make an independent assessment of the IS operations at each facility. A user assessment (like the sample in Figure A) could be used to objectively rate how well each IS operation is meeting its mission, and the best system should then be selected for standardization, rather than the largest. In the world of information technology, bigger is rarely better: many small to medium sized hospitals (and vendors) can achieve far better price/performance, than in the often-stifling bureaucracy of larger Medical Centers or billion-dollar mega-vendors.

AVOID HIRING CONSULTANTS AS CIOs

A related mistake we have encountered increasingly in mergers of late is where the outside consulting firm, originally brought in to perform the assessment, sells one of its members to be the merged entities' "acting" CIO. The rationale is either that the incumbent MIS Directors are not strong enough or that the position is only temporary while a search is conducted for a permanent CIO. This approach results in the immediate large cost of paying the daily per diem rate of a vice-president or principal of a consulting firm (which usually runs several thousand dollars per day) for the many months or even years before a permanent CIO can be recruited and relocated.

Even worse, letting a consultant make key strategic and even tactical decisions for the merged organization leads to the inevitable temptation for them to recommend their own firm for many additional consulting projects. For example, if a question arises as to whether hospital A or B's Laboratory system should be picked as the standard, their inevitable response would be to have their firm's laboratory expert come in to study the two operations for several weeks or months, write a draft report, present it, go back and study other factors, write a second report, etc. After this costly engagement, when the system is finally chosen, their firm is then recommended to "re-engineer" the Laboratories internal operations first, before the new system is installed, another costly project that might take a whole team of consultants many more months of studying, interviews, procedure writing, etc.

In short, hiring a consultant as a full-time, albeit temporary, CIO is letting the proverbial fox into the chicken coop. Few CEOs would ever hire their audit firm to provide a temporary CFO, due to the inevitable conflict of interest that prevents the accounting firm from providing a neutral, independent audit at year-end, let alone hiring their firm's accountants to become cashiers, billers, etc. The same should be true in IS: don't let the supposed neutral, outside independent party take over internal operations and then recommend costly projects contracted back to their own firm.

DO YOU REALLY HAVE TO CONVERT EVERY HOSPITAL?

In most hospital mergers, the assumption is that in order to achieve economies of scale, all member hospitals must be converted to a single HIS. Although logical in theory, in practice, the staggering capital cost of purchasing new hardware and software, penalties in buying out existing contracts, and burgeoning installation costs from vendors and consultants make this prospect financially daunting. For the "typical" community hospital of 250 beds, the average prices of systems in recent vendor proposals is given in Figure B, and it shows the surprisingly high cost of what might seem to be a simple undertaking: an average of $3,000,000 in one-time costs and ongoing maintenance fees of $500,000 per year. Multiply these costs by the number of hospitals involved in a merger, and the prospect of a reasonable Return On Investment (ROI) across the merged enterprise becomes extremely challenging.Rather, consider using technology itself to mitigate the burgeoning cost of replacing technology. Instead of converting all of the base HIS systems (which today often consist of a "best of greed" array of disparate and interfaced vendors or partners anyway), use such new tools as clinical data repositories, data warehouses/marts, and enterprise-wide decision support/executive information systems to "wrap-around" the disparate HIS systems without standardizing them. Just as most hospitals data centers today are comprised of a multitude of CPUs (typically a mid-range minicomputer for the core HIS, different minis for a ancillary department systems, and a host of PC servers for standalone systems), so can the merged data center have several different brands of hardware. Yes, it will be somewhat harder for operators to coordinate multiple platforms, but these minor personnel costs far outweigh the enormous fees listed in Table B for replacing systems. Besides, even in supposed "homogenous" environments, multiple platforms are today's "standard."

ROLL YOUR OWN "REMOTE PROCESSING"

In the halcyon seventies, the majority of US hospitals embraced computerization via shared systems, whereby a single mainframe at a central site processed data for dozens or even hundreds of hospitals. Vendors like McAuto, Timeshare and

SMS were renowned for their ability to provide low-cost access to then-expensive mainframes via batch teleprocessing. In the nineties, relatively few vendors still offer shared systems, albeit under the euphemism of "remote" processing. Basically, in IS terms, they represent the ultimate merger, with literally hundreds of hospitals sharing a few mainframes at a central data center, where a handful of operators in a "lights out" control room achieve an economy of scale of immense proportions.The problem, however, is that the shared cost savings go to the vendors' stockholders, not to their client hospitals. If two community hospitals run on remote processing and merge, their are absolutely no savings to the shared vendor: they still need the same amount of disk drives, CPU cycles, mail-room bins, customer support personnel, account executives, etc. Thus, what is good for the goose is decidedly not good for the gander: when merging hospitals, remote systems will preclude any cost savings, except in the unlikely case one can negotiate reduced processing fees (read: profit margins) from the vendor. Rather, the goal in a merger should be to build a system large enough where it can build its own shared data center, purchase software only from a vendor, and realize the economies of scale on its own bottom-line. An ideal model is Columbia/HCA, which processes several hundred hospitals' financial systems from a central data center, while clinical systems are run at a number of regional data centers. It is difficult to pinpoint the exact number of facilities or beds where a cost break-even point can be realized, but probably somewhere between the 1,000 to 2,000 bed range, a group of hospitals could realize a handsome savings over the large remote processing fees they might incur with a shared vendor.

DON'T SIGN THAT LENGTHY CONTRACT!

As a corollary to the preceding point, signing a seven-year or longer agreement with a vendor for remote processing can be the surest "poison pill" to prevent your hospitals' IS operations from ever being economically merged. Such long-term contracts are usually iron-clad, with the hospital being committed to pay the vendor the full multi-million dollar annual fees, even if they convert to another system and cease processing! This is not to cast any blame on the shared vendors for, after all, they are investing in large data centers and support facilities and need contractual protection for their stockholders so that their customers cannot simply change their mind and cancel the contract.The best system to purchase if you are considering a merger anywhere in your future should have the following characteristics:o Be a "turnkey" system, where your only future financial obligation is the relatively minor annual maintenance agreement, usually 10% to 18% of the purchase costs, cancelable with a few months notice with minimal or no penalties.o Be popular among neighboring hospitals that you might ever merge with (in this world of merger-mania, today's competitor might well become tomorrow's partner!)o Be based on relatively "open" or industry-standard architecture, whereby you have ready access to your data files inhouse and utilize interface engines to talk to "foreign" systems easily.o Be based on a generic infrastructure (such as a fiber-optic backbone, Ethernet, with category 5 end runs) and utilizing PCs rather than "dumb" terminals, so the enormous sunk costs of hundreds of devices and costly user training can be readily re-cycled.

WATCH OUR FOR VENDOR "PARTNERS"

In a surprising number of recent mergers, we have encountered the concept of "Partnerships" between hospitals and their HIS vendors, probably springing from Demming's principle that a wise organization should form a partner-type relationship with major suppliers so they can share each others strategic plans, advise each other of upcoming tactical changes, and, in general, assist each other in their business dealings. The problem with this admirable concept is that vendor marketing executives attended the same TQM/CQI seminars as hospitals did, only they have transmuted the meaning of Demming's words into glib sales documents to form an almost monopolistic hold on some CIOs' minds.The result in a merger is that one hospital proclaims its "partner" HIS vendor is now a partner of the merged entity, ruling out any chance for true competition and resulting cost reductions through open market bidding. Again, the concept of a "partner" is a noble one, but in a merger, the only true partners are now the hospitals you are merging with. All HIS vendors are simply that: suppliers of IS products & services who all should now lower their costs to reflect the larger purchasing power of the joint entity. Indeed, the only true measure of a "partner" vendor is the increase of the discount they are willing to proffer now that you have merged with several other facilities. In reality, that discount usually varies in direct proportion with the number of competitors in the running. Partners, si; monopolies, no!

LET OPERATIONS DRIVE TECHNOLOGY, NOT VICE-VERSA

Since the underlying premise behind most mergers is increased operational efficiencies, the raison d'être of technology should be to enhance operational cost savings. Sadly, we have often seen mergers where the reverse is true, that is, where the pursuit of technological "progress" has had an adverse impact on operations. In a single hospitals. such decisions can be costly, but a merger multiplies the magnitude of the expense many times.A classic example of this is replacing so-called "dumb-terminals" with PCs, which has become a holy grail in many institutions, despite widely-quoted studies that the hidden costs of maintaining PCs can exceed several thousand dollars per year. It is as if the IS department is trying to "keep up with the Joneses" by having the latest version of Microsoft's operating system installed before their neighbors. We have seen merger situations where literally thousands of devices have been upgraded to PCs, at a cost of several million dollars in hardware, software and training, with the primary rationale being to simplify the maintenance burden on a handful of analysts in the IS department. This is perverse if the IS department is truly supposed to be a service department meeting user needs, and not vice-versa. A far better technology to explore would be thin-clients or network PCs, which are purported

to lower terminal device costs & user training overhead, rather than raise costs.There are many exciting new areas of technology that individual hospitals are experimenting with on a small scale to see if they can achieve a reasonable ROI: Point-of-service (hand-held) terminals, telemedicine, PACS, imaging, computerized medical records, etc. A merger should not be used as the excuse to migrate these experiments across a number of institutions just because a group purchasing discount can be obtained form the vendor. If they cannot be demonstrated to have saved specific costs at one of the member hospitals, then why spread the risk of increasing costs across the merged entity?

CONCLUSION

When Boards of Directors first hold exploratory talks in a potential merger or affiliation, one of the prime targets in cost-saving discussions is IS, where it seems a simple matter to bring together multiple data centers and IS staffs to lower costs. Yet, in reality, the road to achieving such efficiencies is paved with pitfalls and roadblocks, such as the examples given above. Hospital management needs to be extremely diligent when making operational decisions during a merger or affiliation process to keep this cost-cutting goal in the forefront of technological considerations. Probably because IS is so esoteric (having its own language of acronyms & buzz-words and cult of shamans & gurus), it is all too easy for the common sense of the CEO, COO and CFO to be seduced by the siren song of technological progress sung by CIOs and vendors. IS can be a potentially powerful tool to achieve operational efficiencies in a merger, but only if it is held to the same standard of reducing FTEs and lowering costs as every other department in the merged entities. Yes, IS costs can be reduced in a merger, but only if they are carefully managed by astute operating and financial executives.

ABOUT THE AUTHORS

Vince Ciotti is a co-founder and Principal with the Information Systems consulting firm of HIS Professionals, L.L.C., Santa Fe, New Mexico (www.hispros.com). He is a 29-year veteran of the HIS industry, a regular contributor to HFM's Journal and a frequent speaker at industry seminars.Jim Griffith is also a Principal with the Information Systems consulting firm of HIS Professionals, L.L.C., working out of their Philadelphia, PA, office. He is a 15-year veteran of the HIS industry, having most recently been CIO at Montgomery Hospital Medical Center in Norristown, PA.