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SESSION 104

System Selection: If We Knew Then What We Know Now

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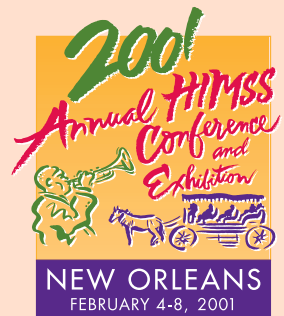
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BACKGROUND

The University of Kentucky Chandler Medical Center (UKCMC) provides educational, research, and clinical services to support the mission of improving health of the citizens of the commonwealth of Kentucky. The 473-bed University of Kentucky Hospital (UKH) is a central resource, providing inpatient services, with more than 20,000 admissions annually. UKH provides Level 1 trauma support and emergency care with more than 35,000 visits per year. Recognized as a statewide, regional, and national referral center, UKH offers 24-hour on-site expertise to meet health care needs ranging from primary care to complex quaternary care. UKH is the premier academic medical facility in Kentucky for acute and intensive care including an Air Medical Service, UK Children's Hospital, a Critical Care Center, Lucille Parker Markey Cancer Center, Women's Health Center, UK Transplant Center, and the UK Center for Minimally Invasive Surgery. The multi-specialty group practice provides care at the Kentucky Clinic with 14 on-site medical clinics, a 21-chair dental clinic, a Student Health Service, and satellite operations of UKH Radiology, Laboratory, and Pharmacy. More than 400 medical faculty in 15 departments and 40 dentists work with residents and support staff to provide primary and tertiary care for more than 500,000 patient visits per year. In addition, several satellite facilities, such as Kentucky Clinic South, and regional clinics offer services throughout the southern and eastern counties of Kentucky.

UKCMC had few information systems that supported clinical practice. In 1998, consultants helped UKCMC to develop an information technology strategic plan. The plan supported a search for an integrated clinical information system, which became known as the ICIS project. The vice chancellor for information services (Chief Information Officer, CIO) was charged with creating and effectively utilizing information technology to support a top-20 academic health center. The CIO and the director of nursing informatics, serving as project leader, selected a multidisciplinary team.

OUR EXPERIENCE

Creation of Project Organization

One guiding principle of the ICIS project was to involve a large number of multidisciplinary team members in the selection process. *Figure 1* displays the team organization.

The Information Systems Executive Committee (ISEC) approved project strategy. ISEC advised the Core Team to select two to three vendors that met their needs to provide leverage for concurrent contract negotiations. The Core Team provided project leadership and was composed of clinicians: physicians, nurses, a case manager, and a respiratory therapist, and administrators: finance, hospital, clinic and group practice. Physicians on the Core Team were selected from a cadre of faculty who were enrolled in or had completed a business certificate program. Team members were chosen based on their previous experience in system selection, reputation as a hard worker or their current role in the institution. The Core Team met weekly for two hours and engaged a system selection consultant to help guide the project. Core Team charges are listed in *Figure 2*.

Figure 1

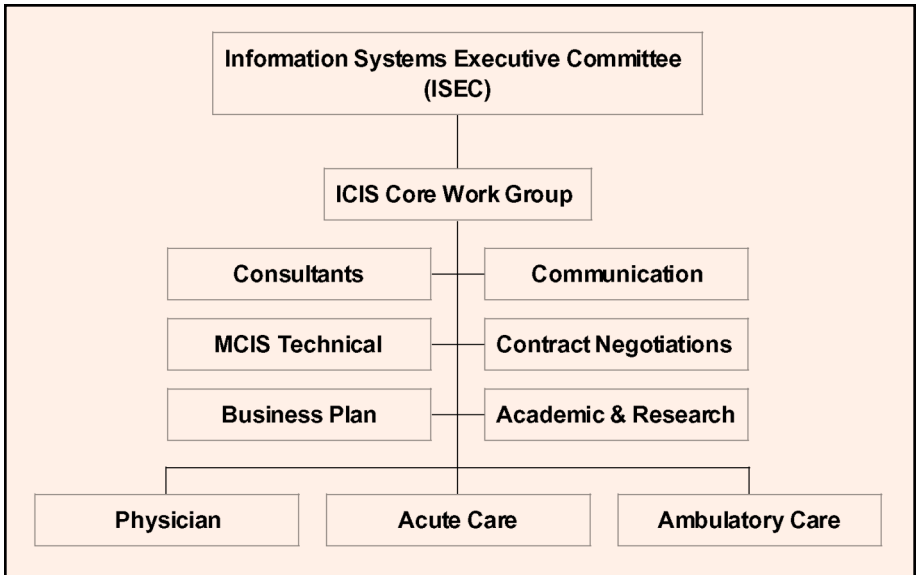


Figure 2: Core Team Charges

- Recommend and oversee project organization.
- Meet established deadlines.
- Act as team leaders and facilitators for practice area and functional teams.
- Facilitate resolution of issues brought forth by practice area and functional teams.
- Integrate information from all teams to provide enterprise-wide priorities.
- Prioritize clinical requirements for enterprise based on practice team's input.
- Identify issues for Information Systems Executive Committee (ISEC) review and resolution.
- Formulate recommendations for ISEC review and approval.

Team members took turns leading different phases of the project. For example, one led the reference checks, another led the vendor exposition and a third led the site visits. Project participants consisted of 110 physicians, nurses, administrators, pharmacists, educators, researchers, finance and information technology members from across the enterprise organized into eight teams. Core Team members also led a Physician, Acute Care, Ambulatory Care, Academic and Research teams to determine functional priorities. These teams met every other week during development of the Request For Proposal (RFP) phase and then sporadically as project needs dictated. The four support teams were:

1. Technical, which evaluated vendor hardware and software proposals;
2. Business Plan, which worked in conjunction with a consultant to develop a generic and vendor specific business case;
3. Communication, which communicated project activities and solicited feedback; and
4. Contract Negotiation, which along with another consultant team guided dual contract negotiations.

Project Management Framework

Project management methodology was used to guide the process. The Core Team's first charge was to agree on a project mission. The project mission was:

The ICIS team will recommend, based on an objective selection process, appropriate vendor partner(s) to provide an integrated clinical information system as a tool to facilitate business process redesign to support high quality patient care in a fiscally sound manner across the UK HealthCare Enterprise. This project supports the UKCMC's objective to create and effectively utilize information technology to support a top-20 academic health center. ICIS begins the building of a foundation for a computer-based patient record and ultimately, the full electronic medical record. The ICIS project will be completed when vendor partner(s) contract(s) is signed.

The chancellor was asked to serve as our project sponsor to demonstrate an enterprise commitment. Team building strategies helped create an effective, functional, core-working group. Team members rotated group roles such as leader, facilitator, scribe, and timekeeper. A timed agenda was sent in advance and minutes with action items and next steps were circulated via e-mail. A project workplan was provided by the selection consultants and modified by UKCMC team members. A traditional system selection model was followed. All UKCMC faculty and staff were invited to a formal project kick off to mark the official beginning of the project and to facilitate obtaining resources as the project progressed. A scoring process was designed in advance to grade the vendors at each stage of the evaluation process. Major milestones of the project are listed in *Figure 3*.

System Selection Process

Request for Information (RFI): The RFI was sent to 20 vendors that had clinical information systems for the inpatient and ambulatory setting. We had difficulty agreeing on the criteria to evaluate the vendor information. An addendum (additional questions) was sent to the vendors to elicit more information and help us narrow the number of vendors that would receive the Request for Proposal (RFP).

Request for Proposal (RFP): The consulting firm provided a draft RFP that the various committees reviewed and revised. The RFP was sent to 13 vendors. A scoring methodology, which assigned weights to system functionality, vendor support capabilities, system technology, vendor profile, projected cost, and business offering, was determined prior to review of the RFP. Kentucky State law has strict guidelines on the RFP process. A purchasing representative advised the committee on proper procedures. One vendor missed the RFP due date so it was eliminated from the review process. To address clinician

Figure 3: Major Milestones

Request for Information (RFI) to vendors
Creation of project teams
Project Kick off
RFI response review
Prioritization of business/functional requirements
Send Request for Proposal (RFP) to vendors
Create scenarios for vendor demonstration
RFP evaluation
Proposal validation sessions
Reference checking
Vendor expositions
Site visits
Develop generic business case
Identification of finalist vendors
Develop vendor specific business case
Negotiate contract(s)
Sign contract

mistrust in the paper scoring process the vendors were invited to demonstrate their software to validate their written proposals.

Reference Checks: The reference team task force created a tool. Sites were obtained from the RFP responses and from a third party. Team members volunteered to call various sites and submit a written report to the Core Team.

Proposal Validation Session: Vendors were required to demonstrate general release or beta software (no alpha) and were asked to identify the software status. Our goal was to structure an “apples to apples” evaluation, therefore case study “scenarios” that described the data and functions to be demonstrated were sent to the vendor in advance. See *Figure 4* for an example of the evaluation tool that was created from the case study scenario. The sessions were timed, and moderated by a UKCMC team member to ensure adherence to the scenarios. Each team member rated the seven vendors and the top three continued in the evaluation process.

Vendor Expositions: A strict outline described how the three vendors would demonstrate their product. A UKCMC moderator facilitated all sessions. Vendors were allowed a one-hour general overview session to describe their applications, then they were given scenarios for four sessions. Session 1 was geared toward physicians, clinical researchers, and other individuals working with diagnostic and prescriptive processes. Topics included, but were not limited to, scheduling, documentation, clinician screens, order entry, results retrieval, and clinical decision support. Session 2 was geared toward direct patient caregivers, such as nurses, physical and occupational therapists and dietitians. Topics included, but were not limited to, patient tracking, pathways/care plans, flowsheets and graphics, documentation, order entry, results retrieval, and scheduling. Session 3 was for individuals involved in business/managed care processes. Topics included, but were not limited to, authorization, registration, scheduling, charge generation, billing, managed care/protocol tracking, and ad hoc reporting. Session 4 was for pharmacists, pharmacy technicians and other individuals responsible for the medication utilization review process. Topics included, but were not limited to, medication use process, drug dispensing, target drug program, formulary, and medication administration record (MAR). The technical session consisted of a set of questions created by the technical committee after reviewing the RFP and other information previously received from the vendor. Interactive sessions provided continuous demonstrations where staffs were encouraged to stop by to ask questions and view specific functions. The scores were very close with no clear differentiation between the three vendors, so all progressed to the site visit phase.

Site Visits: None of the three vendors were able to provide a single site visit to showcase all the applications necessary for an enterprise wide system. Therefore, we visited two to three sites for each vendor. The site visit team consisted of physicians, front line nurses, a clinic representative, a pharmacist,

Figure 4: Proposal Validation Session—Clinical Scenario Evaluation Form

Name: _____		Date: _____		Vendor: _____	
Scenario Evaluation	Did Not See (check)	Functionality : 1 = Poor 2 = Fair 3 = Good 4 = Excellent (Circle)	Ease of Use: 1 = Poor 2 = Fair 3 = Good 4 = Excellent (Circle)	Comments	
1. Show how physician logs on.		1 2 3 4	1 2 3 4		
2. Clinician view is user specific throughout the system e.g. enterprise wide (no matter where sign on see same view)		1 2 3 4	1 2 3 4		
3. Show inpatient physician view:		28 points	28 points		
a. Physicians daily work list for clinical and office e.g. outpt schedule, scheduled procedures, inpatient census, consults		1 2 3 4	1 2 3 4		
b. Prompt for unreviewed lab work		1 2 3 4	1 2 3 4		
c. Prompt for abnormal lab work		1 2 3 4	1 2 3 4		
d. How to access patient's primary care physician		1 2 3 4	1 2 3 4		
e. How to access patient's insurance status		1 2 3 4	1 2 3 4		
f. Data in graphic format e.g. serial vital signs, labs, medication dosages		1 2 3 4	1 2 3 4		
g. Show how PCP and active consultant provider are notified of patient visits.		1 2 3 4	1 2 3 4		

an admitting representative, the Chief Information Officer, and the project leader. Functionality observed at the site visits were scored. These scores were used to narrow the number of vendors to two.

Business case: Concurrent with the demonstration and site visit phase, we developed a business case including anticipated return on investment (ROI). A consultant was employed to guide our business planning/development staff and to collect data. Initially, a generic business case was created which outlined the anticipated benefits of implementing an integrated clinical information system. After choosing the two vendor finalists, their proposals were used to prepare a business case that analyzed the costs and anticipated benefits of their respective systems. This document became paramount in the contract negotiation stage.

Contract Negotiations: The two finalists were invited to participate in concurrent negotiations. A draft Strategic Technology Alliance (STA) was sent to each vendor for their review. A two-day session was held to discuss the vendor's issues with our draft STA. At the end of each session, the outstanding items were summarized and assigned a score. The vendors again were rated. Contract negotiations were begun with the vendor receiving the best score. Almost two years after the initial project kick off, we finally signed the contract.

LESSONS LEARNED "SELECTION DO'S AND DON'TS"

Building a Strong Multidisciplinary Team

This was one of the first times that a Medical Center-wide project had been undertaken and each of many constituencies insisted that their interests be represented on the Core Team. This resulted in an unwieldy team of 20 members. One of the major barriers to the team working effectively in the beginning was a lack of trust or confidence that the Core Team really had decision-making authority. People were leery that their recommendations would not be accepted by ISEC. Confidence was gained as the process progressed and members saw their decisions accepted and supported. Another issue was whether this was truly an enterprise project or just a hospital project. It became an enterprise-wide project by inviting multidisciplinary representatives from across the Medical Center to participate in the selection of tools to provide the right information to the right person at the right time for improving care.

One difficulty was that many of the team members had no experience with system selection and had no vision of what a clinical information system could do for them. It was hard to identify what they wanted in a system when they had little idea about what was possible. To help raise awareness about functionality of clinical information systems selected team members were sent to information systems seminars and experts were brought to UKCMC. A second difficulty was that all of the team

members had full-time jobs, so finding time for committee work was an issue. This slowed the selection project but increased commitment to the initiative. It also increased the creativity in the selection process by having so many talented individuals from different parts of the organization working on a common mission.

Do's and Don'ts

- Select a multidisciplinary team of future leaders.
- Limit teams size to 10 or less and clearly identify which constituency each party represents.
- Check titles at the door, each team member's input is valued.
- Use group facilitation: start on time, set a timed agenda in advance, keep timely minutes, and use consensus decision making.
- Select a clinician project leader who works closely with the Chief Information Officer.
- Dedicate some full-time individuals to decrease selection time.
- Conduct activities to expose team members to clinical information systems, such as attending conferences on clinical information systems, making site visits, reading articles, and inviting respected clinicians to present their experience.

Top Management Support

The successful purchase and implementation of a clinical information system requires a major culture change. To accomplish this culture change, impacted constituencies must believe in a vision of improved patient care resulting from the adoption of the electronic clinical information system. Top management's leadership challenge is to convey the importance of this vision to future users so they will support the needed changes. Innovative use of information technology was identified as a critical success factor by UKCMC top administrators which led to appointment of a chief information officer as vice chancellor. The chancellor conveyed his commitment to the project by sending the message that financial support for the project was expected. He also communicated his project support to "front-line" users in a series of "Lunches with the Chancellor" that served to give key opinion leaders an update on the project. However, it also was critical to obtain the support of other key administrators and faculty. For several months, it was unclear that the key administrators or faculty were convinced that the required investment was the most effective use of available funds. The mixed messages resulted in the ICIS team not receiving a clear-cut budget and some constituencies objecting to "moving too fast to spend too much money." Fortunately, on a visit to another institution, the UK Hospital Chief Executive Officer was able to observe the successful use of a clinical information system. Upon his return, he became an articulate advocate for an electronic clinical information system.

Do's and Don'ts:

- Make sure all top leaders are enlisted as project sponsors.
- Document use of information technology as a critical success factor necessary for the achievement of the institution's mission and vision.
- Encourage top leaders to advocate in highly visible ways directly with all constituencies.
- Speak at all information sessions such as Project Kick Off, Lunch with the Chancellor, Department meetings, etc.
- Include senior leadership quotes in written project communications.
- Ensure that top leadership has the opportunity to observe successful system use (i.e. arrange for their own site visit if they are not convinced or invite experts from sites similar to yours to present to your top administrators and key faculty).
- Assign team members to keep key administrators/faculty up to date throughout the project and seek their input.

Physician Support

Another guiding principle was that the selection must be clinicians driven. This necessitates strong support from key physician leaders. Today's medical climate dictates that physicians in an academic setting must "earn their keep." Therefore, it is imperative that physician leadership time must be purchased. For example, if it is estimated that the project will take one day a week from the physician's other duties; you would reimburse the physician for 20 percent of his or her salary. A project of this magnitude requires clinician leadership and enthusiasm. As was our case, this may be found in someone looking to "move up" in the medical staff ranks rather than an established leader.

Do's and Don'ts:

- Reimburse physicians for their time.
- Pay their way to informatics conferences.
- Schedule meetings around their schedules.

Consultant Support

Three consulting firms helped with the selection process, the business case, and contract negotiations. Consultants were selected to fill “gaps” in our organizational expertise. There was some role confusion. Some consultants thought they were there to advise and guide the process and that the UKCMC teams would do the actual detail work. In contrast, the UKCMC team members saw themselves as the ICIS advisors and that the consultants should be responsible for the work. The most positive aspect was the skill transference from the consultant to UKCMC team members.

Do's and Don'ts:

- Seek consultants for institutional knowledge deficit areas.
- Clearly define consultant role in a contract.
- Explicitly communicate consultant and team members “division of labor”.
- Assign an internal counterpart for the consultant to provide the consultant with necessary information and to learn new skills.
- Don't expect one consultant to be an expert on all aspects of the selection process.

Financial Commitment

When the ICIS team began this project, no specific budget was outlined for the purchase and implementation of the new clinical information system. Team members understood that they were to identify the system best able to meet the needs of the institution but were not given any spending limits. After the lengthy selection process, ISEC was provided with an estimated cost. We provided a more exhaustive cost projection for internal and vendor costs than had ever been done before. Unfortunately, the cost was significantly greater than that anticipated by the administration. When leadership balked at the cost, the ICIS team was instructed to re-work the budget. At one point, when it seemed that sufficient funds might not be available, the team was forced to consider abandoning the project. This had a devastating impact on team member morale, and they feared that two years of good faith effort might be for naught. In the end, the administration agreed to provide most of the funds required. To accommodate the budget, the length of the implementation process was prolonged and creative financing was negotiated with the vendor. Again the ICIS team had to work through several iterations of the implementation timeline (each with its own budget) as these internal negotiations progressed. This was a frustrating, time consuming process.

Do's and Don'ts:

- Specify a target budget or budget range at the outset of the project.
- Clarify the constituencies that will be responsible for providing the funding and ensure that they are informed of all developments during the selection and contract negotiation processes.
- Keep open lines of communication between the selection team and those responsible for the financial commitment throughout the selection process.

Communicate, Communicate, Communicate

Our challenge was to determine how to communicate with major constituencies who work different shifts, ad-hoc schedules, and on and off campus. Our first task was to create an awareness of the ICIS project. This began with the creation of a project icon. The icon was used on every written project document. Then we developed ways to communicate the icon and project updates—a newsletter, a Web site, bulk mailings of flyers, and poster displays. In addition we utilized many forums such as blast e-mails, payroll “stuffers,” individual departmental newsletters, annual colloquiums and leadership retreats. Our second task was to foster two-way communications regarding the project. This was facilitated by soliciting questions or comments via an e-mail address identified on all printed material and by posting information on vendor expositions.

Do's and Don'ts

- Develop an icon/logo and use it on all project material.

- Communicate using multiple forums: bulk mailings, payroll “stuffers,” individual department newsletters, list-serve e-mails, annual colloquiums, and leadership retreats.
- Establish new forums such as a project e-mail address, Web page, newsletter and “give aways” from ballpoint pens to palm pilots.
- Solicit two-way communications via e-mail and poster displays, sending project representatives to standing committee meetings, and hosting a vendor exposition.

RFI and RFP

It took us almost two years to select a system. With our university and hospital purchasing policies and procedures it is a challenge to move quickly through a selection process. One benefit of the delay is that there is more widespread acceptance among clinicians and administrators of the need for a clinical information system. We believe this will help decrease barriers during implementation. Conversely with a lengthy selection process we have potentially delayed achievement of the anticipated benefits of implementing the clinical information system.

Another factor that contributed to lengthening our selection was a healthy skepticism of the paper portions of the selection process. We could not make site visits to 20 vendors so we used the RFI and RFP process to rank the vendors. We were dissatisfied with the responses to some questions and with the scoring methodology. We questioned whether our weighting schema truly reflected our institutional priorities and clinician needs. So we asked for more materials from the vendors and added the Proposal Validation Session, which along with many meetings spent analyzing the information, contributed to the length of the selection process.

Do's and Don'ts

- Identify your institutions policies and procedures on selection/purchasing early in the process
- Request a purchasing advisor for your team if you have a complex process
- Identify institutional priorities first
- Have clinicians identify their top priorities and major obstacles to the delivery of quality care
- Use priorities to develop a scoring system
- Learn from others regarding the selection process

Reference Checks

The ICIS team members initially anticipated that evaluations by current system users would provide useful information to assist with our choice. The team members thought that assessments by actual users would be more valuable than marketing information provided by vendors. Therefore, we asked vendors to provide names of institutions at which their systems were installed and additional institutions were identified by word-of-mouth. A group of nurses, physicians, and other staff then telephoned their counterparts at these sites and asked about the pros and cons of their system. In some cases, it was challenging to identify the appropriate person with whom to talk at the reference check site. Because of the multiple time demands on both the interviewer and the interviewees, it was often difficult to arrange a convenient time and the process became prolonged. Although we developed a standard form for the reference check, some of the most useful information came from open-ended questions assessing the users' overall satisfaction with the system. The responses indicated that most users at the reference check institutions generally were satisfied with their systems. Perhaps this should not have been surprising, as it was unlikely that vendors would provide names of customers who were unhappy with their system. Additional reasons that the reference checks proved to be of little help included:

- Many of the sites only had part of the system installed.
- Some sites had previous versions of the product installed.
- Some sites were alpha or beta sites for the product.
- Many of the sites had customized the product and could not distinguish between the standard product and their customized version.

As a result, the ICIS team elected not to use the reference check scores in the final scoring system. However, the reference checks did prove to be useful in identifying potential problem areas (both specific to an individual vendor's system and more general implementation challenges) and formulating questions to ask the vendors and the hosts at site visits.

Do's and Don'ts:

- Recognize that reference checks often will be evaluating a system that is different than the one that will be delivered.
- Recognize that reference checks are time-consuming and do not easily provide quantifiable information that can be used to score the system.
- Instead, plan to use the reference checks to identify areas upon which to focus in the site visits and to formulate specific follow-up questions for the vendors and site visit hosts.

Vendor Exposition

Preparation for this phase of the project was intense. Planning for the vendor demonstrations focused on: 1) times; 2) locations; 3) format; and 4) last, but not least, food.

- Time: We wanted to encourage faculty participation by scheduling demonstrations when they would not conflict with patient care and administrative commitments; therefore, certain sessions of interest to physicians were repeated at various times of the day: 7 a.m., noon, 4 p.m.
- Location: The demonstrations required rooms with multiple attributes, such as appropriate audio-visual equipment, analog phone lines, and seating capacity for 100. Because of classroom and auditorium schedules, it appeared we would have to hold the demos in a building next to the hospital. The more we discussed this, the more we realized physicians and staff would not go this far out of their way to attend the demos. We elected not to compromise and follow the path of least resistance—we rescheduled several committee meetings and grand rounds so that we could reserve the Hospital Auditorium for all three days of each vendor demonstration.
- Format: We wanted to ensure that each vendor showed us how their system performed similar transactions and functions. We wanted to limit marketing, so we requested that they follow a scripted scenario for their presentation and told them deviation from the script would disqualify them.
- Food: We learned not to under estimate the power of food. We initially assumed that serving refreshments would increase the number of participants, but we didn't expect the "type" of food to influence the number. We were wrong—attendance soared with PIZZA.

Do's and Don'ts

- Publish dates, distribute announcements and personalized invitations. Start sending out DAILY reminders about one week prior to the expo.
- Require vendors to demonstrate scripted scenarios.
- Require vendors to demonstrate versions of software they currently have live, in production environments.
- Establish separate, interactive sessions where vendors can demo the system based on individual requests.
- Hold questions until the end. Require audience to submit questions in writing, which can be addressed if time permits or responded to by e-mail.
- Serve food—pizza brought in more attendees than sub sandwiches, and of course it cost more, too!

Site Visits

Our approach to site visits, according to the vendors, was also somewhat unorthodox. The vendors were surprised that we banned them from attending meetings or accompanying our team on tours of the host sites. We did this to allow the hosts to speak candidly about the software and vendor support. Site selection was another challenge. Several primary host sites declined visits due to being overwhelmed with Y2K work. We opted to visit available locations to meet our self-imposed project deadline. This compromise was costly, both financially and in terms of the quality of the sites. The mechanics of scheduling site visits also should be given close scrutiny. Vendor representatives normally contact host sites, obtain dates, and then communicate these to the customer. After UKCMC's first trip, where we either did not see the software, or did not see it in a live environment, we began asking for the name and number of a contact at the host site. A call to the host confirmed which version of software was actually running in which environments. During this call, we also inquired about staff being available to meet and/or tour with our team. We wanted to speak directly with physicians, nurses, administrators, systems analysts, etc. Several host sites did not know of this desire until we spoke to them directly.

Do's and Don'ts

- Establish the objectives and agenda for the visit based on what will be seen.
- Match team members to system available at the site visit, but have at least three people participate in all visits for “comparison shopping.”
- Demand interaction between site team and host counterparts; nurses talk with nurses, doctors to doctors, project manager to project manager, administrator to administrator, etc.
- Throw the vendor out! Advise vendors prior to site visits that their sales representatives will not be allowed to attend or participate in meetings or discussions with the hosts.
- One-to-one travel coordination; one representative from your institution deals directly with one vendor representative on dates, locations, lodging, ground transportation, etc.
- Request name/number/e-mail address of contact at hosting facility. Verify with contact that you will see same version of software in a live environment as that which was demonstrated during the expo.
- Determine in advance any team member quirks, such as won't fly on prop planes, gets cranky traveling after 10 p.m., prefers “red-eye” flights to staying over an extra night, etc.
- Reconfirm everything!

Business Case

Our development of a compelling business case prior to inviting the finalists for concurrent contract negotiation was important to our success in attracting a strategic vendor partner. Our development of a generic business case demonstrated that we had done our homework and that we were serious in our intent to measure and achieve all possible tangible benefits from the implementation of the system for which we finally contracted. This generic business case also provided a consistent framework for each finalist vendor to utilize in constructing their vendor-specific business case as the first step in concurrent contract negotiations. Having the two finalists submit their final offers in our business case model and format made it much easier to compare their business proposals in preparations for contract negotiations. Internally, the generic business case also was useful in our continuing efforts to convince the medical center leaders that there could be a real payback from the implementation of an integrated clinical information system. Of course, the ultimate proof of this is when the selected vendor finally agreed to go “at risk” for nearly half of their total revenue potential over the life of the contract, solely dependent upon our joint ability to demonstrate and document the achievement of the projected tangible benefits.

Do's and Don'ts

- Dedicate resources to completion of the generic business case.
- Do not wait until the end to develop the business case, data gathering and analysis takes a long time.
- Be prepared to ask the vendors over and over again to submit cost proposals in your format.

Contract Negotiations

In order to obtain the best contract, it is vitally important to engage in concurrent contract negotiations with the two finalist vendors. To make this work, we learned that it was important to accept either vendor as the ultimate survivor of this process. It was critical to go into concurrent negotiations without a clear favorite in mind, to avoid compromising the competitive advantage that concurrent negotiations can provide. This meant that during negotiations, we had to be willing to walk away and renew negotiations with the other finalist vendor. Clearly, this will only work if either vendor is acceptable as the ultimate survivor of negotiations.

Do's and Don'ts

- Include vendor's RFP response in the contract.
- Select at least two finalist vendors that clinicians “can live with.”
- Keep detailed notes of each negotiation session to track active issues.
- Maintain control of contract changes.
- Don't give up!

Strategic Partnership

Ultimately, the goal of the concurrent negotiations is to find the best long-term strategic technology partner to achieve the project objectives. To succeed over the long haul, the final agreement must be

a true “win-win”. In our case, we have crafted a unique 10-year partnership agreement with our vendor that is a good business deal for both parties. By spreading out many of the acquisition expenditures over the 10-year life of the agreement, UKCMC minimized the usual up-front loading of cost normally attributed to major core system acquisitions. At the same time, our vendor partner obtained a predictable revenue stream that helps them stay in favor with Wall Street investment analysts.

Do’s and Don’ts

- Be open to creative financing.
- Be patient; working out a non-traditional contract is time consuming.

CONCLUSION

It is a challenge to find the time and resources to involve clinicians in selection. It is essential to support a clinician-driven process because these clinicians will be responsible for implementation. They know the business of patient care and know what they need to improve health care delivery. Mixing clinical experts, information services expertise, administrative wisdom and financial wizardry together on our project team led to a lively process for selection of a clinical information system.

AUTHOR BIOGRAPHIES

All presenters were members of the ICIS Core Workgroup and are members of the ICIS Core Implementation Team currently in process at University of Kentucky Chandler Medical Center, Lexington, Kentucky.

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Fran McIntyre, Associate Director Kentucky Clinic. She served as a Core Team member, coordinated site visits, facilitated ambulatory team meetings, and transition team meetings.

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