

Culture

multiple

- We have a national perspective as well as a local one, academic as well as practice-based.
- We don't set barriers inside the institution - there is a tradition of collaboration.
- We have a strong entrepreneurial tradition.
- Clinical quality improvement is the most important issue on our minds.
- We have a 5-year strategic vision for our system.
- IT is a critical factor in our strategy, more important than bricks and mortar.
- We use a coaching process within the organization to bring people together.
- Paper medical record is not required for care - the expectation is that the data will be available online
- There is an IT plan for the whole university, standards, and incentives for participation.
- We have a history of being entrepreneurial, taking controlled risks.
- We try to keep each other informed so as not to duplicate what is being built or tested.
- The University has a long history of testing good ideas at multiple sites simultaneously.
- We have the same mission and culture in all of our locations.
- We depend on a lot of bottom-up or grass roots development and pilot testing.
- Faculty are collaborative and interactive inside and outside the institution.
- Superstars fail here. No one is more important than the organization.
- The organization's strategic plan has a goal on the role of IT in making it great.
- Collaboration across schools already exists through faculty appointments.
- Having information available isn't a luxury, it's an expectation.
- We plan for the whole region, not just our university or the health sciences center.
- IT is a regular topic in leadership meetings.
- Active support for IT from leadership at highest levels.
- Institutional view dominates – beyond parochial departmental needs.
- Culture of collegiality, trust, civility, consensus, accountability.
- Leadership cooperation & agreement on major issues.
- People in other parts of the university who are like wizards with databases share their expertise freely.
- Deeply ingrained value structure/loyalty to organization.
- We have a strategic plan that gives direction.
- Information management issues regularly discussed in major forums of institution.

- There is leadership encouragement to adopt new technology.
- We take advantage of good ideas wherever they are, e.g., the student-designed system for course evaluations.
- The highest priority is placed on research, everyone knows this.
- Interdisciplinarity is a key core value.
- Researchers learn about new technologies at meetings & share with IS staff.
- CEO understands the need for continual improvement of the IT foundation.
- Hospital CIO has an IAIMS view, has been part of IAIMS all along.
- We have a great brand name.
- We have a known culture of entrepreneurial spirit.
- Our 'brand name' makes us an attractive partner to industry.
- Senior leaders understand what's going on and know that if someone wants 1 million for a system, everyone below this has discussed and supported it.

Expertise

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- In-house development staff can quickly build a custom tool to meet our needs.
We don't have to depend on off-the-shelf solutions.
- We have an incredible reservoir of expertise.
- We have IT people who know the scientists, and the culture of science.
- The library is a central point for IT information for the medical center.
- Faculty members are eager to do informatics projects with medical students.
- There is a strong University IT group.
- The library is actively involved in IT development/innovation.
- We have a person who is tasked to pay attention to copyright and multimedia.
- Critical mass of informatics-savvy, innovative faculty.
- IAIMS leader's talent for aligning stakeholders.
- IAIMS leader's talent for understanding the institution.
- We have a number of students with strong technology backgrounds.
- We have an interface group of top-notch technology & business skills that are the liaison between schools and clinical enterprise

Financing

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- There is a student IT fee that is returned to the schools for their use.
- IT Strategic plan has a 5 year budget approved; there is also a mechanism for updating and adding new items.
- We have good endowment & development support for research.
- We spend 1/3 of our capital on information systems.
- Investment of sufficient (large amounts) of institutional funds.

Organization

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- We have key people involved in IAIMS and central support for IAIMS staff.
- Conscious interweaving of academic and clinical IT groups.
- Having a single CIO allows synergies across the medical and non-medical campuses.
- Informatics is integrated into the clinical side of the operation, not separate like a 'basic science' department.
- Two-pronged process for IT communication & decisions. One committee brings IT people and their bosses together. Another group looks into new things. The
- There are informatics /IT projects going on in several departments - they learn from one another.
- Clinical systems advisory group trains members to take the institutional view.
- Having a single CIO lets us leverage huge IT investments being made at different schools.
- Decentralized governance with strong coordination mechanisms - this is the best organizational model to support innovation.
- Back in the 80s, we had someone thinking ahead of the wave on IT and integration.
- There is a single central IS structure that deals with IT applications, with 3 subcommittees: academic, management, and clinical care.
- There is a responsive governance structure that fits within the budget cycle.
- Can't overestimate importance of bringing together the school and the hospital. This helps the cross-enterprise effort.
- We have many technology committees and people who are members of several of them serve as informal links between them.
- We have a consensus process for initiating, framing, authorizing and funding projects.
- There is a committee that defines software and hardware standards.
- Our process works to identify opportunities & needs, bring a business plan to the leadership.
- IT planning & development are totally integrated.
- Our governance includes all clinical stakeholders as full partners.
- IT steering committee has academic leaders and IT managers together.
- VP office has an IT staff member who works actively with CIOs of affiliated hospitals.
- Have different kinds of legal entities available - e.g. can run sponsored projects through a foundation to reduce state control.
- The enterprise IT organization supports the academic mission.
- Our medical center structure brings physicians, hospitals, education and practice into the same management structure, making it easier to integrate systems.
- Integration with non-medical campus through IT brings more resources to our side.
- Our IT staff have formed informal committees for communication/problem solving.
- We have a stable academic departmental structure.
- There is a regular weekly meeting for project reviews.
- A single group sets priorities across organization for resource utilization.

- Hospital belongs to the university.
- Informatics department has authority and budget support for business-related IT activities.
- Stability & length of service in leadership positions.
- Strong IAIMS leader at the table with senior institutional leaders.
- CIO has authority to reallocate institutional IT funds across missions.
- There is a mechanism to support investing quickly in promising ideas.
- Our information organizations are organizationally aligned.
- There are multiple mechanisms for user involvement.
- There is an information sharing group, includes all IS directors.
- Consensus process in the Executive Council assures support for IT projects.

Partners

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- We have a history of partnering with industry for system development.
- Strong tradition of regional collaboration among academic centers based on IT infrastructure.
- Due to state fiber network and tradition of collaboration, vendors want to work with us
- There is a long standing consortium of libraries with single licensing mechanism for digital resources.
- Every college, school, & university is connected to the state infrastructure.
- Many equipment manufacturers use us as a data site or test site for their products.
- Technology is part of the affiliation agreement between school and hospital svstems.
- We have political support of city leaders.
- State universities share a set of knowledge bases and a history of advanced IT development.
- We share educational resources across the campus and across town.
- We have regional programs - it gives us a great testbed and also the responsibility to meet a great variety of needs.
- Our involvement in gigapop and high performance computing comes from the non-medical campus. We have very active computer science and engineering

Programs

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- In the 80s the health sciences library functioned as an incubator for informatics projects.
- We have a usability lab for software development.
- Institutional endowment fund for IT gives grants for innovative projects.
- All health professions programs have informatics requirements.
- We have targetted programs, don't try to do everything.
- We have a research technology support center and a clinical support team.
- Training is available at several levels, including classes offered by IT group and also special training for educators & researchers.
- Students use systems in training like those they will use in practice.
- Faculty can learn the skills they need to create e-curriculum materials.
- The library has been very active in outreach to county health departments.
- We have a leadership focus on getting curriculum materials online.
- We have a laptop requirement for students.
- Biomedical engineering program brings medical and engineering schools together
- We have a special unit to support research scientists.
- We have an excellent system of expedited review through IRB for informatics research.
- Our involvement with NCI is helping us recruit better faculty.
- For 10 years, we have had a focus on software, databases and informatics.
- Researchers can get data management, acquisition or validation services from a central source

Rewards

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- Innovation in instructional technology is recognized for promotion and tenure.
- The institution rewards entrepreneurship.
- There are incentives for participation in IT activities & adoption of standards.
- We have an innovation awards process.
- We have several faculty tracks; in one of them, creativity can be demonstrated by developing computer-based programs.

Standards

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- We control what goes onto a clinical 'device'.
- All of our health organizations have used the same medical record for many years.
- Main campus has a desktop standard that medical center has adopted too.
- Medical center uses university financial, HR, payroll and so does the hospital.
- The clinical record is readable for everyone and better than it was in paper form.
- The same system is used in all locations.
- The university has strong commitment to the notion of a single set of standards.
- We have established build-or-buy policies.
- Flexible approach to standards deployment.

Systems

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- We invest more than our peers in databases and IT.
- We have built a faculty interest system that also has grants information.
- Our system connects student records, accounts, housing and anything else that touches the student
- System provides data that helps us make management decisions.
- Customized internal systems allow people to be very efficient.
- There is free, useful curriculum management software developed here.
- The financial system is robust.
- Have core gigabit network with switched Ethernet to desktop.
- We use the same systems in support of all three missions so the missions are integrated.
- We have a large IT infrastructure and system-wide teleconferencing capability.
- University's node support provides technology foundation for education.
- Have FDDI ring and state fiber network and Internet 2/NGI center.
- Our EMR web interface pulls together access to diverse data - documents, clinical repository, images, etc.
- Network architecture that supports using the web for integration.