

*"When you're finished changing, you're finished."*

**Benjamin Franklin**  
**1706-1790**

### **Welcome to our first issue!**

*We at Cardinal Consulting are pleased to provide you with this quarterly roundup of recent articles related to health care information technology.*

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## **Why management should provide a coach to the newly-promoted CIO**

**By Everett Hines, Principal, CCI**

When a CIO vacancy occurs, hospital management usually searches outside the organization to bring in an individual with good management skills, an understanding of technology, and leadership qualities. In some circumstances, there is a talented individual already within the IT department who shows potential, understands the culture of the organization, and is given the opportunity to move up to the CIO position.

However, within a short time management may be disappointed by the performance of the individual who seemed to have such promise. Why does this happen? There are several major factors that cause the individual not to live up to expectation, including:

- The new CIO has been at the hospital for several years and knows only one environment (such as Meditech, McKesson, or HBOC)
- The new CIO has had a technically-oriented role previously (such as project manager or infrastructure manager)
- The new CIO has had very limited interaction with key members of administration and medical staff
- The new CIO probably has attended some industry seminars, but does not have an in-depth grasp of the health information systems industry.

In the months following promotion, the new CIO has a honeymoon period in which significant improvements can be recommended which, if fiscally possible, will be approved by administration. Yet during this key transition period, the new CIO is trying to understand his or her new role, adjust to the new lifestyle of mandatory meetings, deal with vendors who are trying to sell their "latest and greatest", and respond to IT employees who are trying to improve their position. Typically, little is changed from the IT organization that was inherited. The expectations of management and physicians quickly change to disappointment.

An entirely different scenario is possible if a senior Health Information Systems individual is provided by administration to work with the newly-promoted CIO. The following key actions can take place in the first three months:

- Perform a quick assessment of current IT resources
  - Are the key IT individuals capable and trained to perform their function?
  - Does the current suite of applications make sense?



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- Are the IT vendors supplying an appropriate level of support?
- Meet with the user department "champions" of each of the major systems.
  - How are the systems functioning and what needs to be changed?
- Meet with all members of senior administration.
  - What is their assessment of current operations?
  - What improvements are they are seeking?
- Meet with the vendors of the major software systems currently installed at the hospital.
  - Review the terms of their contracts, discuss support and training that is required, and listen to their perspective regarding how usage of their systems could be improved.

The coach should assist the new CIO in developing an assessment of the strengths, weaknesses, and the immediate next steps for departmental improvements. This should be discussed with management to obtain their suggestions and buy-in. The following types of activities can be facilitated by the coach:

- Brainstorm on key issues with members of administration
- "Lean" on the incumbent vendors to supply more support to fix immediate pressing issues
- Set up meetings with some of the successful senior CIOs in the region to see how other IT departments are organized and how they approach problem solving and major projects
- Set up meetings with the senior executives of the primary IT vendor(s) operating at the hospital
- Review the pros and cons of the major professional organizations that the CIO should consider joining
- If "burning" issues must be fixed, i.e., the billing system is functioning poorly, suggest outside expert resources that can fix the issues quickly
- As requests come in from key players throughout the institution, assist the CIO in handling them without offending the requestor. Many of the requestors will be important future relationships.
- Develop a short-range tactical plan and outline activities for the development of a long-range plan

For the above activities to take place, the coach should be an individual with many years of experience in the Health Information Systems industry. The coach should have functioned as a CIO and have worked in other aspects of the health care field.

## **Automated paths save \$3721/patient**

After struggling with a manual clinical pathways process, **Valley View Hospital** (Glenwood Springs, CO) opted to automate using Medstat's *Outcomes Analyst* application. The change allowed the hospital to expand the number of clinical paths, so that by the end of 2002, paths were in use for over half of all inpatients. The overall results for pathed patients?

- 1.5 day decrease in length of stay
- \$3721 drop in charges per patient
- 11.5% decrease in patients with complications
- 2% drop in unplanned readmissions

Source: The Path to improved results. *Health Management Technology*, December 2003;24(12):pp 16+. Full text free here:  
<http://www.healthmgttech.com/archives/h1203path.htm>



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## HIPAA cost/provider: \$5.7 million

The typical health care provider will spend nearly \$6 million on HIPAA compliance, according to Gartner, Inc., with the entire national cost estimated to be \$40 billion. This is about 5 times the Y2K outlay for hospitals nationwide. Implications of the final security rule, which will take effect in April 2005, for clinical engineers are discussed in this article. Why should clinical engineers be concerned? Because hospitals can have 3 to 4 times as many pieces of biomedical equipment that store patient-specific information as they have computers managed by the IT department.

Source: Davis S: Safe keeping. *Health Facilities Management*, December 2003;16(12):pp 12-17. Full text free here:

[http://www.hospitalconnect.com/hfmmagazine/jsp/articledisplay.jsp?dcrpath=AHA/PubsNewsArticleGen/data/0312HFM\\_FEA\\_CoverStory&domain=HFMMAGAZINE](http://www.hospitalconnect.com/hfmmagazine/jsp/articledisplay.jsp?dcrpath=AHA/PubsNewsArticleGen/data/0312HFM_FEA_CoverStory&domain=HFMMAGAZINE)

## HIT spending: \$17.3 billion in 2007

US health care provider IT spending will increase from \$15.1 billion in 2002 to \$17.3 billion in 2007, or 3 to 4 percent per year, according to a market research study prepared by IDC. Outsourcing is expected to grow. The majority of provider IT investments are projected to be related to clinical applications.

Source: IDC: US healthcare provider IT spending to increase to \$17.3 billion by 2007, IDC reveals. *Press Release*, July 23, 2003. Full text free here:

[http://www.idc.com/getdoc.jhtml?containerId=pr2003\\_07\\_18\\_114152](http://www.idc.com/getdoc.jhtml?containerId=pr2003_07_18_114152)

## What is the ROI on PACS?

The first enterprise-wide picture archiving and communications system (PACS) in the US was installed a decade ago at **Baltimore VA Medical Center**. A 25 percent decrease in the cost per imaging study occurred and the payback period on the PACS was 4 years. At **Commonwealth Health Corp.** (Bowling Green, KY), a 3-hospital system, patient throughput was increased and costs were decreased by 85 percent after installing a new digital imaging system in 2003. The **University of Pittsburgh Medical Center** has saved \$14 million in the past 3 years on a PACS technology enhanced by dynamic transfer syntax (DTS), a UPMC invention. The experiences of these and other institutions are reviewed in this survey conducted to identify the 15 US providers that are most innovative in IT and imaging technology.

Source: A Look into this year's top 10 hospitals, plus top 5 specialty facilities. *HealthImaging&IT*, October 2003;1(2):pp 14+.

Full text free here: <http://www.healthimaging.com/archives/HIIT/HIIT0102/HIIT010201.htm>

## GAO: HIT benefits quantified

Cost savings and other benefits associated with the implementation of IT projects at 10 provider organizations, 3 health care insurers, and 1 community data network were studied by the US General Accounting Office. The findings are written up as case studies, with benefits quantified, for organizations that are identified by name. For example, **Vanderbilt University** (927 beds) saved nearly \$1.2 million in transcription costs in 2003, noted a 40% decrease in paper faxes, and saved 28 FTEs. **Maimonides**

**Mean IT budget is 3.5% of total budget...** according to data provided by the 8 large provider organizations chosen by GAO for this study.



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**Medical Center** (705 beds) attributed a 32 percent decrease in length of stay and 25 percent of the increase in patient revenues over the period 1995 to 2001 to improved efficiencies related to IT projects.

Source: US General Accounting Office: *Information Technology: Benefits Realized for Selected Health Care Functions*. Washington, DC: GAO, October 2003. (125-page report) Full text free here: <http://www.gao.gov/new.items/d04224.pdf>  
[www.gao.gov/getrpt?GAO-04-224](http://www.gao.gov/getrpt?GAO-04-224)

## Intranet improves bed assignment

**Piedmont Hospital** (Atlanta), a 450-bed general hospital, was spending as many as 500 hours per month on diversion status at an estimated cost of \$422/hour (including lost revenue and increased direct care costs). Implementation of an intranet-based communication tool between the direct-admit nurse and the hospital admissions office was found to be successful in improving the bed-assignment process. Further refinements in the process included a bed waiting-time feedback mechanism to physician offices, the emergency department, surgical suite, and other hospital departments that request beds.

Source: Hamby L, Fraser SW: Using patient waiting-time data to improve the hospital bed-assignment process. *Joint Commission Journal on Quality and Safety*, January 2004;30(1):pp 42-46. Full text available electronically to subscribers here: <http://www.jcrinc.com/subscribers/journal.asp?durki=454>  
Others may request a reprint from: Dr. Leigh Hamby at [leigh.hamby@piedmont.org](mailto:leigh.hamby@piedmont.org)

## Enterprise-wide wireless installed

**El Camino Hospital** (Mountain View, CA, 426 beds), chose to install a wireless network throughout the hospital instead of running more wires to expand the number of desktop PCs in use. *Eclipsis* was chosen to complete this 4-month turnkey project, which has been quick to show a return on investment. Another advantage of the wireless installation was the minimal disruption to everyday hospital operations during the change-over. A result of the project has been the increase in use of point-of-care technology from about 30 percent to nearly 100 percent.

Source: Cutting the cord. *Health Management Technology*, January 2004;25(1):pp 48+. Full text expected to be posted here: <http://www.healthmgttech.com/>

## Automating the supply chain

The use of reverse auction e-procurement has saved **West Penn Allegheny Health System** (Pittsburgh, 6 hospitals) an average 18% on supplies. Other hospitals are exploring trading exchanges as an effective way to automate supply chain management. At the **University of Colorado Hospital** (Denver), use of a web-based exchange has resulted in staff savings of 3,570 hours per year. Likewise, **Allina Hospitals and Clinics** (Minneapolis, 11 hospitals) has saved 2.5 percent on supplies annually by using an exchange.

**Providers spend about 44% of revenue** on operational resources, contracted services, and capital goods, according to a study by Aberdeen Research.

Source: Jossi F: Hospital stock exchange. *Healthcare Informatics*, November 2003;20(11):pp 35+. Full text free here: [http://www.healthcare-informatics.com/issues/2003/11\\_03/jossi.htm](http://www.healthcare-informatics.com/issues/2003/11_03/jossi.htm)