

## HIMSS 1999

### *Executive Summary*

For the first time, the buzz on the floor at the annual Healthcare Information and Management Systems Society (HIMSS) Conference and Exhibition, held in Atlanta, Feb. 21-25, was as much about the show itself as about technology or management trends. Discussion of HIMSS' status among both vendors and CIOs overshadowed the topic of disease management, which remains a hot trend after being last year's buzzword. One factor fueling talk was that the conference experienced its first drop in attendance from a previous year.

The show drew 17,000 attendees and 488 exhibitors, down from 19,500 attendees and 610 exhibitors last year. HIMSS is trying to put a positive spin on the drop, saying it was due mostly to vendors and consultants staying away because they were preoccupied with Y2K problems. Indeed, the biggest no-show, Malvern, Pa.-based SMS, cited consuming Y2K work and the high cost of exhibiting at HIMSS as its reasons for opting out this year. The move also came on the heels of disappointing quarterly financial results for SMS. But most observers say fewer and fewer CIOs attend HIMSS and that has resulted in minimal sales for vendors like SMS.

Still, there were bright spots. New ambulatory medical records and physician connectivity products proliferated. Although no single product has everything, the general quality is high, especially among ambulatory medical records. In the main text that follows, we delve into more detail on this year's HIMSS, including comment on the annual HIMSS Leadership Survey. In the next report we will summarize HIMSS educational sessions on Y2K.



### **General comments**

HIMSS offered a range of practical, clinical decision-support products that can act as stepping-stones to more sophisticated systems. "Some people are disenchanted with big systems and are looking for more near-term solutions to address specific issues such as customer service," says Jane Metzger, VP with FCG's emerging practices unit in Boston.

The number of ambulatory medical record vendors continues to increase, she says, adding that FCG now tracks between 20 and 30 of them, even

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with the recent departures from healthcare of software vendors like Reynolds & Reynolds and Health Matrix.

There's a wide variety of electronic medical record products that can confuse buyers. "You really have to dig. In some cases, the product is a clinical data repository. In others, it's just a Lotus Notes application," says Keith MacDonald, Boston-based consultant for FCG. Some are quite advanced with full functionality, many have a lot of functionality and a few have limited capabilities. "It's good news for the market, but buyers do need help in sorting them out," he says.

FCG defines an ambulatory medical record as having several key features:

1. Physician entry—including user interface
2. Order entry and referral management—order medications, track orders
3. Process integration and communication management—communicate with other physicians, care team, clinical work processes
4. Results management—test results
5. Patient data management—viewing the data  
(many vendors do this well)
6. Clinical decision support—protocols, guidelines, drug/drug interaction
7. Technical architecture—some products have open architecture  
(preferred), some proprietary
8. Installations—clients, a big differentiation

### **HIMSS Survey**

The Tenth Annual HIMSS Leadership Survey Sponsored by IBM provides a snapshot of where the industry is and what its top concerns are at the moment. It's a "sidewalk survey," an informal glance that—while not something scientific enough upon which to build a marketing plan—can provide an instructive framework for discussion.

The survey was completed by over 1,100 senior executives, IT managers, operations and financial managers, and other provider organization professionals. The survey was available to these professionals who attended the HIMSS annual meeting at Atlanta World Congress Center and to those IT professionals who participated from their office or home via a special site on the World Wide Web. Forty-eight percent of the survey respondents work for a multi-entity healthcare network with hospitals. Another 16% work at stand-alone hospitals. The remainder of them are employed at a wide variety of healthcare organizations including long term care, home health care, group medical practices and HMO's.

The following are some highlights with commentary from FCG experts.

### **Y2K Conversions Quickly Rise to the Number One IT Priority in 1999**

The strategic plans and budget for this are in place, with IT outsourcing growing quickly. Over the next 10 months, healthcare information technology (IT) professionals will race the clock to implement Year 2000

conversions. Not surprisingly, triple the number of IT professionals cite this as their number one priority, compared to a year ago. With almost three-quarters of IT budgets expected to increase over the coming year, the funds appear to be in place to pull this off. Still, the recruitment and retention of high-quality IT staff could be the barrier that will prevent these plans from being met on time.

Y2K preparations don't seem to be hindering the slow but steady implementation of Computerized Patient Records, use of the Web, HIPAA security compliance, and telehealth applications. Looking to the near-term future of healthcare IT, the survey found that provider organizations would most likely turn to wireless information appliances to provide new solutions to business and clinical challenges. Web-enabled business transactions (e-commerce) are expected to gain acceptance as well.

Y2K conversion rises to the number one IT Priority in 1999. Recruiting and retaining staff is still seen as a major IT barrier. The most important IT priority for health care organizations over the next 12 months is implementing a Year 2000 (Y2K) conversion, mentioned by 39% of the survey respondents. The Y2K issue rated only an 11% response in the 1998 survey.

### **Integration and retention**

Integrating systems in a multi-vendor environment was the second-most frequently mentioned priority, gathering 18% of the responses.

Recruiting and retaining high-quality IT staff, which was last year's number one IT priority at 17%, dropped to 8% this year. However, 23% of the 1999 survey takers said that the difficulties involved in recruiting and retaining IT staff is their number one barrier to successfully implementing IT.

"Recruitment and retention are still key topics, and will continue especially after Y2K," says Gene D'Amore, director of FCG's technology management practice and interim CIO at the Lahey Clinic in Burlington, Mass. For example, as new application sets take on importance, the issue of what to do with the COBOL experts who have been tackling Y2K will arise. "They will need to become re-skilled and retooled," says D'Amore.

### **Financial support**

Fourteen percent of the respondents said that both the lack of financial support and difficulty in proving IT quantifiable benefits were also significant implementation barriers. However, financial support was of more of a concern in 1998, cited then as a major barrier by 35% of the respondents.

"IT budgets are under pressure, especially until we get through Y2K," says Mike Gorsage, VP and managing director for advanced technologies in FCG's Atlanta office. "Executives and boards are asking what is the pay-back. There's lot more questioning, at the same time there is a lot more

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emphasis on the value of automation. IT will be one of the tools for care delivery to maintain quality and control costs," he says.

The outlook for IT budgets over the next 12 months continues to be optimistic. While lack of financial support for IT was cited as a significant barrier, 72% of healthcare organizations' IT budgets are still expected to increase in the next 12 months. Forty-six percent of this year's respondents report that their organizations' IT budgets will definitely increase. Another 26% say that their budgets will probably increase. This is consistent with last year's results. Increases called for in long-term strategic plans were cited by 48% of the respondents. An additional 13% said that both overall budget increases and their ability to prove return-on-investment are other important reasons for getting more IT dollars. Thirteen percent of the respondents anticipate no change in their budgets. Only 5% report an expected decrease in IT budgets over the next 12 months. That's down from 7% in 1998.

One major component of an IT budget is outsourcing certain functions to vendors. The 1999 survey showed that this expenditure has gotten larger in the past year. Eighty-one percent of this year's respondents are outsourcing key IT functions, compared to 66% in 1998, a 15% increase. Applications support (15%) was the top outsourced function. At 12% of the responses each, other key functions include technical support, Web-site support, and PC support.

Gorsage noted many Web-based products at HIMSS were aimed at providing physician integration and connectivity. San Jose, Calif.-based Healthcon, for example, made a big splash with heavy advertising, including a billboard.

In terms of priorities, Gorsage believes most CIOs would put Y2K at the top, followed by systems integration, then the computer-based patient record. But Y2K is clearly the front-runner. "Most of my clients are still not done" with correcting Y2K code, he says, citing recent government statistics showing only 30% of U.S. hospitals are Y2K compliant.

Full implementation of computer-based patient records is getting closer. US healthcare organizations are making faster progress toward implementing computer-based patient records (CPR's) this year. Compared to only 2% in 1998, 10% of this year's respondents say that their organizations have a fully operational CPR system in place. Twenty-four percent say that they have developed a CPR implementation plan, and 29% have begun to install a CPR system. Twenty-eight percent have not yet begun to plan for a CPR system.

### **Security and compliance**

The threat from within is still today's biggest IT security concern. When it comes to the security of computerized medical information, the respondents' biggest concern continues to be internal breaches of security.

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Thirty percent of the respondents said that this is their number one security concern this year; almost equal to 1998's 31% response. Other security issues mentioned by respondents include the limits of existing security technology (21%; up from 18% last year) and external breaches of security (14% in both 1998 and 1999).

FCG's MacDonald says many providers have yet to realize the importance of the security issue. "People are overburdened by other things like Y2K," he says. IS managers are avoiding the issue because it's not a formal part of the budget approval process yet and lacks reality for a manager. In fact, by the end of the year, the federal government will announce the final rules of the Health Insurance Portability and Accountability Act (HIPAA) and organizations will have only two years to comply, MacDonald warns.

### **Web applications**

Web applications are still relatively unsophisticated from a technology perspective, but starting to grow. Only 2% of this year's respondents indicated that their organization does not yet have a Web page. For those that do, the top applications are organizational promotion (29% in both 1999 and 1998), employee recruitment (19%), and consumer health information (17%). Use of more sophisticated Web-based functions is starting to increase. For example, 15% report an online physician/provider directory (up from 6% in 1998) and 2% are conducting electronic vendor transactions via the Web, up from 1% last year. The Web is a source of information about the healthcare IT industry and HIMSS is the preferred source of that information by 36% of the survey respondents. The Gartner Group garnered 19% of the responses and CHIME was mentioned by 13%.

Telehealth applications are found in the large majority of healthcare organizations. Medical image transmission tops the list. Medical image transmission is the number one telehealth application in 1999, used by 24% of the survey respondents. Use of telehealth systems for management or business-related videoconferences is reported by 19% and professional continuing education applications were cited by 16% of the survey respondents. Patient interviews and consultation were mentioned by only 8%; patient education by 9%. Sixteen percent of the respondents said that their organizations are not currently using any telehealth applications.

### **Wireless**

Health care organizations are most likely to begin using wireless information appliances over the next 12 months. When asked which emerging information technologies their organizations are most likely to begin using in the next year, 20% of the survey respondents mentioned wireless information appliances, supplanting voice recognition from the top spot (16% this year). In 1998, wireless appliances were cited by 13% of the respondents and voice recognition by 31%. The other top emerging technologies for the next year include Web-enabled business transactions (19%; up from 14% last year) and data mining (14%).

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It's easy to overstate the value of certain technologies, however. "Wireless is just a portal," says Metzger. "We're not aware of broad success with wireless except in in-patient care and for nurses." While many observers predicted handheld, wireless devices would be the high-tech answer in ambulatory care, such tools have never really taken off, she says, adding, compared to a real workhorse like the PC, wireless is limited.

Voice recognition is another technology that has yet to take off. Despite the fact that large provider organizations often include voice recognition in RFPs, the technology almost never appears in final purchase orders, according to Metzger. The issue boils down to understanding the processes surrounding physician data. "The truth is many physicians do not dictate," except in specialized areas such as the ER and radiology, she says, adding that many questions remain about voice recognition. For example, even if primary care physicians want to use the technology, would it be best in free text or more structured format?

