HIMSS

The Source for Healthcare Information

14th Annual HIMSS Leadership Survey

Vendor Chief Executive Officer Results

March 17, 2003

Healthcare CEO Survey

Healthcare IT Industry

Healthcare CIO Survey

Vendor CEO Survey Final Report

Sponsored by Superior Consultant Inc.

SUPERIOR CONSULTANT

14th ANNUAL HIMSS LEADERSHIP SURVEY

Sponsored by Superior Consultant Company

Final Report: Vendor CEO

Sponsored by **Superior Consultant Company**, the 14^{th} Annual HIMSS Leadership Survey reports the opinions of information technology (IT) executives from healthcare provider and vendor organizations from across the U.S. regarding the use of IT in their organizations. The survey is designed to obtain information about IT priorities, barriers, applications, and other crucial factors in the use of IT to enhance healthcare.

This is the second in a series of four reports on findings from the 14^{th} Annual HIMSS Leadership Survey. It reflects the opinions of vendor organizations in the United States. The first report, released in February 2003, presents the opinions of CIOs at provider organizations. The final two reports, which will represent the opinions of healthcare CEOs and healthcare clinicians, will be reported in late March or early April.

Contents

1. Executive Summary
2. Methodology
3. Profile of Survey Respondents
4. IT Priorities
5. IT Barriers
6. IT Applications
7. IT Security
8. Technology Adoption
9. IT Outsourcing
10. IT Budget and Staff
11. Survey Sponsors
12. How to Cite This Study
13. For More Information

Figures

1. Titles of 2003 Respondents
2. Primary Responsibility of Respondent within Firm
3. Primary Business of Respondent Companies
4. Healthcare Market Segment Targeted by Respondents
5. Percent of Revenue Dedicated to Healthcare IT
6. Location of Corporate Headquarters of Respondent Firms
7. Annual Revenue of Respondent Firms
8. Current IT Priorities (Within Next Twelve Months)
9. Projected IT Priorities (Today vs. Next Two Years)
10. Top Business Issues Facing Healthcare (Within Next Two Years)
11. Most Significant Barrier to IT Implementation at Client Facilities
12. Applications Areas Considered Most Important For Healthcare Clients Over Next Two Years
13. Current Use of Security Tools
14. Security Tools (Today vs. Next Two Years)
15. Technology Adoption for Healthcare Clients
16. Technology Adoption for Healthcare Clients (Today vs. Next Two Years)
17. Projected Outsourcing Revenue
18. Outsourcing Services
19. Primary IT Decision Maker at Client Facilities
20. 2003 IT Staffing Needs at Client Facilities

1. Executive Summary

The 14th Annual HIMSS Leadership Survey, sponsored by Superior Consultant Company, suggests that interest in clinical information systems and data security is strong. Interest in HIPAA is still strong, although it is projected to decline as the industry reaches and moves past the 2003 deadlines for implementation.

- **HIPAA:** Respondents were most likely to identify HIPAA as the business issue that would have the most impact on the healthcare industry in the next two years (68%). However, implementing privacy modifications to systems and making security upgrades emerged as the third and fourth priorities that vendors identified would be important for their clients. These issues are projected to be of less importance in the next two years, falling 15 and nine percentage-points, respectively, from current levels.

- **Clinical applications:** The three healthcare applications reported by vendors to be of importance to their healthcare clients in the next two years are all clinical. Enterprise-wide clinical information sharing was identified by the most respondents (52%), followed by computer-based patient records (51%) and clinical information systems (49%).

- **Data security:** When asked to identify the technologies they considered most important to their healthcare clients now, nearly half of the respondents (49%) indicated data security; 51% said it will be of importance in the next two years. Firewalls were the most frequently identified security tools used to maintain data integrity at healthcare organizations, both now and in the future. Vendors were more likely to note the importance of security tools for healthcare organizations; there was an average increase of 18% in importance this year compared with last year.

- **IT outsourcing:** Almost two-thirds of respondents (64%) predicted their outsourcing revenues would increase in the next 12 months. Fewer than one percent projected a decrease in outsourcing revenue.

Other notable findings include:

- The need to prove quantifiable benefits or returns on investment is reported to be the top barrier to implementing IT at client facilities, vendors reported.

- Process and workflow design was most frequently identified by vendors as the area in which healthcare organizations have staffing needs. Other staffing needs noted by vendors include system integration, and network and architecture support.

2. Methodology

To ensure the most informed, representative coverage of the field possible, data were solicited from one individual per supplier/consultant organization. Slightly more than 850 CEOs and/or healthcare division leaders at vendor, supplier, and consulting organizations across the United States were e-mailed invitations to participate in this year's survey. This format helped ensure that each organization was represented only one time in the survey and that the respondents were senior-level executives at their companies.

Senior-level executives from 117 different vendor, supplier, and consultant organizations in the United States completed the self-administered Web-based questionnaire over a six-week period beginning on December 11, 2002. Data from healthcare CIOs were captured in a separate survey, and the results were reported at the 2003 Annual HIMSS Conference and Exhibition in February. Results from surveys of healthcare CEOs and chief clinical officers will be released in early April.

3. Profile of Survey Respondents

Nearly three-quarters of the respondents (72 percent) were presidents or chief executive officers; last year, only 49 percent of the respondents indicated they had these titles. Another 14% of respondents reported that they were consultants. The remaining respondents include managers, directors, vice presidents and other senior-level executives.

Half of the respondents – 51 percent – reported that strategy was their primary responsibility within their company, compared with 54 percent of respondents who answered similarly last year. Another 21 percent indicated that their primary area of responsibility was consulting. Other areas of primary responsibility include sales/marketing, and product management or product development.

In identifying their company's primary business, respondents gave these responses:

- Consulting firm—37 percent (up from 23 percent in 2002)
- Enterprise application vendor—23 percent (down from 28 percent in 2002)
- Departmental/niche application vendor—17 percent (up from 13 percent in 2002)
- ASP/outsourcing vendor—9 percent (the same percentage as 2002)
- Networking vendor—2 percent (down from 4 percent in 2002)
- Other—13 percent (down from 22 percent in 2002).

This year, 84 percent of respondents indicated that their company targets the hospital marketplace, compared with 80 percent last year. Some 58 percent of respondents said they target the physician office market; 31 percent target the health plan, payer and insurer market; and 29 percent indicated they target other healthcare facilities, such as nursing homes or home health agencies.

Almost all responding firms (94 percent) indicated that from 76 percent to 100 percent of their company's business is focused on the healthcare industry. Another 5 percent indicated that from 26 percent to 75 percent of their company's business is focused on healthcare. The remaining respondents indicated that 10 percent or less of their company's business is focused on healthcare.

Annual gross revenue for the vendor organizations represented in this year's survey is:

- Less than $5 million—61 percent of respondents (compared with 42 percent in 2002)
- $5 million to $9 million—11 percent (compared with 17 percent in 2002)
- $10 million to $29 million—12 percent (compared with 9 percent in 2002)
- $30 million to $49 million—3 percent (compared with 6 percent in 2002)
- $50 million to $99 million—2 percent (compared with 7 percent in 2002)
- $100 million to $500 million—5 percent (compared with 9 percent in 2002)
- More than $500 million—2 percent (compared with 5 percent in 2002)

Slightly more than one-quarter of respondents (27 percent) reported that their company was headquartered in the Mountain region of the United States. This is followed by the East North Central, Mid-Atlantic and South Atlantic, each with 16 percent of respondents.

Figures:

Figure 1. Titles of 2003 Respondents
Figure 2. Primary Responsibility of Respondent within Firm
Figure 3. Primary Business of Respondent Companies
Figure 4. Healthcare Market Segment Targeted by Respondents
Figure 5. Percent of Revenue Dedicated to Healthcare IT
Figure 6. Location of Corporate Headquarters of Respondent Firms
Figure 7. Annual Revenue of Respondent Firms

4. IT Priorities

Vendors identified system integration, patient safety and implementing privacy modifications to meet HIPAA requirements as the top priorities for their healthcare clients.

Respondents were asked to identify their clients' top five IT priorities, both currently and in two years. Survey respondents were most likely to identify integrating systems in a multi-vendor environment (53 percent currently; 48 percent in the next two years). Last year, this was the priority ranked second by respondents. Implementing technology to reduce medical errors and promote patient safety emerged as this year's second most frequently mentioned answer (46 percent currently, 42 percent in the next two years). This was last year's third most frequently provided response. In third place among clients' current priorities is implementing privacy modifications to meet HIPAA requirements, identified by 41 percent of respondents. The third place response for future priorities of clients is the deployment of Internet technology, cited by 37 percent of respondents; last year, 39 percent of respondents indicated this type of technology was a future priority for clients.

The priority identified by the most respondents last year, IT security upgrades to meet HIPAA requirements, fell to fourth place among current priorities and to fifth place for future priorities. Other notable changes from last year include a decrease of 12 percentage points for those who indicated that either deploying Internet technology or replacing/upgrading ambulatory care systems was a priority and an increase of 11 percentage points for those who indicated that designing and implementing an IT strategic plan or process/workflow redesign are important. Thirty-two percent of this year's respondents also indicated that implementing enterprise-wide applications is a priority. While this represents a 22 percentage point increase over last year's response, part of the increase can be explained by the broadening of the category this year to include a wide array of enterprise-wide applications; last year, the category only mentioned a master patient index (MPI).

With many HIPAA requirements having 2003 deadlines, it's not surprising that responding vendors indicated that implementing EDI to meet HIPAA requirements and implementing privacy modifications to meet HIPAA requirements would be less of a priority for their clients in the future. Each declined by 15 percentage points as a future priority, compared with clients' level of concern today.

The top three business issues that vendors indicate will have the greatest impact on healthcare in the next two years remain constant. Vendors, who were able to select among five choices, were most likely to identify HIPAA compliance as the business issue that will have the greatest impact on healthcare in the next two years, cited by 68 percent of respondents. Cost pressures were identified by 61 percent of respondents (up from 55 percent in 2002), and improving operational efficiency was identified by 44 percent of respondents.

Vendors responding to the 2003 survey also were much less likely to identify obtaining capital as a business issue that would affect healthcare than were respondents to the 2002 survey (13 percent vs. 33 percent). According to vendors in this sample, mergers and consolidation also declined in importance, from 17 percent to 5 percent. This year's respondents also were more likely to identify improving quality of care as a business issue that will affect healthcare. It climbed more than nine percentage points to 33 percent.

Figures:

Figure 8.	Current IT Priorities (Within Next Twelve Months)
Figure 9.	Projected IT Priorities (Today vs. Next Two Years)
Figure 10.	Top Business Issues Facing Healthcare (Within Next Two Years)

5. IT Barriers

Vendors identify the ability to prove quantifiable benefits/return on investment as the top barrier they face in implementing IT at client facilities.

Respondents were asked to identify the most significant barrier to successful implementations of IT in clients' organizations. This year, the top response was difficulty in proving quantifiable benefits or a return on IT investment to clients, identified by 23 percent of respondents. Last year, vendors ranked identifying ROI third as a client concern, as it was mentioned by only 18 percent of respondents. Clients' lack of a strategic IT plan or failure to execute the plan remained the second most frequently mentioned barrier, cited by 18 percent of respondents, compared with 19 percent last year. Last year's top response, lack of adequate financial support for IT at the client's facility, fell to third, cited by 15 percent of respondents in the 2003 survey, down from the 21 percent of respondents who identified it as a top barrier last year. Lack of staffing resources also dropped in importance, mentioned by four percent of vendors this year vs. 11 percent last year.

Figure:

Figure 11.	Most Significant Barrier to IT Implementation at Client Facilities

6. IT Applications

Clinical information systems, including enterprise-wide applications and computer based patient records, continue to be identified as the most important for healthcare clients over the next two years.

Survey respondents were asked to identify the five healthcare applications areas they considered to be the most important for their healthcare clients over the next two years. Enterprise-wide clinical information sharing was identified most frequently, cited by 52 percent of respondents. This response was not included in last year's survey. Computer-based patient records remained in the number two slot, identified by 51 percent of respondents, compared with 58 percent last year. Clinical information systems, identified by the most respondents last year (65 percent), fell to third, cited by only 49 percent of respondents this year.

Financial and administrative applications, and point-of-care clinical decision support systems both declined 15 percentage points from last year's response rate. Business intelligence/decision support systems declined by nearly 12 percentage points.

Figures:
Figure 12. Applications Areas Considered Most Important For Healthcare Clients Over Next Two Years

7. IT Security

Vendors indicate increased current and future use of all security applications. Firewalls are the most commonly used technology, and are expected to remain so in the future.

Respondents were asked to indicate the security tools they believed were important to healthcare organizations in maintaining data integrity, both currently and in the next two years. For the second year in a row, firewalls were cited most frequently—81 percent this year, compared with 46 percent in 2002. User access controls were cited by 65 percent of respondents, and disaster recovery rounds out the top three, cited by 59 percent of respondents. Data encryption, ranked second last year, fell to fifth place. Audit logs recording each time a patient health record is accessed dropped from third place to fourth place.

Respondents believe firewalls will continue to be important; these security applications were most frequently cited as the security tool that vendors believe will be important to healthcare organizations in two years. Rounding out the top three security technologies of the future are audit logs (mentioned by 65 percent, up from third last year), and user access controls (mentioned by 61 percent, up from sixth).

Figures:
Figure 13. Current Use of Security Tools
Figure 14. Security Tools (Today vs. Next Two Years)

8. Technology Adoption

Vendors continue to report that data security tools and intranet technology will be important to their healthcare clients. Interest in wireless technologies is expected to increase in the future, while interest in extranets and handheld personal digital assistants is projected to decline.

Vendors continue to identify data security technology as important to their healthcare clients. Last year, nearly half of respondents (48 percent) indicated data security technology was important to their clients. This year, it was cited by 49 percent of respondents, making it the most frequently cited technology in this category. Intranet continues to hold the number two spot, identified by 46 percent of respondents, compared with 40 percent last year. Extranets were cited by 42 percent of respondents, making it the third most identified technology. Last year's third-place response, high-speed networks, fell to fourth place. Vendors see speech recognition and thin clients as less important than in the past; both of these items show a 14 percentage-point decrease compared to last year's data.

Vendors continue to predict that data security and wireless information appliances will be among the most important technologies for their clients in the next two years. Wireless information systems were identified by the most respondents (55 percent), followed by data security technologies (51 percent). Each category was cited by 50 percent of respondents in 2002. Web-enabled business transactions ranked third, identified by 45 percent of respondents. This item ranked fifth last year. Future interest in both extranets and handheld personal digital assistants, last year's second and third place responses, declined. However, among survey respondents, handheld personal digital assistants are projected to be more important in the future than they are today (27 percent today vs. 37 percent in two years). This trend also holds true for wireless information systems (40 percent today vs. 55 percent in two years) and speech recognition (10 percent today vs. 21 percent in the future).

Figures:
Figure 15. Technology Adoption for Healthcare Clients
Figure 16. Technology Adoption for Healthcare Clients (Today vs. Next Two Years)

9. IT Outsourcing

Respondents predict an increase in outsourcing revenue. Systems integration was identified as the service with the most growth potential.

More than two-thirds of respondents (64 percent) predicted that their outsourcing revenues would increase in the next twelve months. This represents a nine percentage-point increase over the 55 percent of respondents who projected an increase last year. Some 21 percent of respondents projected no change, and fewer than one percent indicated that their outsourcing revenues would decrease. When respondents were asked which of their service areas would see the most revenue growth, the areas most frequently identified were systems integration (46 percent), project management (42 percent) and applications development (41 percent).

Figures:
Figure 17. Projected Outsourcing Revenue
Figure 18. Outsourcing Services

10. IT Decision Makers and Staffing Needs

For the second year, vendors report that CIOs are the primary IT decision makers at their client sites. Vendors are most likely to identify process/workflow design as the area in which their clients are most likely to have staffing issues.

When asked to identify who, in their experience, was the primary IT decision maker within their clients' organizations, nearly half (44 percent) indicated it was the chief information officer (CIO). This represents almost no change from last year, when 45 percent of respondents indicated that CIOs were the primary IT decision maker. As with last year, chief executive officers (17 percent) and chief financial officers (15 percent) hold the number two and three slots, respectively. However, this year's respondents are less likely to believe that the CEO is the primary decision maker; (17 percent compared with 25 percent last year).

Respondents are most likely to identify process/workflow design as the areas in which they believe that their clients have staffing needs. This is followed by systems integration (32 percent) and network and architecture support. There was no comparable question in last year's survey.

Figures:
Figure 19. Primary IT Decision Maker at Client Facilities
Figure 20. 2003 IT Staffing Needs at Client Facilities

11. Survey Sponsors

About Superior Consultant Company

Superior Consultant specializes in Digital Business Transformation(tm) services that enable clients to thrive in the information-driven economy. Superior's outsourcing, management and information technology consulting services and solutions help clients plan and execute better business strategies and meet their fiscal challenges while advancing clinical quality. Superior's best practices outsourcing model includes a full range of flexible business process and information technology solutions, including data center services, 24/7/365 network monitoring and help desk services, facility management, interim management, and application outsourcing services. For more than 18 years, Superior has been recognized as one of the most innovative within the healthcare industry and has been rewarded with full and partial outsourcing contracts, thousands of engagements, approximately 150 interim management assignments, and nearly 3,000 clients.

For more information on Superior Consultant Holdings Corporation simply dial 1-800-PRO-INFO and enter the Company ticker: SUPC (a no-cost fax-on-demand service) or visit the Company's Web site at http://www.superiorconsultant.com.

About HIMSS

The Healthcare Information and Management Systems Society (HIMSS) provides leadership in healthcare for the advancement and management of information technology. Headquartered in Chicago, HIMSS provides services to more than 13,000 members, including IT healthcare corporations, firms and professionals from around the globe. Through the collaboration of 42 chapters and 19 special interest groups, HIMSS directs and shapes the healthcare industry, encourages emerging technology and promotes public policies that will improve healthcare delivery. For more information, visit HIMSS at www.himss.org.

12. How to Cite This Study

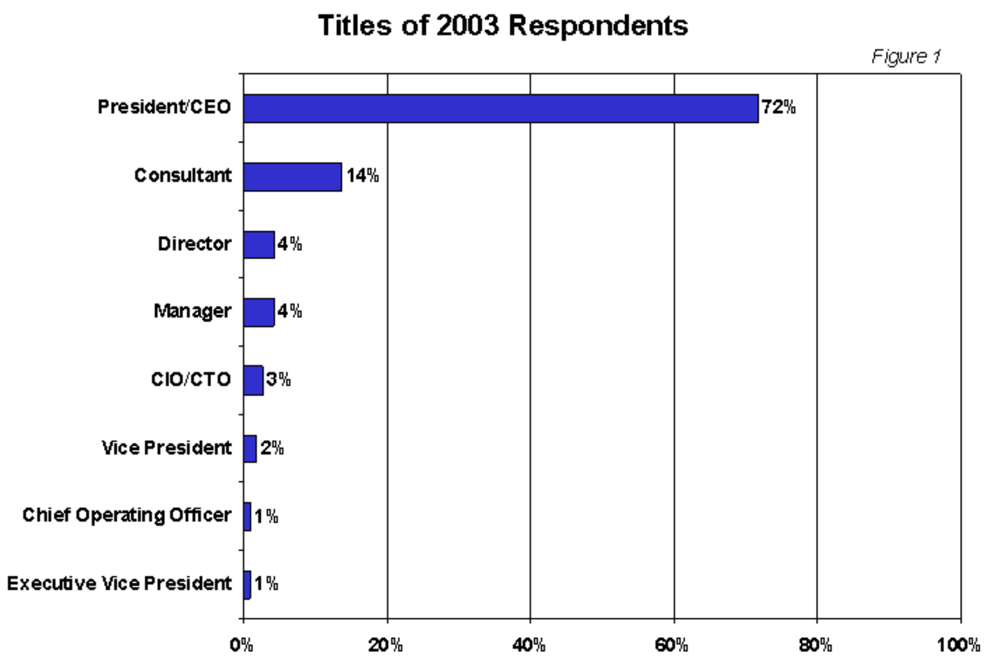
Individuals are encouraged to cite this report and any accompanying graphics in printed matter, publications, or any other medium, as long as the information is attributed to the 14th Annual HIMSS Leadership Survey sponsored by Superior Consultant Company.

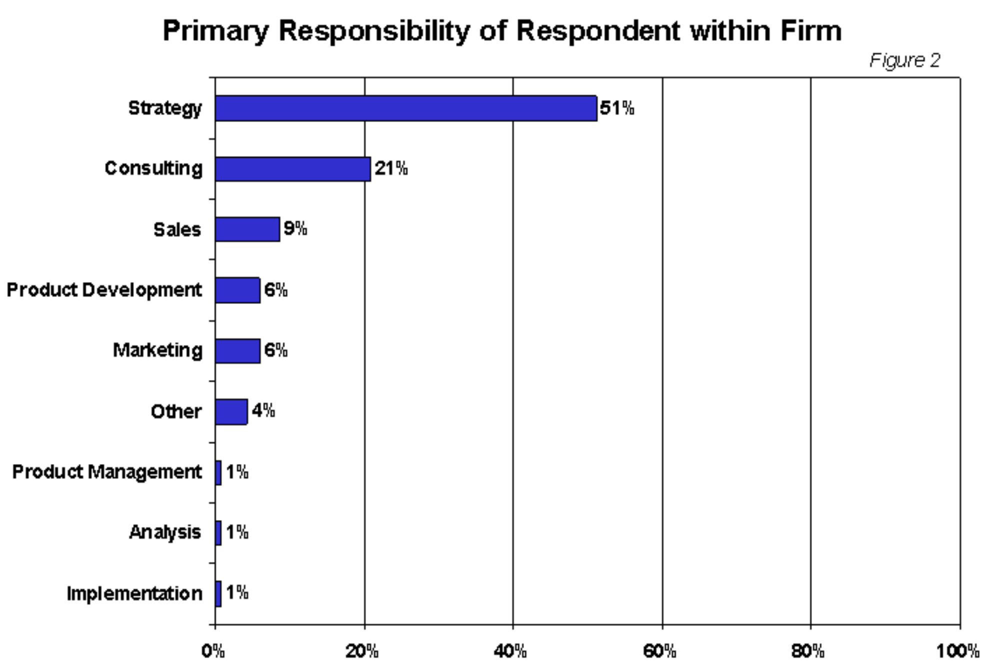
13. For more information, contact:

Joyce Lofstrom
Corporate Communications Specialist
HIMSS
312/915-9237
jlofstrom@himss.org

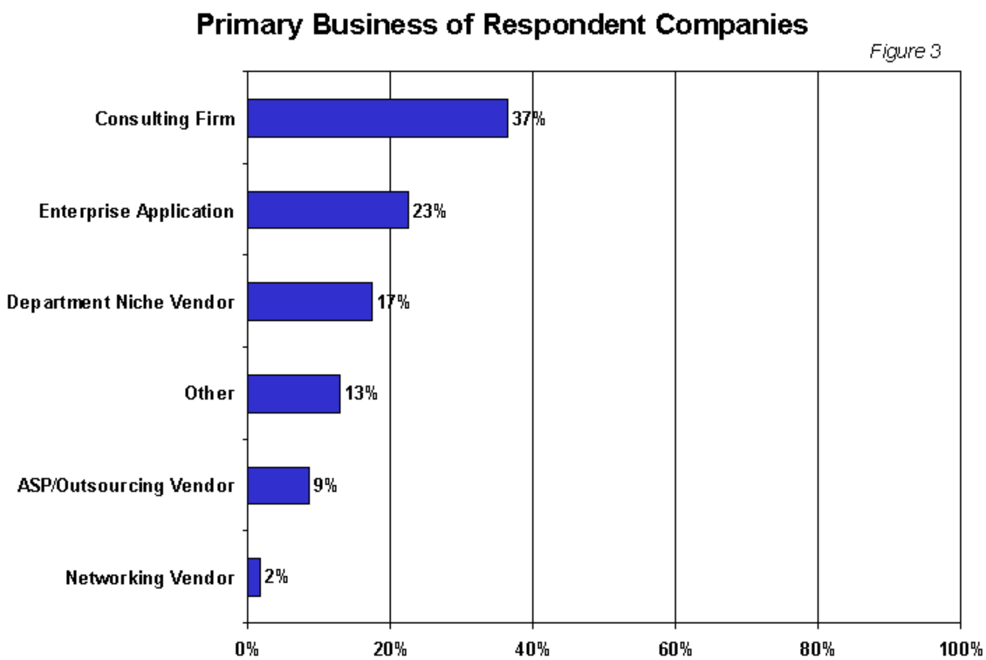
Sue Synor
Executive Vice President
Superior Consultant Holdings Corporation
248/386-8300
sue_synor@superiorconsultant.com

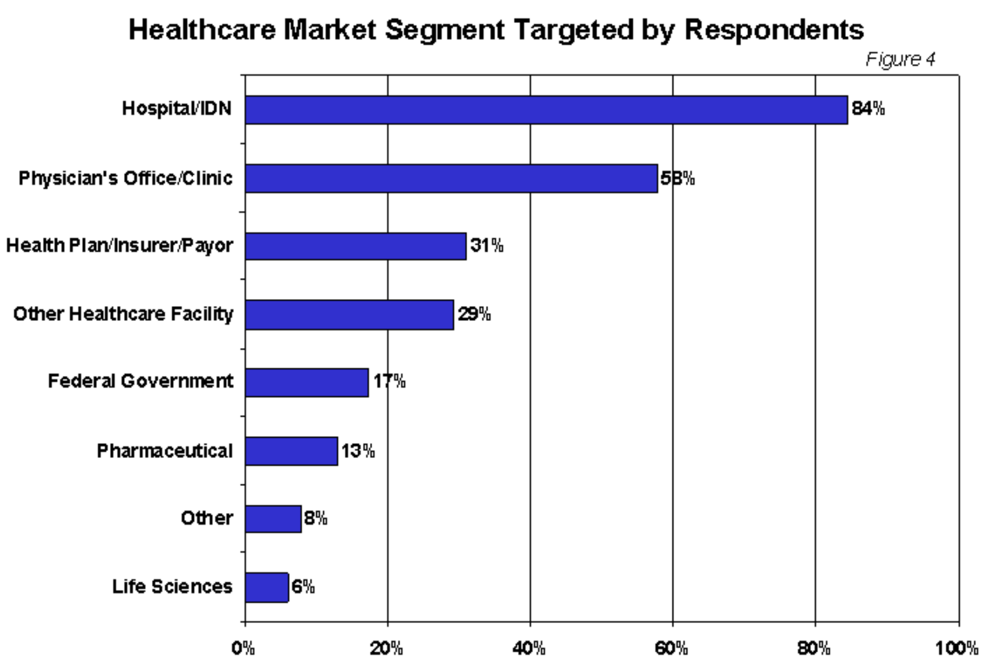
Participant Profile



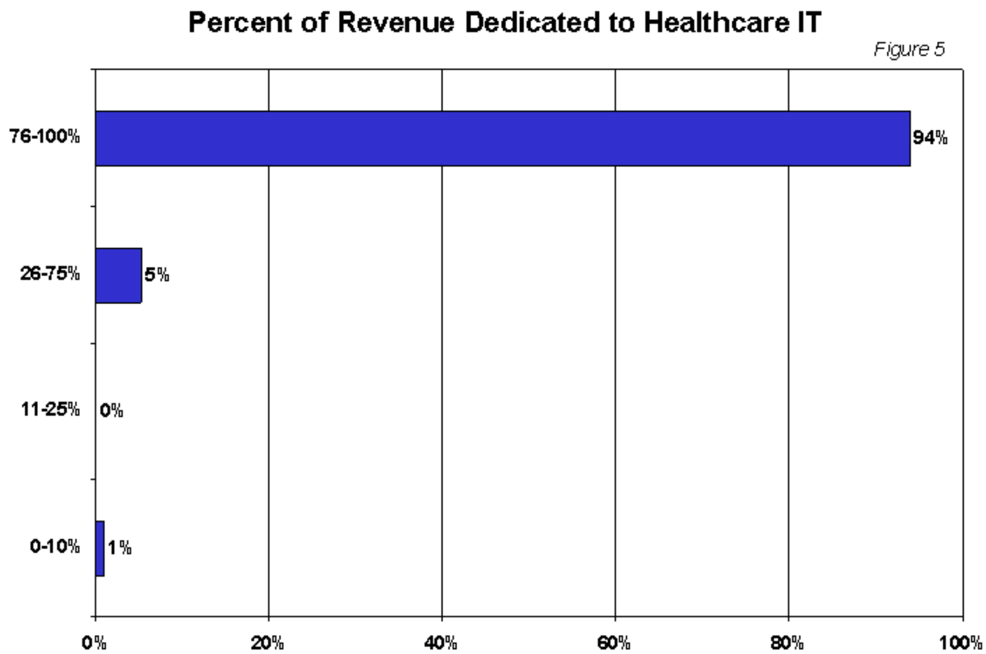


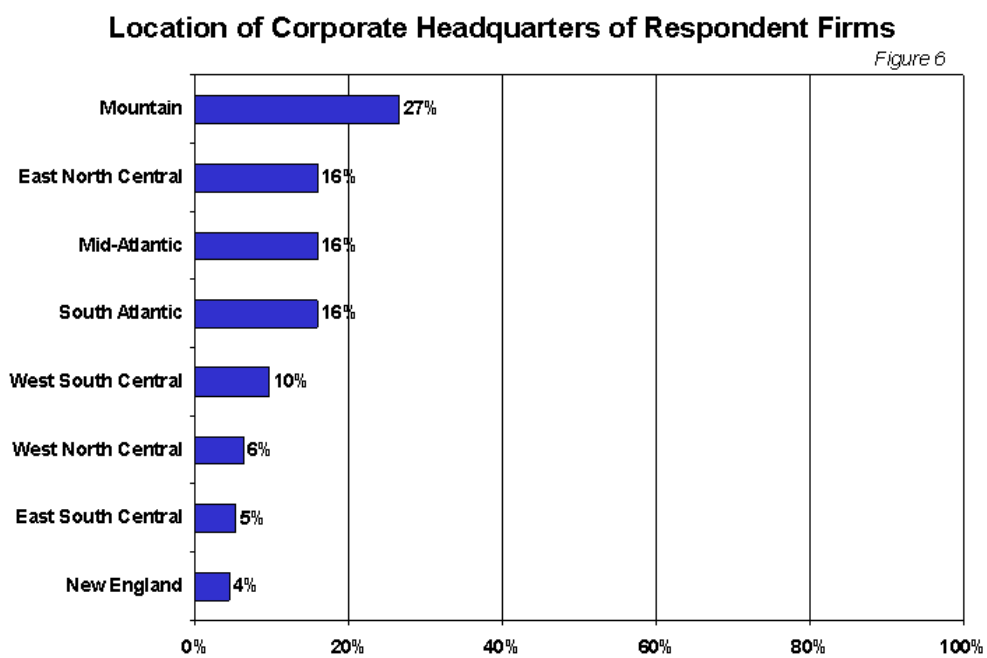
Participant Profile (continued)



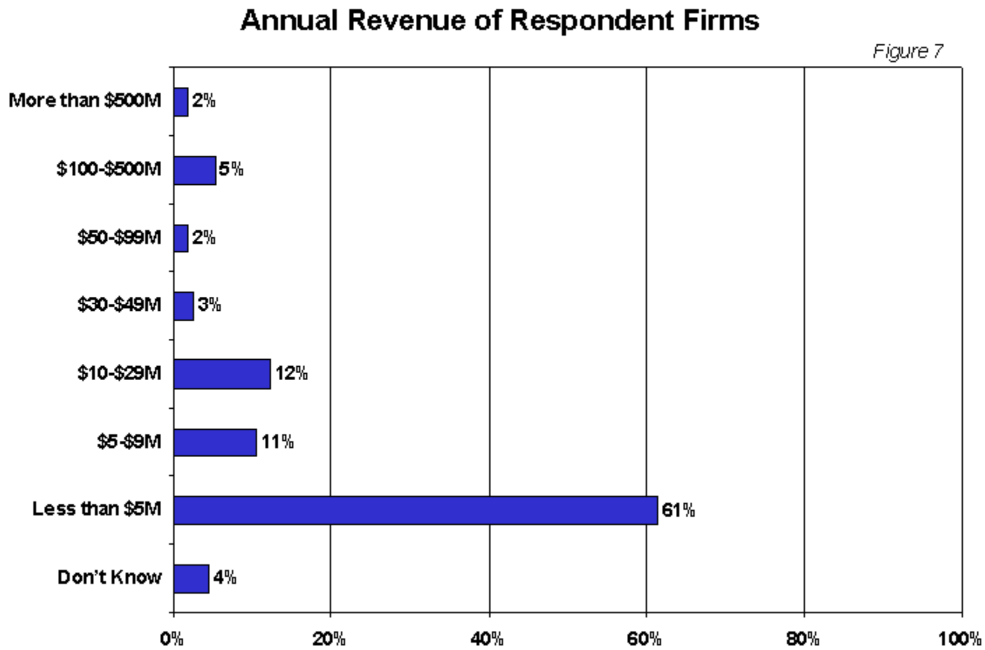


Participant Profile (continued)

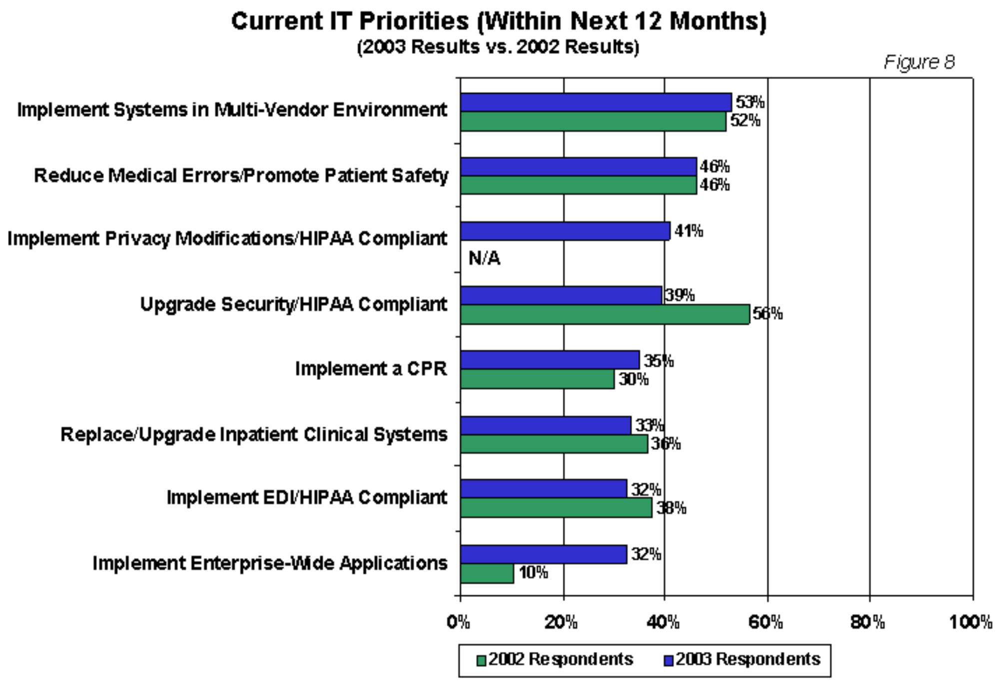




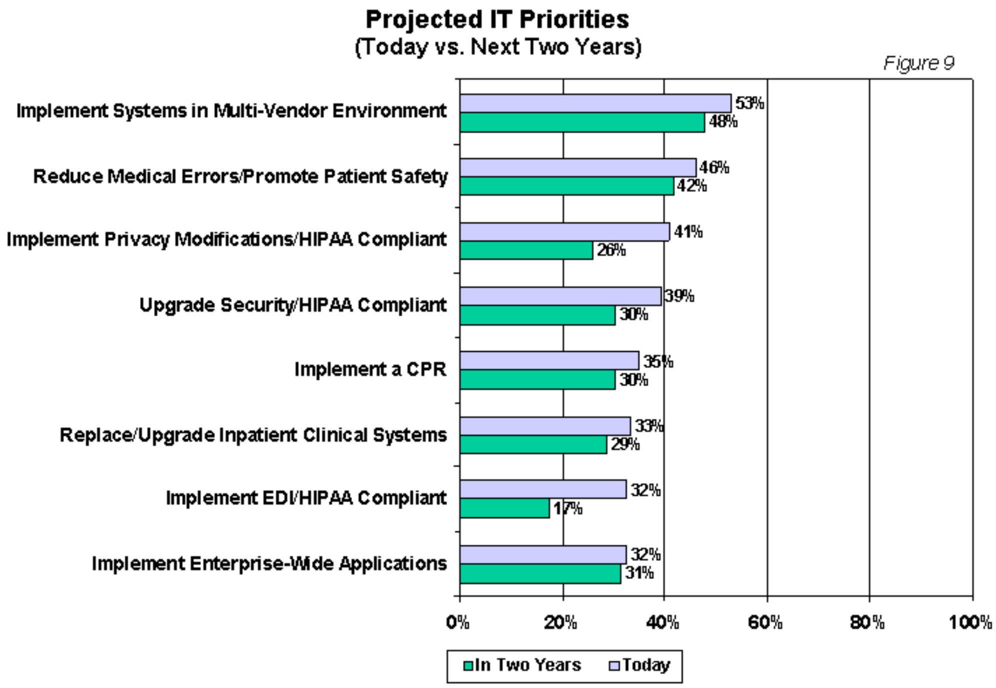
Participant Profile (continued)

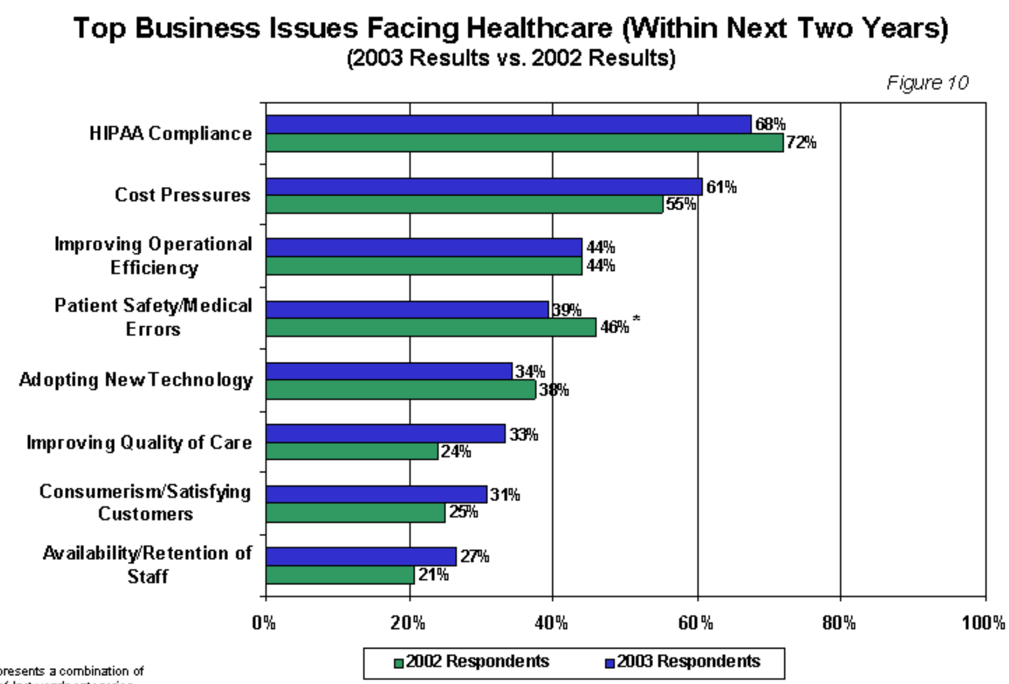


IT Priorities



IT Priorities (Continued)



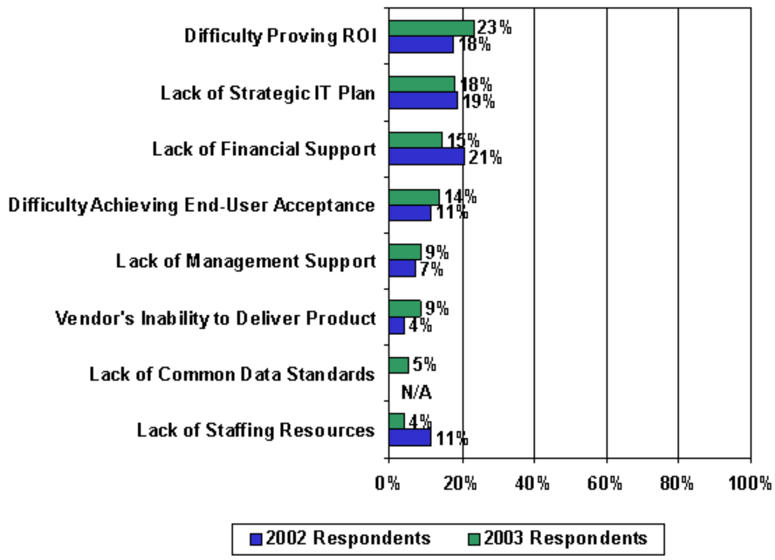


*Represents a combination of two of last year's categories

IT Barriers

Most Significant Barrier to IT Implementation at Client Facilities
(2003 Results vs. 2002 Results)

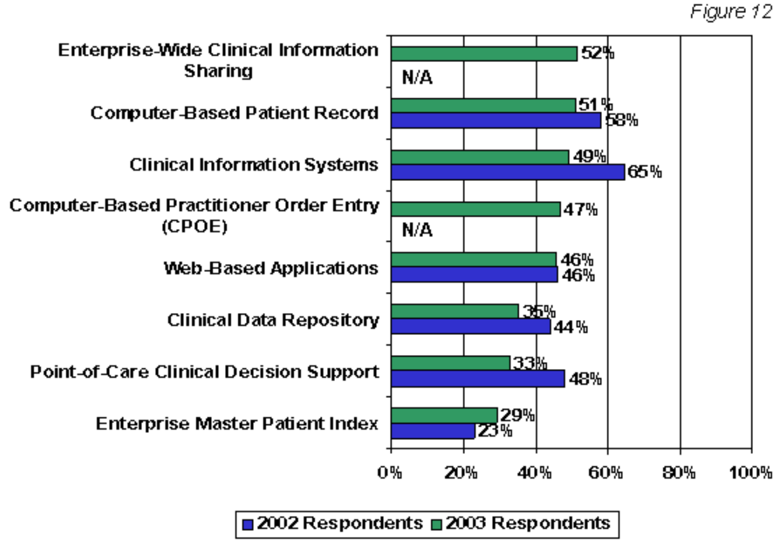
Figure 11



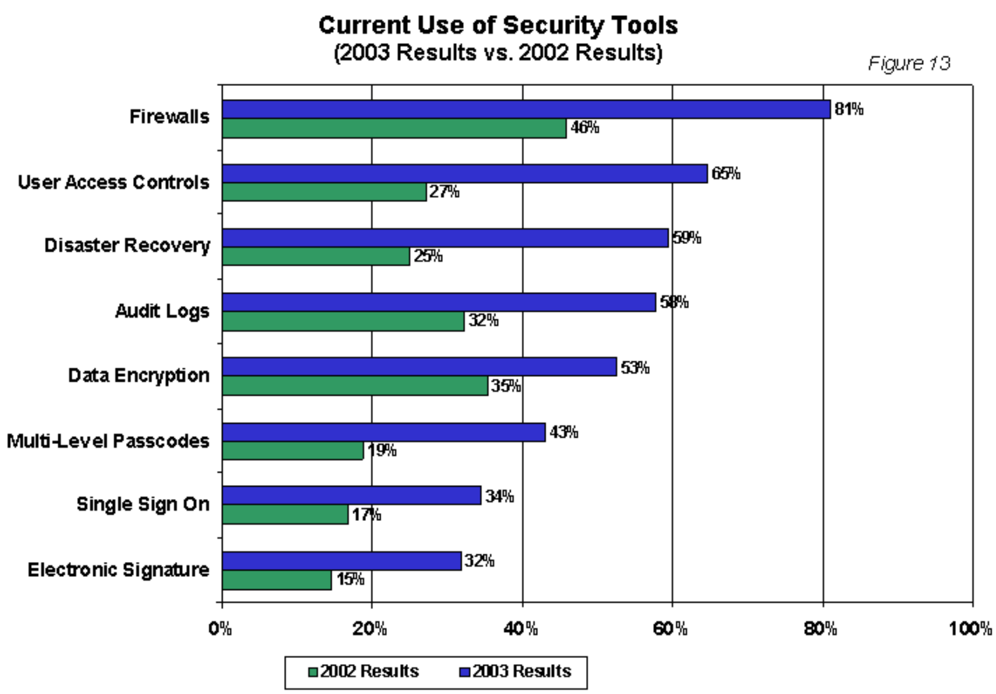
IT Applications

Application Areas Considered Most Important for Healthcare Clients over Next Two Years
(2003 Results vs. 2002 Results)

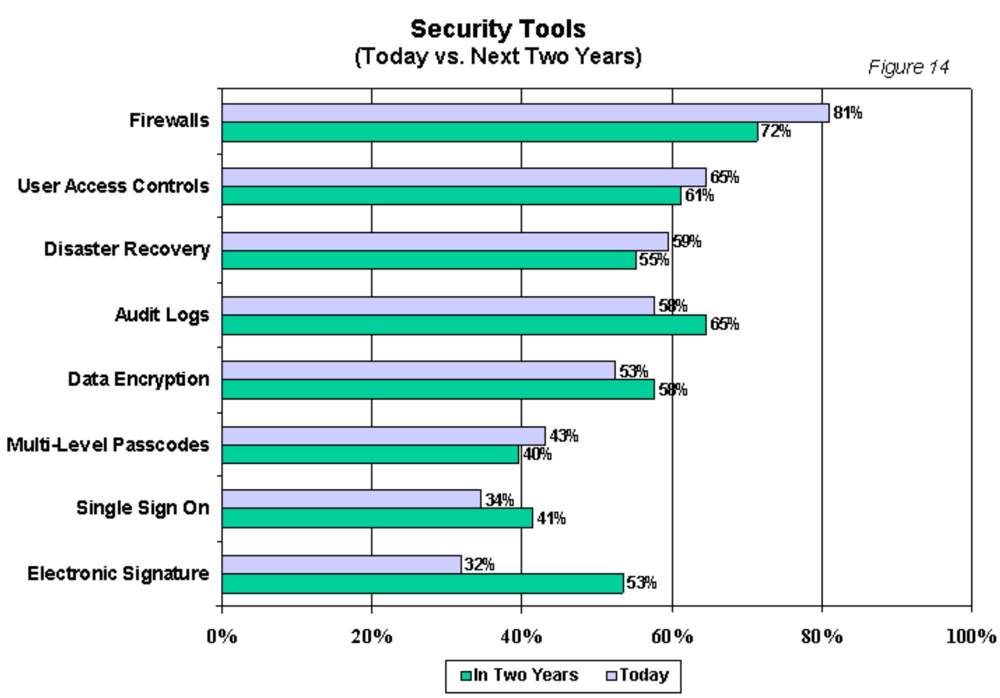
Figure 12



IT Security

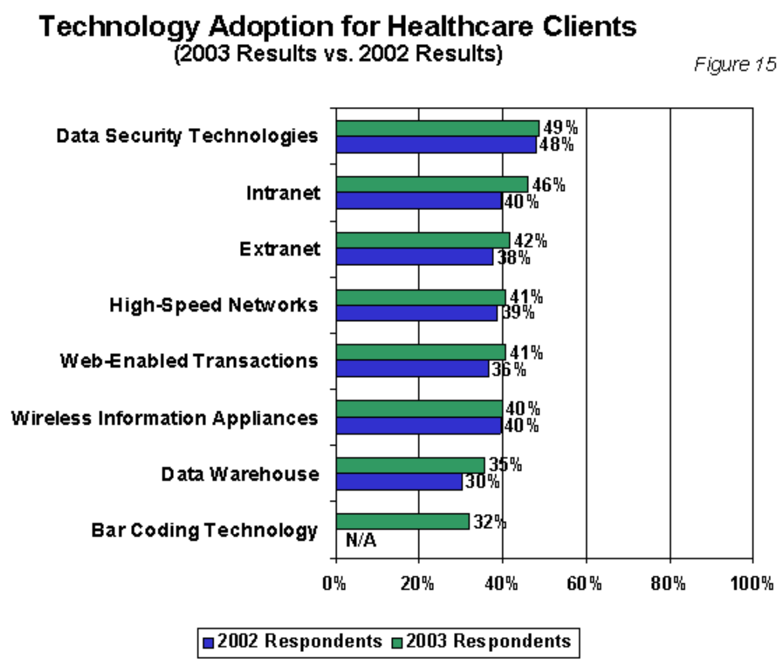


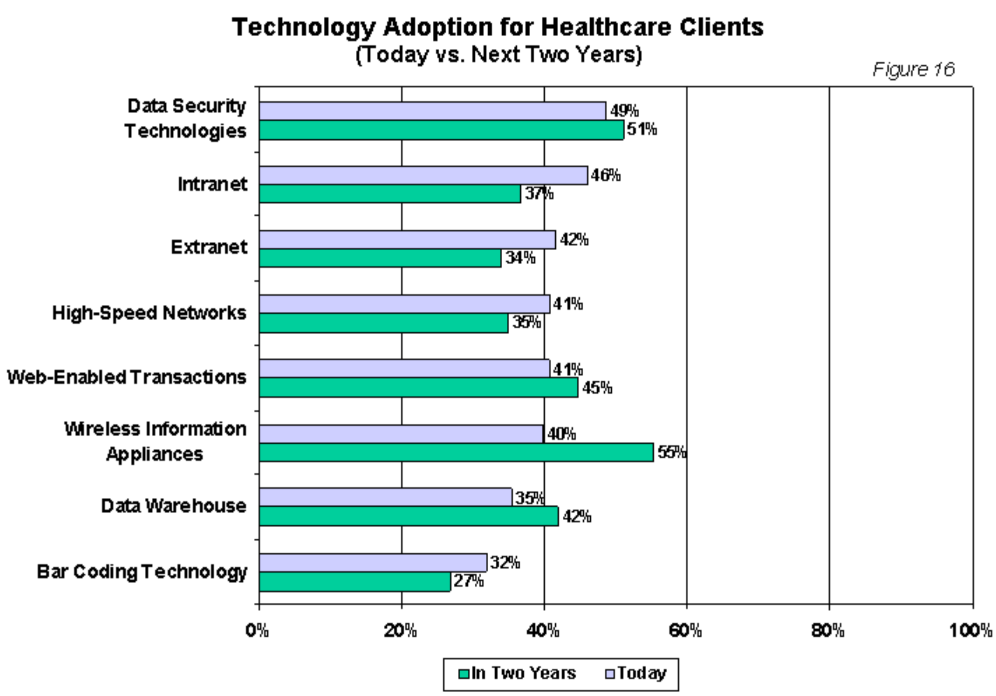
Current Use of Security Tools
(2003 Results vs. 2002 Results)
Figure 13
Firewalls
User Access Controls
Disaster Recovery
Audit Logs
Data Encryption
Multi-Level Passcodes
Single Sign On
Electronic Signature
81%
46%
65%
27%
59%
25%
58%
32%
53%
35%
43%
19%
34%
17%
32%
15%
0%
20%
40%
60%
80%
100%
2002 Results
2003 Results



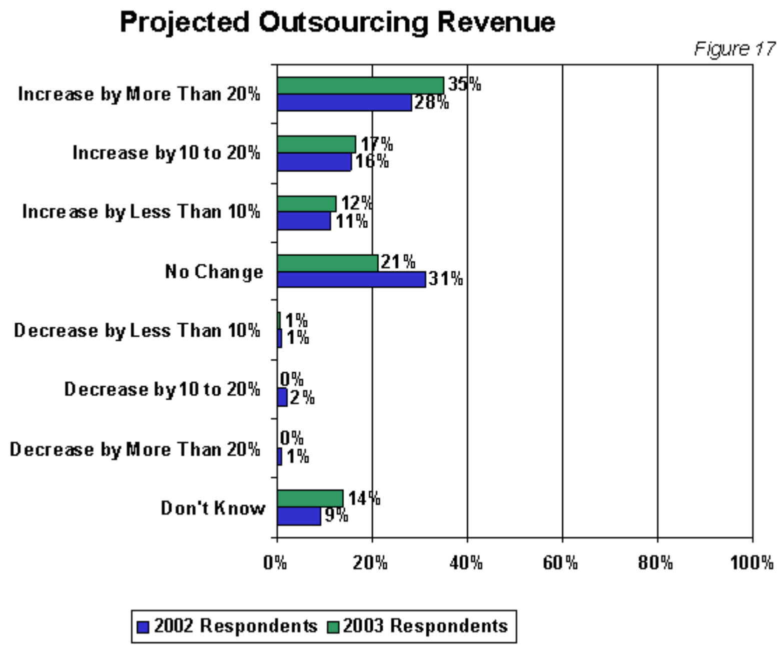
Security Tools
(Today vs. Next Two Years)
Figure 14
Firewalls
User Access Controls
Disaster Recovery
Audit Logs
Data Encryption
Multi-Level Passcodes
Single Sign On
Electronic Signature
81%
72%
65%
61%
59%
55%
58%
65%
53%
58%
43%
40%
34%
41%
32%
53%
0%
20%
40%
60%
80%
100%
In Two Years
Today

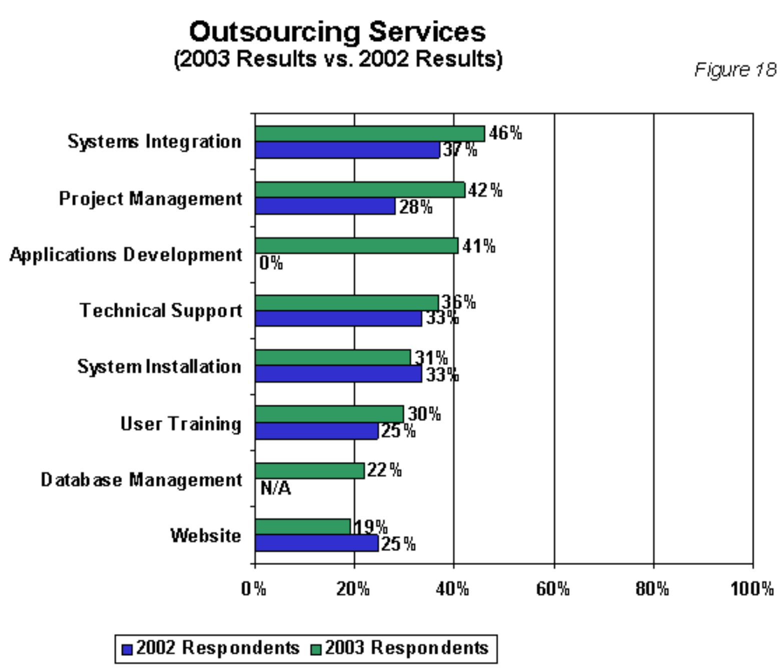
Technology Adoption





IT Outsourcing





IT Decision Makers & Staffing Needs