



21st Annual

2010 HIMSS Leadership Survey

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Healthcare CIO Final Report

HIMSS

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HIMSSanalyticsTM

21st Annual HIMSS Leadership Survey

Final Report: Healthcare CIO

The 21st Annual HIMSS Leadership Survey reports the opinions of information technology (IT) professionals from healthcare provider organizations across the U.S. regarding the use of IT in their organizations. The study was designed to collect information about IT priorities, business issues that impact technology adoption, security concerns, IT staffing & budgeting and other crucial factors in the use of IT to enhance healthcare.

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1. Executive Summary

When asked to identify the single information technology (IT) priority at this time, 42 percent of respondents indicated that meeting meaningful use criteria, according to the 398 healthcare IT professionals who participated in the 21st Annual HIMSS Leadership Survey. Indeed, more than half of healthcare IT professionals (59 percent) noted that they were going to make additional investments to position themselves to qualify for incentives. Another quarter (22 percent) indicated that they were going to identify gaps in their systems, but will wait to make investments.

By taking these steps, nearly half of respondents working for *hospitals* (47 percent) anticipated that they would be able to meet meaningful use requirements by FY2011. Because the final meaningful use criteria were not established when data collection for this survey began, three broad categories of meaningful use were established for this research.

- 1) The eligible hospital demonstrates to the satisfaction of the Secretary that during such period the hospital is using certified EHR technology in a meaningful manner;
- 2) The eligible hospital demonstrates to the satisfaction of the Secretary that during such period such certified EHR technology is connected in a manner that provides, in accordance with law and standards applicable to the exchange of information, for the electronic exchange of health information to improve the quality of health care, such as promoting care coordination; and
- 3) The eligible hospital submits information for such period, in a form and manner specified by the Secretary, on such clinical quality measures and such other measures as selected by the Secretary. Another 32 percent believed their organization would be eligible by FY2012. The biggest barrier to achieving measurable outcomes at this time was identified as a lack of adequate staffing resources (37 percent).

Respondents also noted that the biggest barrier to achieving meaningful use would be a lack of staffing resources. Organizations hope to overcome this need by hiring new IT staff. Two-thirds of healthcare IT professionals indicated that they anticipated an increase in the number of IT staff at their organization in the next 12 months. Particular areas of staffing needs include clinical application support and process/workflow design.

Other key survey results include:

Financial support: One-quarter of respondents (24 percent) indicated that lack of adequate financial resources/lack of budget is the most significant barrier to successfully implementing IT in their organization.

IT budgets: Nearly three quarters of respondents reported that they expected their IT operating budget to increase in 2010. This is consistent with the data reported in the 2008 survey, after showing a dip in last year's research (55 percent). Achieving meaningful use and an overall growth in the number of systems and technologies are spurring this increased spending.

IT staffing: Three-quarters of respondents reported that IT staffing levels would increase in the next 12 months, compared to 42 percent of respondents reporting this to be the case in 2009.

Electronic Medical Records¹: Nearly half of respondents noted that they have a fully operational EMR in at least one facility at their organization. One-third of respondents (35 percent) noted that ensuring the organization has a fully electronic medical record in place will be the primary clinical focus of IT at their organization.

Impact of IT on Patient Care: Respondents strongly believe that IT can have a positive impact on healthcare delivery. Slightly more than one-third of respondents indicated IT could improve clinical and quality outcomes. One-quarter of respondents indicated that IT can reduce medical errors/improve patient safety.

Role of Clinicians: Clinicians play an active role in multiple facets of IT at their organization, from system evaluations to acting as project champions to developing policies and procedures related to clinical information systems.

Security concerns: Healthcare IT professionals identified an internal breach of security as their primary concern regarding the security of data at their organization. One-quarter of respondents indicated that their organization has experienced a security breach in the past year.

IT governance: Nearly all respondents (87 percent) reported a strong level of integration between their organizations' strategic plan and the IT strategic plan. Nearly three-quarters (70 percent) of senior IT executives reported that the sit on the executive committee at their organization.

Health Information Exchanges (HIEs): More than 40 percent of respondents reported that their organization participates in an HIE. Three percent of respondents said they participated in an HIE in the past, but this initiative failed.

CIO Responsibilities: Nearly all of the senior IT executives surveyed reported that they are responsible for at least one IT area outside of the IT department. Most frequently identified was telecommunications, which was identified by 84 percent of respondents.

¹ For the purposes of this research, an EMR has been defined as electronically originated and maintained clinical health information for patients, derived from multiple clinical application sources, about an individual's episode of healthcare at a care delivery organization. It contains all clinical orders and documentation related to a patient's treatment in electronic format. An EMR is also supported by clinical decision support systems and replaced the paper medical record as the primary source of patient information.

2. Methodology

A total of 398 valid responses were received for this year's web-based survey. Data was collected between December 14, 2009 and January 29, 2010. The survey respondents represent nearly 270 unique healthcare organizations and nearly 700 hospitals throughout the United States. The average bed size of the hospitals in this survey is 235; the median bed size is 128.

3. Profile of Survey Respondents

More than 80 percent of respondents (85 percent) reported that they hold a senior IT title. More specifically, two-thirds of the survey respondents (66 percent) reported that they are the corporate Chief Information Officer (CIO). Another 19 percent reported that they are the CIO at their facility. Five percent reported that they are a department head; another five percent reported that they hold the title of either Chief Medical Information Officer (CMIO) or Chief Nursing Information Officer (CNIO). The remaining respondents hold either manager or staff level responses. This is similar to the types of individuals who responded to the 2009 survey.

Approximately 80 percent of the respondents reported that they work for either a stand alone hospital (39 percent), a healthcare system (34 percent), or a hospital that is part of a multi-hospital system (eight percent). Nearly ten percent of the respondents work for an outpatient setting. Other types of facilities represented in this report include long-term care facilities, mental health/behavioral health and other types of healthcare organizations. In the 2009 survey, approximately 90 percent of respondents reported working for a hospital-based organization.

Respondents who worked for a hospital-based organization were asked to identify the type of hospital they work for. Nearly three-quarters (72 percent) indicated that their hospital environment can be characterized as a community hospital. Another 17 percent indicated that they worked for an academic medical center. Approximately 14 percent of respondents indicated that they work at a critical access hospital and 13 percent reported that their facility is a general med/surg facility. As some respondents represent multiple hospitals, they were able to classify their hospital as multiple types (i.e. both a community hospital and a critical access hospital).

Annual gross operating revenues for the provider organizations represented in this year's survey were:

- \$50 million or less—16 percent;
- \$51 million to \$200 million—23 percent;
- \$201 million to \$350 million—12 percent;
- \$351 million to \$500 million—11 percent;
- \$501 million to \$1 billion—14 percent;
- More than \$1 billion—18 percent; and
- Don't Know/Not Applicable—8 percent.

The majority of individuals responding to this year's survey represented the East North Central² region (18 percent). This is followed by the South Atlantic³ and Pacific⁴ regions

² Illinois, Indiana, Michigan, Ohio, Wisconsin

³ Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia and Washington, D.C.

⁴ Alaska, California, Hawaii, Oregon, Washington

(15 percent each). The fewest respondents (five percent) were located in the Mountain⁵ region.

Figures:

Figure 1. Participant Profile—Title

Figure 2. Participant Profile—Facility Type

Figure 3. Participant Profile—Type of Hospital

Figure 4. Participant Profile—Revenue

Figure 5. Participant Profile—Region

4. IT Priorities

One-third of respondents noted that government issues will have the most impact on healthcare in the next two year. In this context, approximately 40 percent of respondents indicated that the primary IT priority at their organization in the next two years will be to meet meaningful use criteria.

Respondents were asked to identify the single information technology (IT) priority that would be addressed at their organization in the next two years. Approximately 40 percent of respondents (42 percent) indicated that the primary IT focus would be meeting meaningful use criteria. This response was not included in last year's survey.

Another quarter of respondents (27 percent) indicated that their organization would focus on clinical systems. This is a decrease from the approximately half of respondents who selected this as an option in the 2009 research. No other option was selected by more than 10 percent of respondents. The third choice, leveraging information through the use of a data warehouse, clinical decision support or evidence-based medicine was identified by nine percent of respondents.

Least likely to be selected were interoperability between in-house systems, integration of IT and medical devices and a focus on revenue cycle management (RCM) solutions. Each of these options was selected by fewer than one percent of respondents. None of the respondents identified supply chain systems as a top IT priority that would be addressed in the next two years.

Respondents were also asked to identify the primary focus their organization had in both the clinical and financial arenas. One-third of respondents (35 percent) noted that ensuring the organization has a fully electronic medical record in place will be the primary clinical focus of IT at their organization. Another quarter (27 percent) indicated that their organization will focus on installing a computerized provider order entry (CPOE) system. By a similar percentage, these items were also identified as the top clinical areas in the 2009 research.

Least likely to be selected as an area of clinical focus were creating clinical documentation flow sheets and installing a full radiology PACS system. Each of these items was selected by less than one percent of respondents. None of the respondents identified cardiology PACS as an area of clinical focus.

⁵ Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

With regard to areas of financial IT focus, nearly one-quarter of respondents (22 percent) upgrading their patient billing system as an area of focus. This was also the top area identified in the 2009 research. Approximately 12 percent of respondents will focus on web-enabling some of their processes to improve patient self serve functions. Specific areas of focus include registration (seven percent), bill payment (three percent) and patient scheduling (three percent). Nine percent of respondents selected upgrading the patient access system which includes registration and admission/discharge/transfer (ADT); nine percent also identified implementing an enterprise-wide patient scheduling system.

Respondents were asked to identify the single key business objective that their organization is trying to achieve in the next 12 months. Nearly one-third of respondents (29 percent) indicated that their organization would like to improve patient care/quality of care. Approximately 22 percent of respondents indicated that their organization was trying to sustain financial viability/survival and 21 percent noted that they are trying to improve operational efficiencies and lower operating costs via process re-engineering techniques (such as Six Sigma). While there were also the top items selected in the 2009 research, this year's top concern is patient care; last year the top concern was trying to sustain financial viability/survival.

Identified least frequently were attracting qualified staff and improving supply chain dynamics; each of these items was selected by less than one percent of respondents.

When given a list of options from which to choose, one-third of respondents (38 percent) indicated that government issues were the business issue that they felt would have the most impact on health care in the next two years. This category includes items such as compliance with new regulations as per meaningful use, ICD-10 and HIPAA 5010; it was selected by only six percent of respondents in the 2009 survey. Identified by one-quarter of respondents (23 percent) was financial considerations, such as the demand for capital and finding new revenue sources. This option was the most frequently selected item in the 2009 research, selected by 54 percent of respondents.

The only other option selected by at least ten percent of respondents was health information exchange, which was identified by 11 percent of respondents.

Least frequently selected was technology considerations, such as pressure to adopt new technology or the impact from Stark laws. This was identified by approximately three percent of respondents.

Figures:

Figure 6. Projected IT Priorities – Next Two Years

Figure 7. Primary Clinical IT Focus

Figure 8. Primary Financial IT Focus

Figure 9. Key Business Objective

Figure 10. Business Issue with Most Impact on Healthcare

5. IT Barriers

Lack of financial support/lack of budget continues to be reported as the most significant barrier to IT implementation.

One-quarter of respondents (24 percent) indicated that lack of adequate financial resources/lack of budget is the most significant barrier to successfully implementing IT in their organization. This is the tenth consecutive year that this issue was selected as the top barrier to implementing IT. The other areas that got at least ten percent of responses were lack of staffing resources (16 percent) and vendors' inability to deliver products/services to satisfaction (10 percent). These three items were selected by a similar number of respondents in the 2009 survey.

Least frequently identified as a barrier to the successful implementation of IT was a concern about the ability to security data. This was identified by only one percent of respondents. Another percent of respondents indicated that there were no barriers to successfully implementing IT.

Figures:

Figure 11. Most Significant Barriers to Implementing IT

6. IT and Patient Care

Respondents believe that IT can have a positive impact on patient care, either by improving clinical/quality outcomes or reducing medical errors. This may be a result of the widespread role of clinicians with regard to such issues as systems evaluation and developing policies and procedures regarding use of IT systems.

Respondents were also asked to address the area in which they felt that IT could have the most impact on patient care. Slightly more than one-third of respondents (37 percent) indicated IT could improve clinical and quality outcomes. One-quarter of respondents (28 percent) indicated that IT can reduce medical errors/improve patient safety. While these were the top items identified in the 2009 survey, the order was reversed. In 2009, 38 percent of respondents indicated that reducing medical errors was the area in which IT can have the most impact, while one-quarter of respondents indicated that IT would have the most impact on improving clinical/quality outcomes.

The only other area that was selected by at least ten percent of respondents was helping to standardize clinical care using evidence based medicine (15 percent). This was selected by 14 percent of respondents in 2009.

Respondents were least likely to indicate that IT could have an impact in the following areas:

- Enabling Practitioners to Obtain Data Remotely—two percent;
- Ensuring Data is Private and Secure—two percent;
- Providing Remote Monitoring of Patients—one percent.

In order to best address clinical issues, it is critical that clinicians participate in the select IT environment at their organizations. Among survey respondents, 95 percent noted that clinicians play some role in the IT process.

Respondents were most likely (80 percent) to indicate that clinicians participate in evaluating and selecting IT systems. Three-quarters of respondents (76 percent) also noted that clinicians act as project champions, taking the role of educating and leading other clinicians. These were also the top responses selected in the 2009 survey.

Slightly more than half of respondents (57 percent) also identified that clinicians are involved in participating in the development of policies related to clinical information systems. The same percent indicated that clinicians are involved in the development and implementation of clinician training. Nearly half of respondents (48 percent) also reported that they employ hospitalists who use clinical applications to manage patient care.

Respondents were least likely to report that they have a CNIO who orchestrates the clinical aspects of our organization's IT strategy (eight percent).

In addition, most organizations also enable their clinicians to access patient information from remote, non-hospital locations. Nearly all respondents (96 percent) reported that they provide physicians with this type of access. Two-thirds reported that they give other clinical professionals (such as occupational therapists) access (65 percent). A slightly smaller percent (58 percent) reported that they give nurses this type of access. Only 12 percent of respondents provide this type of access to patients.

Figures:

Figure 12. Patient Care Area that IT Can Most Impact

Figure 13. Role of Clinicians

Figure 14. Access to On-line Patient Information from Remote Location

7. IT Security

One-quarter of respondents reported that their organization has experienced a security breach in the past year. The top security concern, as it pertains to electronic medical information, continues to be an internal breach of security.

Approximately one-quarter of respondents (23 percent) noted that their organization had a security breach in the past year; this is similar to the percent of respondents who reported this to be the case in last year's study.

One-third of respondents (34 percent) indicated that an internal breach of security was their top concern with regard to the security of electronic medical information. This has been identified as the top concern for the past several years.

Compliance with HIPAA security regulations/CMS security audits was selected by a similar number of respondents (30 percent). Rounding out the top three is inadequate funding/support for the security process, which was selected by 19 percent of respondents respectively. These were also top concerns identified in last year's study.

Only four percent of respondents indicated that they don't have any concerns about the security of electronic medical information at their organization.

Respondents were least likely to indicate that there is a lack of compliance with their business associate agreement (four percent) and a lack of confidence among patients in the technology solutions at the health care organization (three percent).

Figures:

Figure 15. Security Breach

Figure 16. Top Concerns – Security of Computerized Medical Information

8. Electronic Medical Record

Nearly half of respondents noted that they have a fully operational EMR in at least one facility at their organization.

For the purposes of this research, an EMR has been defined as electronically originated and maintained clinical health information for patients, derived from multiple clinical application sources, about an individual's episode of healthcare at a care delivery organization. It contains all clinical orders and documentation related to a patient's treatment in electronic format. An EMR is also supported by clinical decision support systems and replaced the paper medical record as the primary source of patient information.

With this definition in mind, respondents were asked to identify the current status of their EMR environment. Nearly one-third of respondents (32 percent) indicated they have begun to install this technology in at least one facility in their organization. Another quarter of respondents (26 percent) indicated that they have a fully functional EMR at one facility in their organization. This is consistent with the data reported in the 2009 research. However, 22 percent reported that they have a fully operational EMR throughout their entire organization; this is up from 17 percent in the 2009 research.

Three percent of respondents have signed a contract to install EMR technology, but have not yet begun the installation process. The remaining respondents have either developed a plan to implement an EMR system (12 percent) or have not yet begun to plan for the use of an EMR (five percent).

Figures:

Figure 17. Status of Electronic Medical Record (EMR) Implementation

9. Health Information Exchange (HIE)

More than 40 percent of respondents reported that their organization participates in an HIE. Three percent of respondents said they participated in an HIE in the past, but this initiative failed.

Respondents were also asked to identify their current involvement in a Health Information Exchange Organization, which is defined as an organization that brings together healthcare stakeholders that oversee and govern the exchange of health-related information according to nationally recognized standards (which could include a state designated health information exchange).

Only two percent of respondents indicated that they are not aware of what an HIE is. Another 41 percent of respondents indicated that their organization has not yet begun to plan to participate in an HIE – this is a decrease from the 52 percent of respondents who reported this to be the case in the 2009 research.

Forty-three (43) percent of respondents indicated that their organization either participates in an HIE in their area (37 percent) or participates in a state mandated HIE (seven percent). This is substantially higher than the 29 percent of respondents who reported this to be the case in the 2009 study.

Twelve percent of respondents noted that there is an HIE in their area, but they have chosen not to participate in the HIE at this time. Three percent reported that their participated in an HIE in the past, but that HIE has failed.

Figures:

Figure 18. Health Information Exchange (HIE) Adoption

10. IT Governance

Nearly three-quarters of senior IT executives reported that they sit on their organization's executive team. This fosters an environment where the organization's business plan is supported by the IT strategic plan and nearly 90 percent of respondents indicated that the two IT strategic plans are closely aligned.

Respondents were asked to identify the level of integration that exists between their organization's strategic plan and their operating, clinical and capital plans. The majority of respondents (87 percent) indicated that there is a strong level of integration between IT strategies and overall organizational strategy. Specifically, 47 percent of respondents noted that the IT plan is a component of the organization's overall strategic plan. Another 40 percent reported that their IT strategic plan is integrated with overall strategic plan, even though the two are separate. While the overall percent of respondents who noted that the plans are integrated has increased slightly, a much higher percent of respondents in this year's survey reported that the IT strategic plan is a component of the organization's strategic plan (47 percent in 2010 and 38 percent in 2009).

The remaining respondents indicated that their organization either does not have an IT strategic plan (seven percent) or that their IT strategic plan is not at all integrated with the broader organizational plan (four percent).

Among those respondents who indicated that their title was either corporate CIO or facility CIO, 70 percent reported that they sit on the executive committee of their organization. This is identical to the number of respondents who reported this to be the case in the 2009 survey. In this survey, an executive committee is defined as the senior leadership team that drives the overall strategy and direction for the organization.

Individuals identifying themselves a senior IT executive were also asked to identify which responsibilities they assume on a regular basis as part of their job. The percent of respondents identifying each option is listed below.

- Drive Value from IT Investments—92 percent;
- Enable the CEO/Executive Team to Improve Management Through IT—89 percent;
- Support Business and Clinical Process Owners— 87 percent;
- Manage IS Department Operations— 85 percent;
- Contribute to Overall Business Strategy— 85 percent; and
- Responsible for Process Change Management to Be Supported by IT— 79 percent.

Figures:

Figure 19. Alignment of Organizational & IT Strategic Plan

Figure 20. Member of Organization's Executive Committee

Figure 21. CIO Responsibilities

11. ARRA

Approximately 60 percent of respondents are making additional IT investments to position themselves to qualify for the incentives associated with achieving meaningful use. Nearly half of respondents noted that they would be able to meet all of these requirements by FY2011.

Previously, respondents were asked to identify the single information technology (IT) priority that would be addressed at their organization in the next two years; 42 percent indicated that the primary IT focus would be meeting meaningful use criteria. Thus, it is not surprising that when asked to identify the approach to IT spending, more than half of respondents (59 percent) noted that they were going to make additional investments to position themselves to qualify for incentives. Another quarter (22 percent) indicated that they were going to identify gaps in their systems, but will wait to make investments. Only four percent of respondents indicated that they were not making any investments at this time despite the promise of potential incentives. Eight percent noted that they are not making investments at this time because they believe their existing systems qualify them for incentives.

Those respondents working for a hospital were also asked to identify the year in which they believed their hospital would be able to meet three meaningful use requirements outlined in the survey.

These requirements⁶ were:

- 1) The eligible hospital demonstrates to the satisfaction of the Secretary that during such period the hospital is using certified EHR technology in a meaningful manner;
- 2) The eligible hospital demonstrates to the satisfaction of the Secretary that during such period such certified EHR technology is connected in a manner that provides, in accordance with law and standards applicable to the exchange of information, for the electronic exchange of health information to improve the quality of health care, such as promoting care coordination; and
- 3) The eligible hospital submits information for such period, in a form and manner specified by the Secretary, on such clinical quality measures and such other measures as selected by the Secretary

⁶ Data collection for this survey was launched prior to the finalization of the meaningful use requirements

Nearly half of respondents (47 percent) noted that they would be able to meet all of these requirements by FY2011. Another 32 percent believed their organization would be eligible by FY2012. Only five percent believed that they would not be ready until FY2014 or later.

The biggest barrier to achieving measurable outcomes at this time was identified as a lack of adequate staffing resources (37 percent). Another quarter of respondents (24 percent) noted that achieving end-user acceptance was a top barrier. Two percent of respondents noted that there were no barriers to achieving measurable outcomes at this time.

Figures:

Figure 23. Investment In ARRA

Figure 24. Time Frame Eligible for Meaningful Use Incentives

Figure 25. Barriers to Achieving Meaningful Use

12. IT Budget and Staff

While healthcare IT professionals predicted increases in both IT staffing and budget levels in the next year.

According to the HIMSS Analytics™ Database, in 2009 IT departments in hospitals in the United States had an average of nine IT FTEs (median three IT FTEs). Two-thirds of respondents indicated that they anticipated an increase in the number of IT staff at their organization in the next 12 months. In the 2009 research, less than half of survey respondents indicated that they anticipate that they would increase in staff. However, the data is consistent with what was reported in 2008.

More specifically 38 percent of respondents who indicated an increase of less than 10 percent, another 20 percent suggested that that the increase would increase by 10 to 20 percent. Nearly eight percent indicated that their staff would change by more than 20 percent.

Less than one-third of respondents (29 percent) did not expect a change in the size of their IT staff in the next 12 months. Only two percent of respondents indicated that they expected a staffing decrease in the next 12 months. This can be compared to 16 percent of respondents anticipating a decrease in the 2009 research.

Approximately eight percent of respondents reported that they did not have any staffing needs at their organization; this is similar to what was reported in 2009. Respondents were most likely to identify clinical application support as a key area in which staffing needs will be most critical in the future. This was identified by 42 percent of respondents. This was also the top staffing need identified in both the 2008 and 2009 research.

Slightly more than one-quarter of respondents (27 percent) reported that they have critical IT staffing needs in the area of process/workflow design. Other areas frequently identified as having critical IT staffing needs are clinical informaticists (25 percent), network/architecture support (21 percent), IT security (21 percent) and clinical transformation (20 percent).

Five percent or fewer respondents reported having critical staffing needs in the below areas:

- Programming (five percent);
- Internet/Intranet (five percent);
- IT Management (four percent); and
- Regulatory Issues (four percent).

Respondents characterized as a CIO were also asked to identify which areas outside of the IT department they were responsible for. Nearly all of the senior IT executives surveyed (94 percent) reported that they are responsible for at least one IT area outside of the IT department. Most frequently identified was telecommunications, which was identified by 84 percent of respondents. Respondents were much less likely to report responsibility for other areas such as medical informatics (36 percent), health information management (26 percent), or biomedical/clinical engineering (14 percent). Nine percent of respondents also mentioned that they oversee other areas within their organization. Some of these areas include laboratory, library services, security, communications and supply chain.

According to the HIMSS Analytics™ Database, in 2009, US healthcare organizations spent an average of 2.78 percent of their total budget on IT. When compared to their IT budget in 2009, nearly three quarters of respondents reported that they expected their IT operating budget to increase in 2010. The majority of those projecting an increase noted that the increase would be definite (47 percent), compared to probable (25 percent). This represents an increase from the 55 percent of respondents who projected an increase in 2009, but is much more consistent with the data reported in the 2008 survey.

Another 18 percent of respondents reported that their IT budget would remain unchanged; this is consistent with the 20 percent of respondents who reported this to be the case in 2009.

Only nine percent of respondents indicated that their budget would decrease in 2010. This is consistent with data from 2008 survey results, in which 10 percent of respondents expected a decrease in their IT operating budget; this was closer to one-quarter in 2009.

Nearly half of those respondents who indicated that their budget would increase in 2010 (49 percent), reported that meaningful use would be a driver. A similar percent (45 percent) reported that the increase would be due to an overall growth in number of systems and technologies at their organization. Nearly 30 percent of respondents also suggested that the increase was due to a need to upgrade the IT infrastructure at their organization.

Least likely to drive an increase in spending is the business requirements needed to invest in e-business; this was identified by only three percent of respondents.

Among the handful of respondents who noted that their budget would decrease, the most likely reason identified for the decrease was a general overall budget decrease at their organization.

Figures:

Figure 26. Expected Change in IT Staff in Next 12 Months

Figure 27. 2009 IT Staffing Needs (Top Ten)

Figure 28. Additional Functions Managed by CIO

Figure 29. Projected Change in 2009 IT Operating Budget

Figure 30. Reason for Increase in 2009 Budget

13. About HIMSS

The Healthcare Information and Management Systems Society (HIMSS) is a comprehensive healthcare-stakeholder membership organization exclusively focused on providing global leadership for the optimal use of information technology (IT) and management systems for the betterment of healthcare. Founded in 1961 with offices in Chicago, Washington D.C., Brussels, Singapore, and other locations across the United States, HIMSS represents more than 23,000 individual members, of which 73% work in patient care delivery settings. HIMSS also includes over 380 corporate members and nearly 30 not-for-profit organizations that share our mission of transforming healthcare through the effective use of information technology and management systems. HIMSS frames and leads healthcare public policy and industry practices through its educational, professional development, and advocacy initiatives designed to promote information and management systems' contributions to ensuring quality patient care.

14. 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 21st Annual HIMSS Leadership Survey.

15. For More Information, Contact:

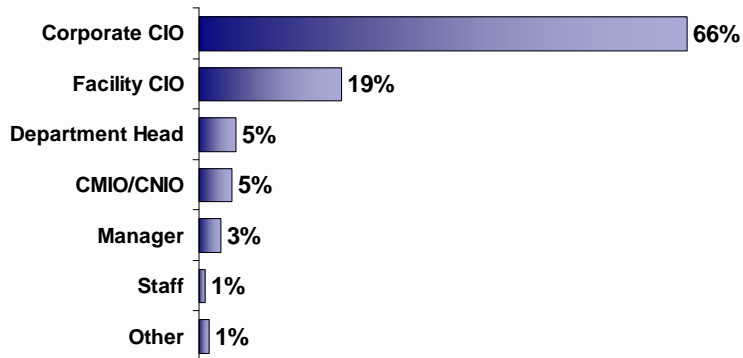
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Profile of Survey Respondents



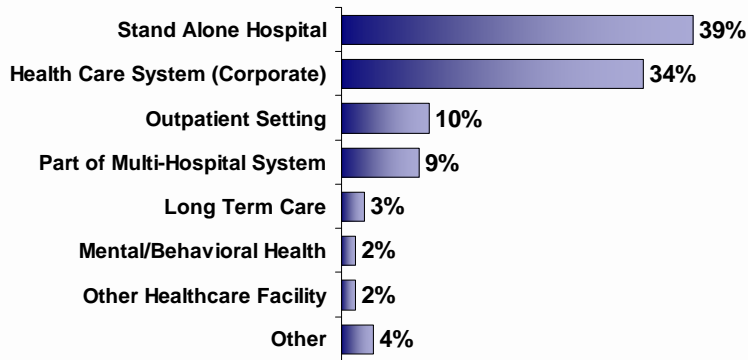
Participant Profile – Title

Figure 1



Participant Profile – Facility Type

Figure 2

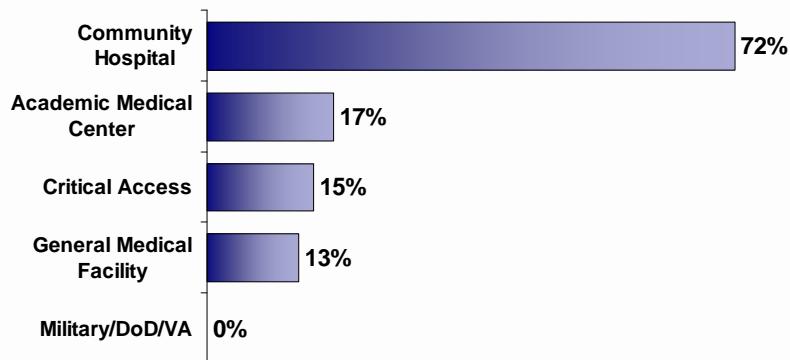


Profile of Survey Respondents (continued)



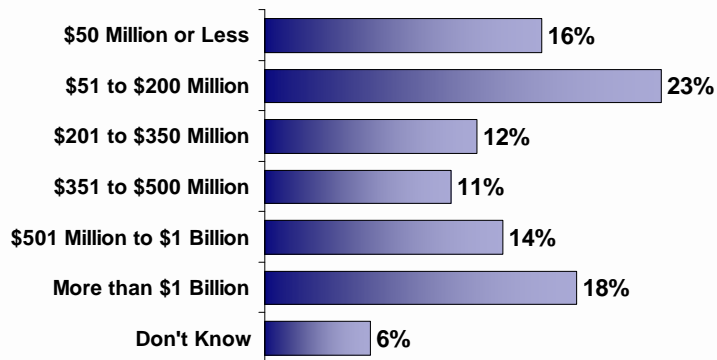
Participant Profile – Type of Hospital

Figure 3



Participant Profile – Revenue

Figure 4

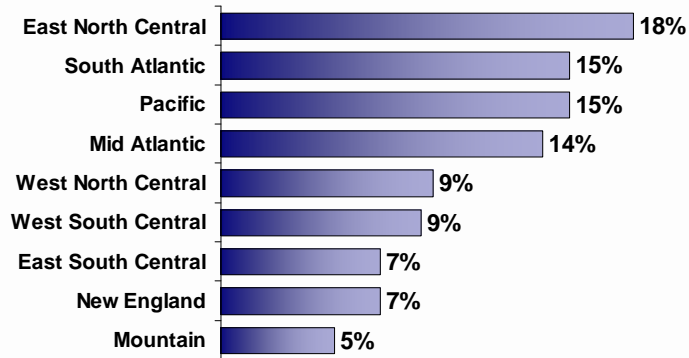


Profile of Survey Respondents (continued)



Participant Profile – Region

Figure 5

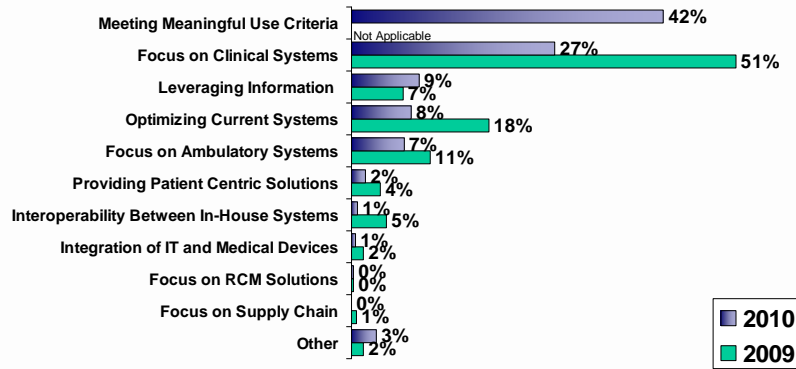


IT Priorities



Top IT Priority—Next Two Years

Figure 6

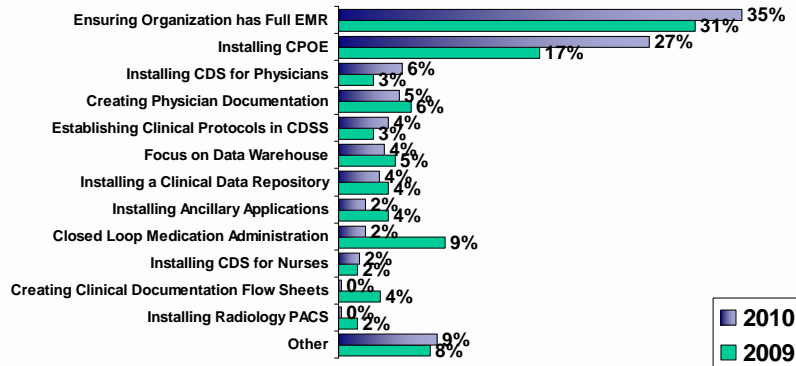


IT Priorities (continued)



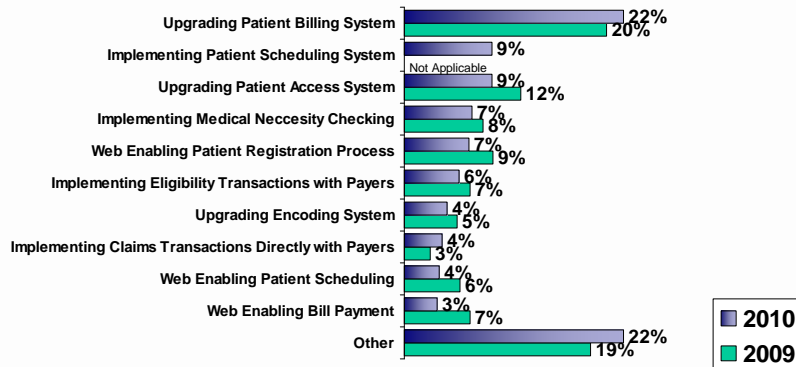
Primary Clinical IT Focus

Figure 7



Primary Financial IT Focus

Figure 8

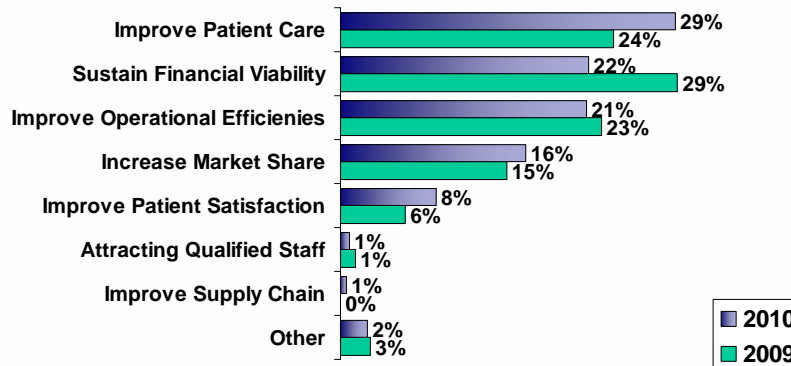


IT Priorities (continued)



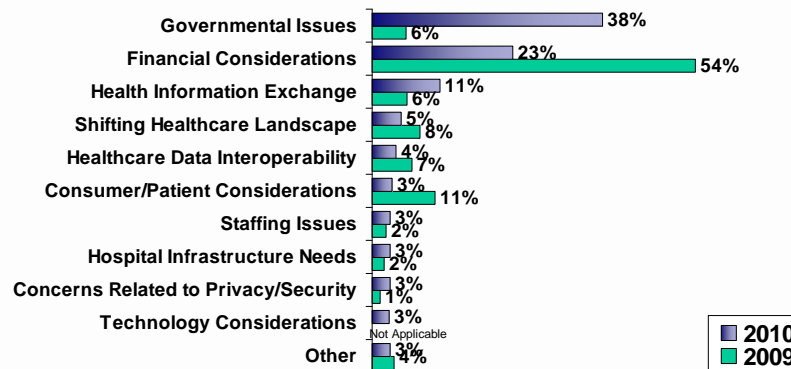
Key Business Objective

Figure 9



Business Issue with Most Impact on Healthcare

Figure 10

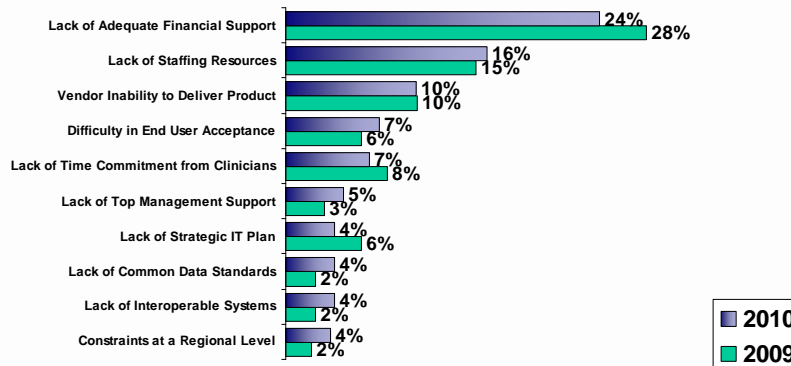


IT Barriers



Most Significant Barriers to Implementing IT

Figure 11



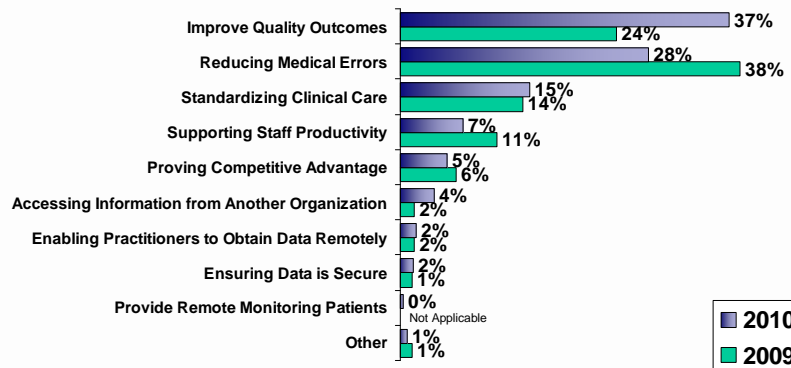
Top Ten Responses

IT and Patient Care



Area that IT Can Most Impact

Figure 12

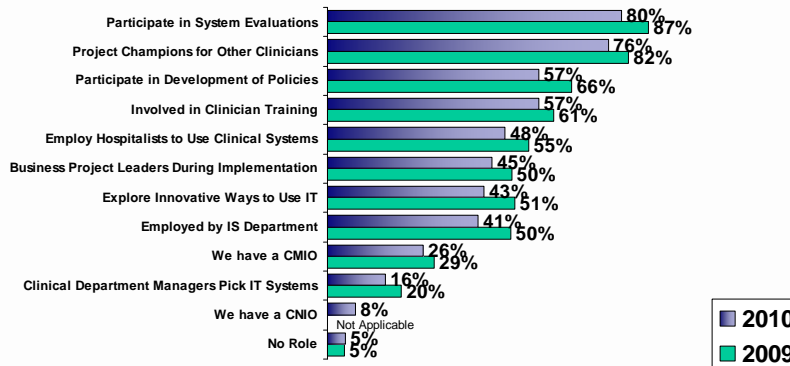


IT and Patient Care (continued)



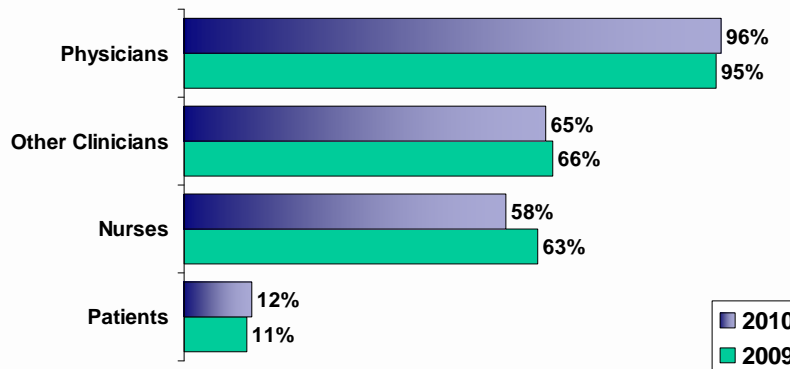
Role of Clinicians

Figure 13



Access to On-line Patient Information from Remote Location

Figure 14

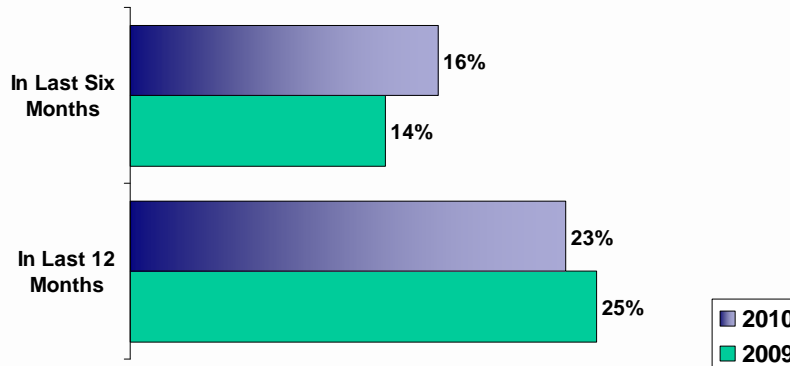


IT Security



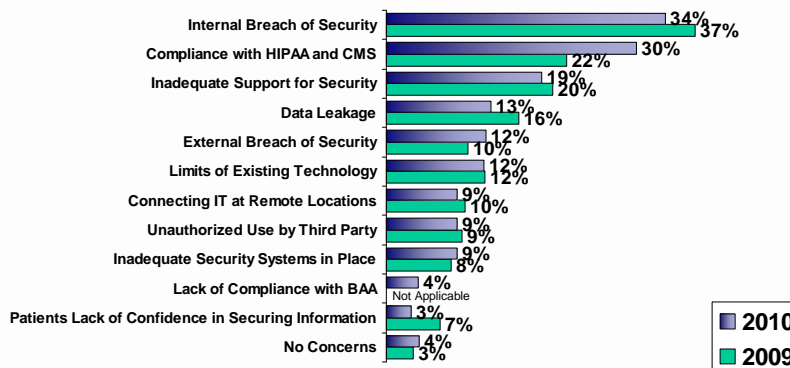
Security Breach

Figure 15



Top Concerns—Security of Computerized Medical Information

Figure 16



Electronic Medical Record



Status of Electronic Medical Record (EMR) Implementation

Figure 17

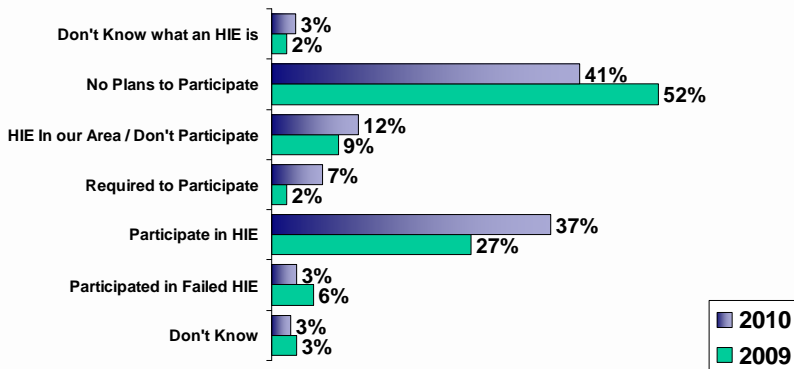


Health Information Exchange



Health Information Exchange (HIE) Adoption

Figure 18

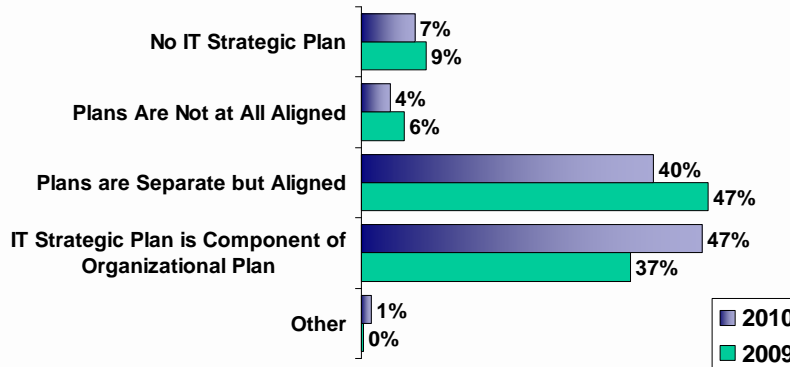


IT Governance



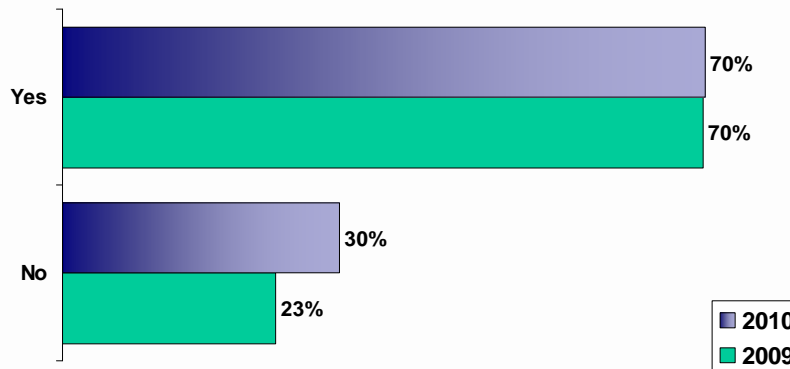
Alignment of Organizational & IT Strategic Plan

Figure 19



Member of Organization's Executive Committee

Figure 20

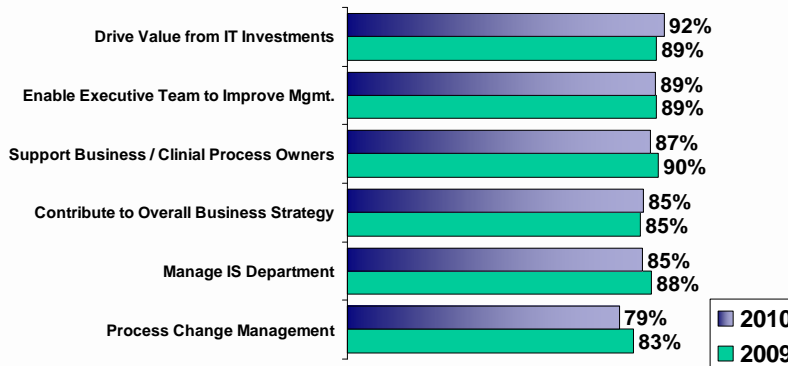


IT Governance (continued)



CIO Responsibilities

Figure 21

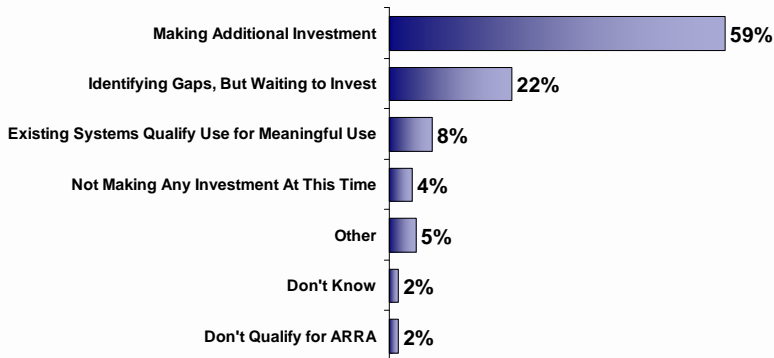


ARRA



Investment In ARRA

Figure 22

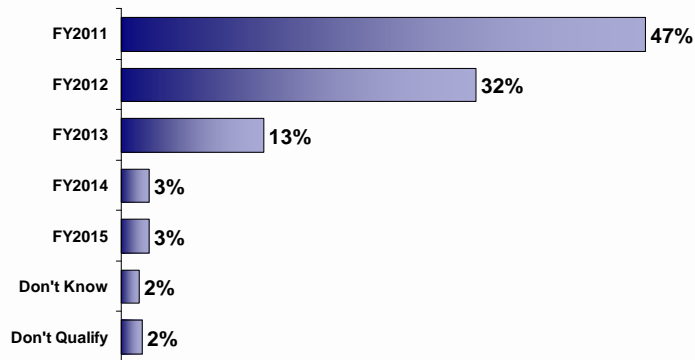


ARRA (continued)



Time Frame Eligible for Meaningful Use Incentives

Figure 23



Barriers to Achieving Meaningful Use

Figure 24

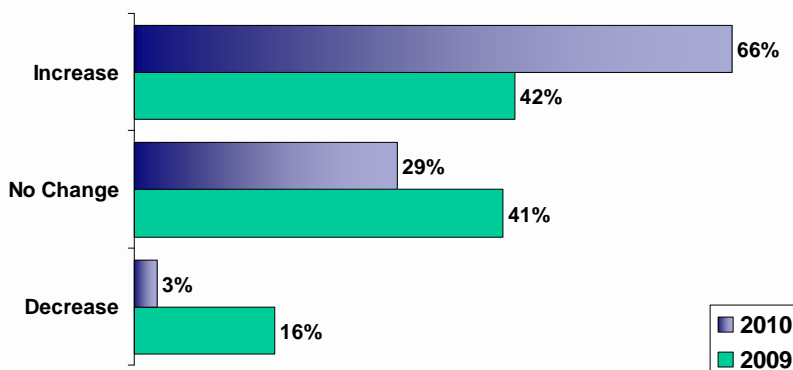


IT Budget and Staff



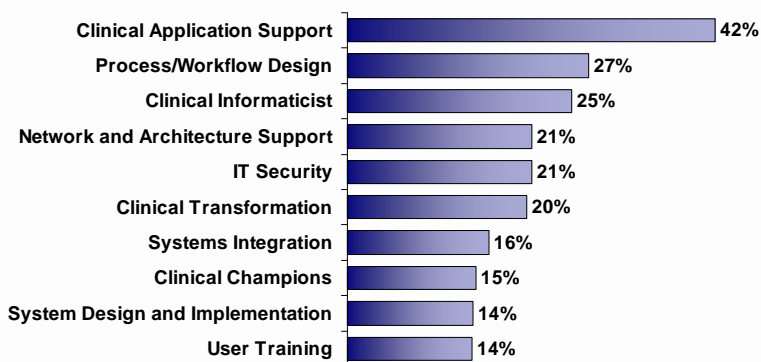
Expected Change in IT Staff in Next 12 Months

Figure 25



2010 IT Staffing Needs (Top Ten)

Figure 26

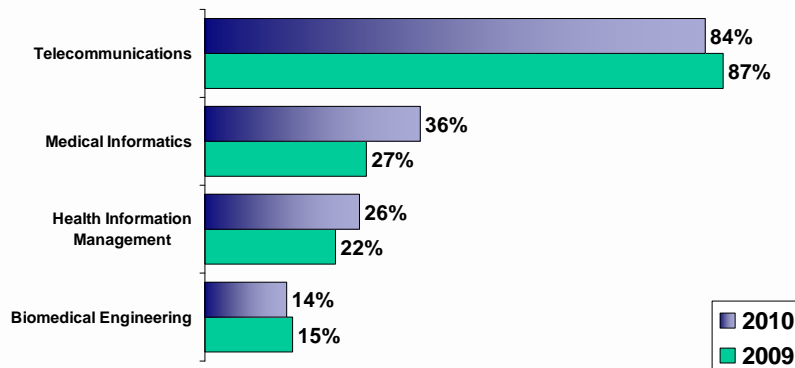


IT Budget and Staff (continued)



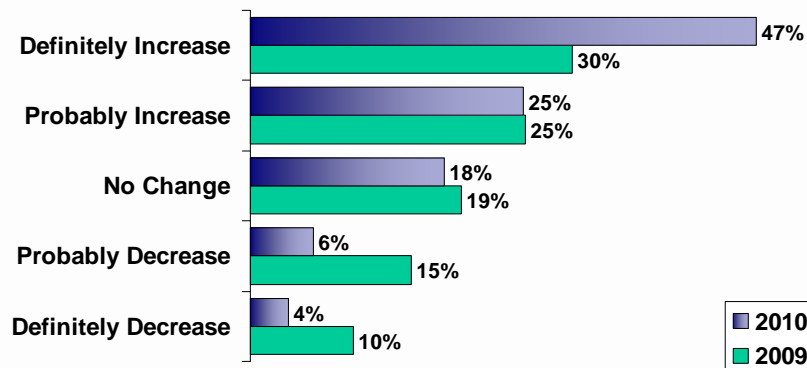
Additional Functions Managed by CIO

Figure 27



Projected Change in 2010 IT Operating Budget

Figure 28



IT Budget and Staff (continued)



Reason for Increase in 2010 Budget

Figure 29

