

TIGER Initiative and the Alliance for Nursing Informatics



Joyce Sensmeier MS, RN-BC, CPHIMS, FHIMSS
Co-chair Alliance for Nursing Informatics
VP, Informatics, HIMSS

Charlotte Weaver RN, PhD
Chair, HIMSS Nursing Informatics Committee
VP and Chief Nursing Officer, Cerner Corporation

Congressional Budget Office

October 17, 2007

Nursing Perspective on HIT Workforce Issues

- **TIGER Initiative** – a program to engage all nursing stakeholders to better prepare our nursing workforce (all practicing nurses and nursing students) to use technology and informatics to improve the delivery of patient care.
- **Alliance for Nursing Informatics** – collaboration of organizations that represent a united voice for nursing informatics.



Technology Informatics Guiding Education Reform

The focus of the TIGER Initiative is to better prepare our nursing workforce (all practicing nurses and nursing students) to use technology and informatics to improve the delivery of patient care.

We believe that *necessary skills* for nurses' portfolio in 2007 includes computer literacy and information literacy.

The TIGER Initiative is a program; not an organization.

TIGER has been a grass-roots effort to engage with all stakeholders that are committed to a common "vision" of ideal EHR-enabled nursing practice. Today, more than 70 diverse organizations have joined this effort.

TIGER Vision

- Allow informatics tools, principles, theories and practices to be used by nurses to make healthcare safer, effective, efficient, patient-centered, timely and equitable
- Interweave enabling technologies transparently into nursing practice and education, making information technology the stethoscope for the 21st century

Nursing Focus

- Nearly 3 million practicing nurses in the U.S.
- More than 55% of all health care workers
- Nurses are knowledge workers

Necessary Skills Nursing Portfolio in 2007

- Computer Literacy Skills
- Information Literacy Skills
- Informatics Skills





Building the Work Force for HIT

A work force capable of innovating, implementing and using health communications and information technologies will be critical to healthcare's success.

For health Information Transformation

AHIMA and AMIA

http://www.ahima.org/emerging_issues/Workforce_web.pdf



TIGER Summit – Phase I

- October 31 -November 1, 2006
- Held at the Uniformed Services University for Health Sciences (USUHS) in Bethesda, MD
- 100 participants representing all stakeholders, 70 organizations
- Created a collective vision for nursing practice and education within 10 years if nurses were fully enabled with IT resources
- Developed a 3-year action plan required to achieve this vision
- Summary Report published at www.tigersummit.com

Collaborative Work Groups – Phase II

- ***Enabled by the Alliance for Nursing Informatics (ANI) – a collaboration between AMIA and HIMSS***
- Continue to support progress of each participating organization's 3-year action plan
- Formalize cross-organizational activities/action steps into collaborative TIGER Teams (9 identified)
- Define measurable outcomes of each collaborative team
- Provide the infrastructure and support to facilitate the development and dissemination of the activities of the collaborative
- Develop educational materials that can be distributed to all practicing nurses and nursing students

9 Collaborative Teams

Created from combining all 3-year action steps into common themes/topics

1. Standards and Interoperability
2. Healthcare IT National Agenda/HIT Policy
3. Informatics Competencies
4. Education and Faculty Development
5. Staff Development/Continuing Education
6. Usability/Clinical Application Design
7. Virtual Demonstration Center
8. Leadership Development
9. Patient-Focus/Personal Health Record

Measurable Outcomes for Each Collaborative Team

1. Definition, scope, success criteria, and timeline for deliverables (1 year)
2. Inventory and analysis of existing resources (e.g., literature review, subject matter experts, publications, programs, etc.)
3. Identification and access to resources and constituent targets
4. Educational web-based audio conferences (target = 2)
5. Conference presentations (e.g., AONE, AWHONN, AACN, NONPF, ARN, NADONA, etc.)
6. Comprehensive white paper-type document (modeled after TIGER Summary Report – see next slide)
7. Articles for publication and dissemination amongst broader TIGER audience
8. Chapter in the 4th Edition of the Nursing Informatics Series *Where Caring and Technology Meet*

Alliance for Nursing Informatics

- ANI is a collaboration of organizations that represent a united voice for nursing informatics.
- Alliance represents more than 3000 nurses and brings together 26 distinct nursing informatics groups in the U.S.


ANI and the TIGER Initiative

- In 2007, ANI became the enabling organization for the TIGER initiative



Strategic Goals and Activities

- Maintain and increase communication channels to expand our membership outreach
- Encourage nursing informatics competencies, education, training, publication, and professional development
- Engage in issues of national importance in health information technology and provide leadership
- Promote and enhance the professional practice of nursing informatics
- Support nursing informatics research



Evidence of a unified voice

- Clinical Decision Support Request for Proposal
 - Letter of support for the HIMSS Clinical Decision Support Request for Proposal to AHRQ and nursing representation on the Advisory Panel
- American Health Information Community
 - Comments to the Office of the National Coordinator for Health IT on the proposed succession of AHIC to the public/private sector
- Google Health Advisory Council
 - Letter requesting Google to add nursing representation on the Google Health Advisory Council
- Healthcare Information Technology Standards Panel
 - Active member and participant in standards harmonization efforts
- United States Department of Labor – Nursing Informatics Job Occupational Codes
 - Letter of support and definition of tasks, abilities, knowledge, and work activities of the nurse informaticist - effort lead by AMIA



TIGER communication

www.tigersummit.com

- Donna DuLong, TIGER Program Director
donna@tigersummit.com

ANI Co-chairs

www.allianceni.org

- Joyce Sensmeier, MS, RN-BC, CPHIMS, FHIMSS
 - HIMSS Representative
 - JSensmeier@himss.org
- Carole Gassert, RN, PhD, FACMI, FAAN
 - AMIA Representative
 - Carole.gassert@nurs.utah.org





HIMSS 2007 Nursing Informatics Survey

Joyce Sensmeier MS, RN-BC, CPHIMS, FHIMSS
Co-chair Alliance for Nursing Informatics
VP, Informatics, HIMSS

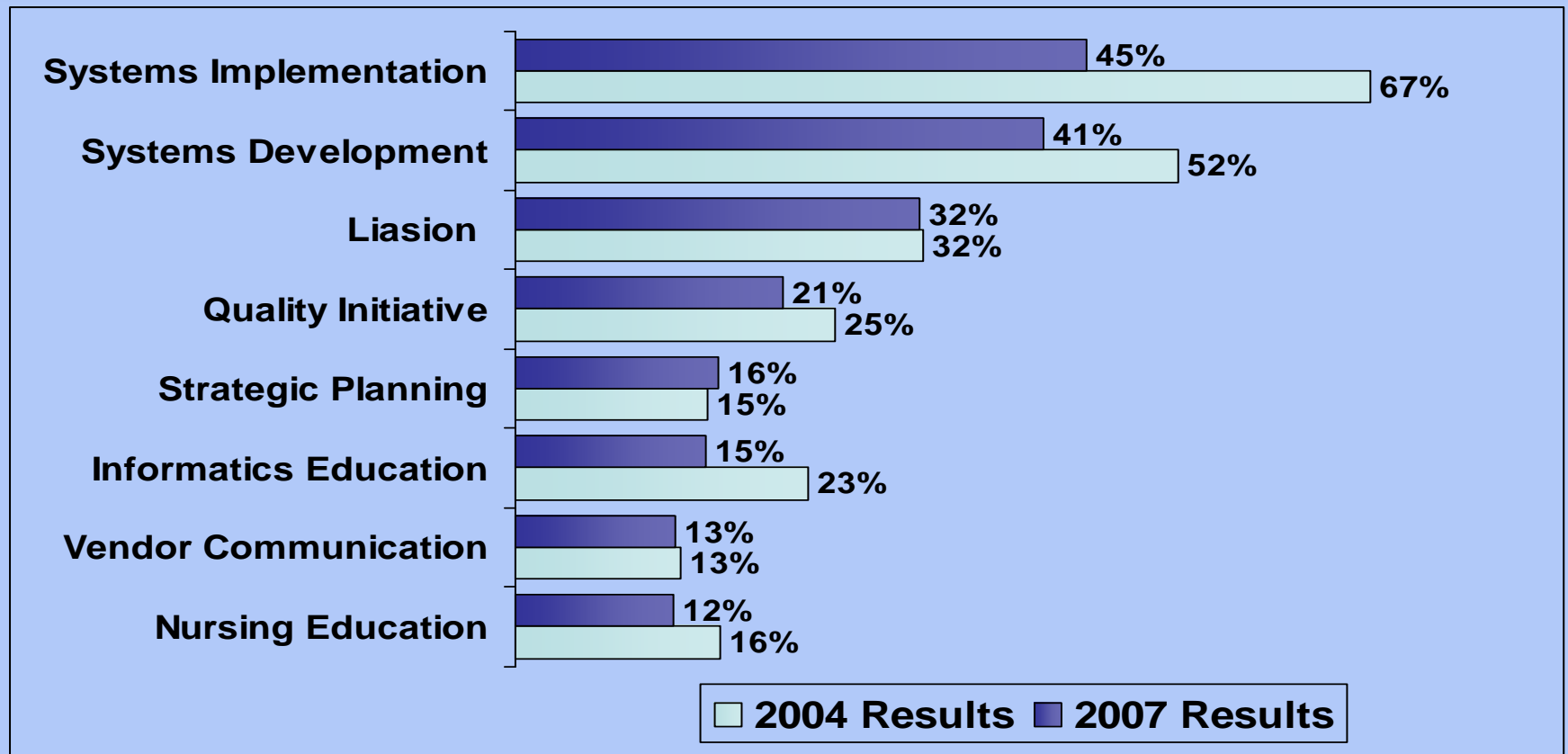
Charlotte Weaver RN, PhD
Chair, HIMSS Nursing Informatics Committee
VP and Chief Nursing Officer, Cerner Corporation

Observation

“Nursing informatics is the leading edge solution that can positively impact the delivery of state of the art health care, lower its cost and dramatically improve patient safety across the entire industry.”

Quote From 2007 HIMSS Nursing Informatics Survey Respondent.

Top Three Job Responsibilities



**Top eight responses shown.*

Overview: 2007 Nursing Informatics Workforce Survey

- Conducted to gain a better understanding of the following:
 - Background of nurse informaticists
 - Issues nurse informaticists address on a daily basis
 - Tools nurse informaticists turn to for completing their jobs

Objectives

- Identify the 2007 Nursing Informatics survey methodology and respondents.
- Describe the 2007 survey results as they relate to nursing background, informatics training and education of participants.
- Explore job responsibilities and compensation of respondents.

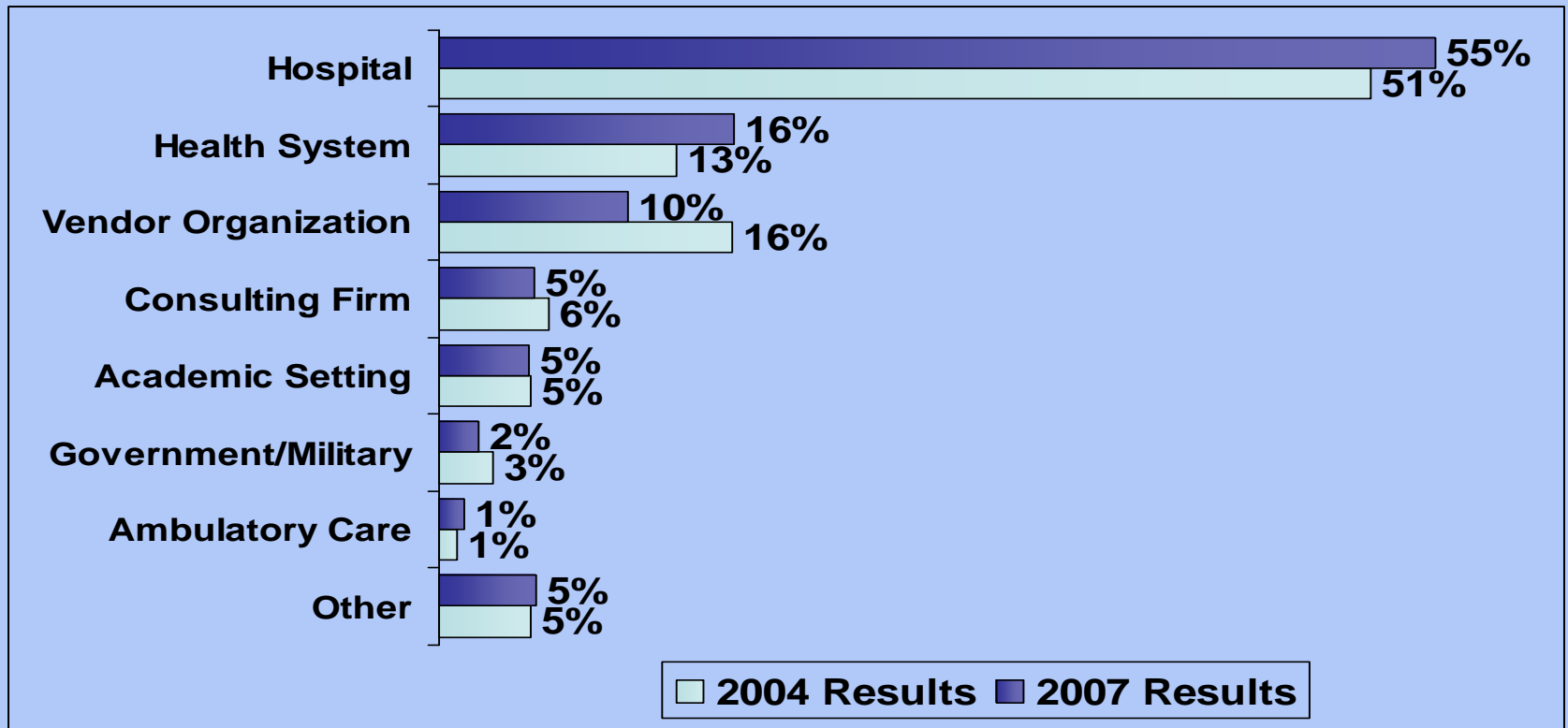
Objectives

- Review common barriers to success and resources of information identified by nurse informaticists.
- Compare and contrast 2007 survey results with the 2004 survey findings.

2007 NI Survey

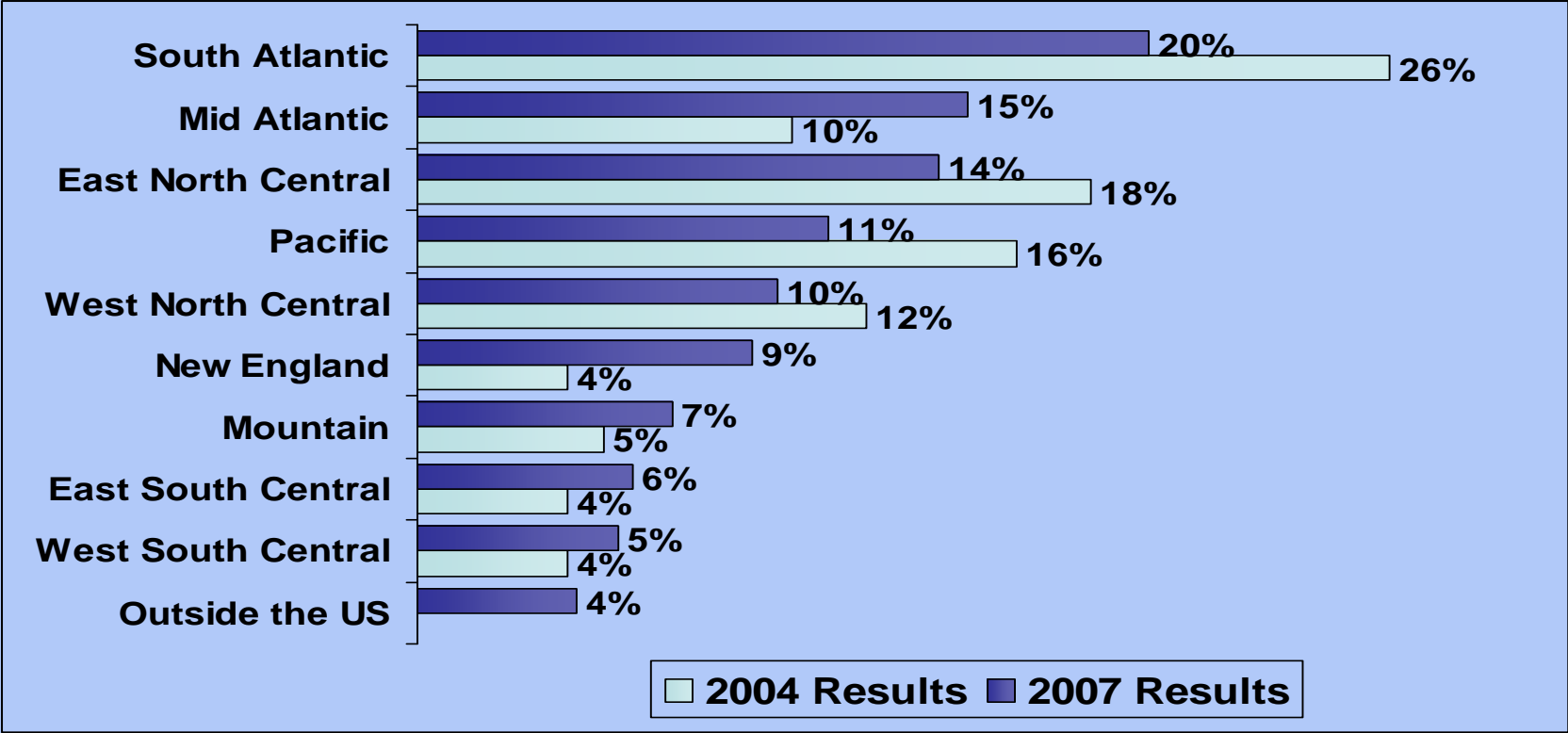
- **Distribution:**
 - Non-probability “Snowball Sampling”
 - Solicitation through NI organizations via:
 - websites
 - listserves
 - emails
 - private referrals
 - 776 respondents

Primary Workplace



Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

Geographic Region



Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

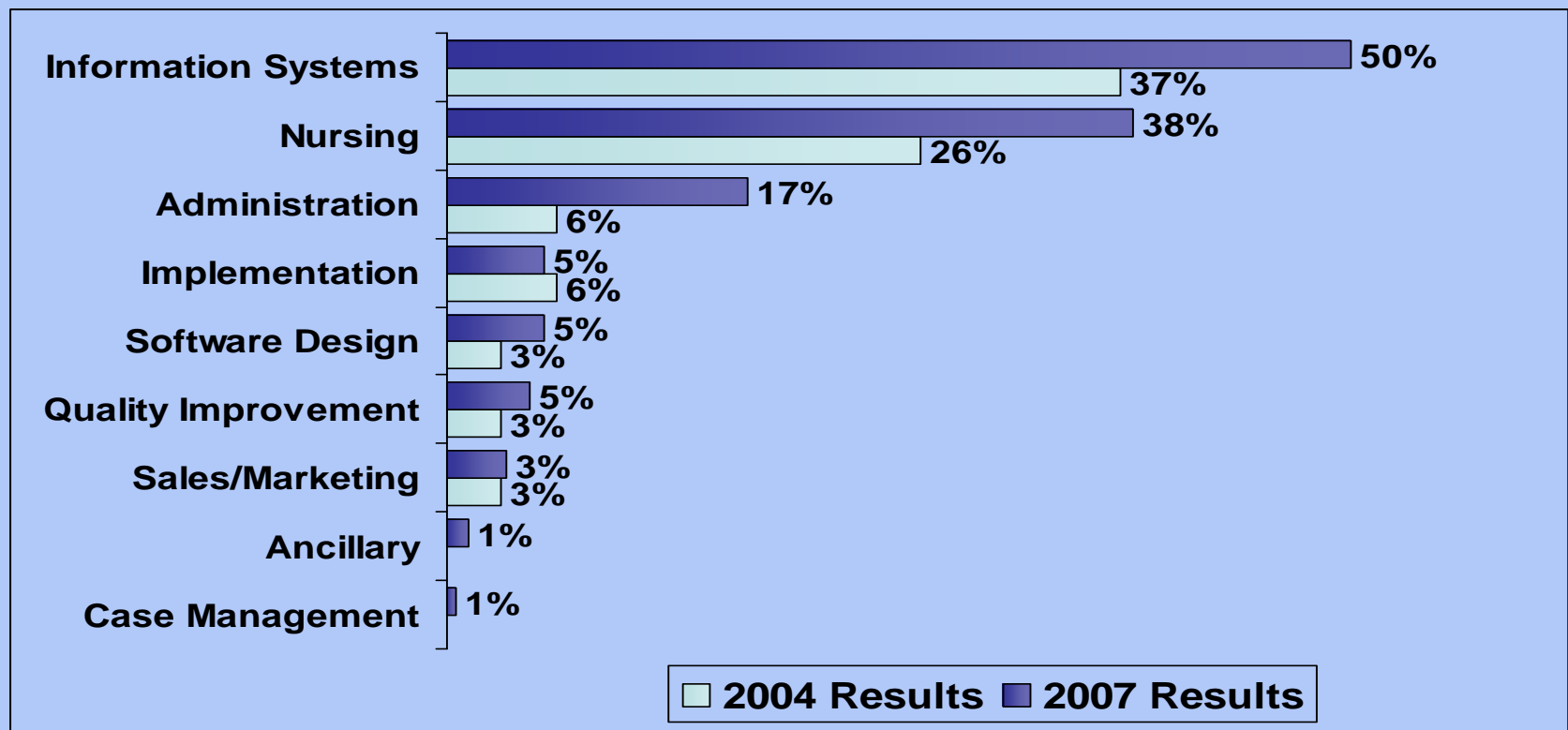
Nursing Informatics Job Titles

- **Diverse**
 - 14% “clinical analysts”
 - 14% “informatics nurse specialist” or “nursing informatics specialist”
 - 9% “consultant”
 - 40% identified “other”
 - Director of Clinical Informatics, Clinical Informatics Coordinator, Clinical Systems Analyst, Clinical Informatics Specialist.

Standard Occupational Classification System (SOC)

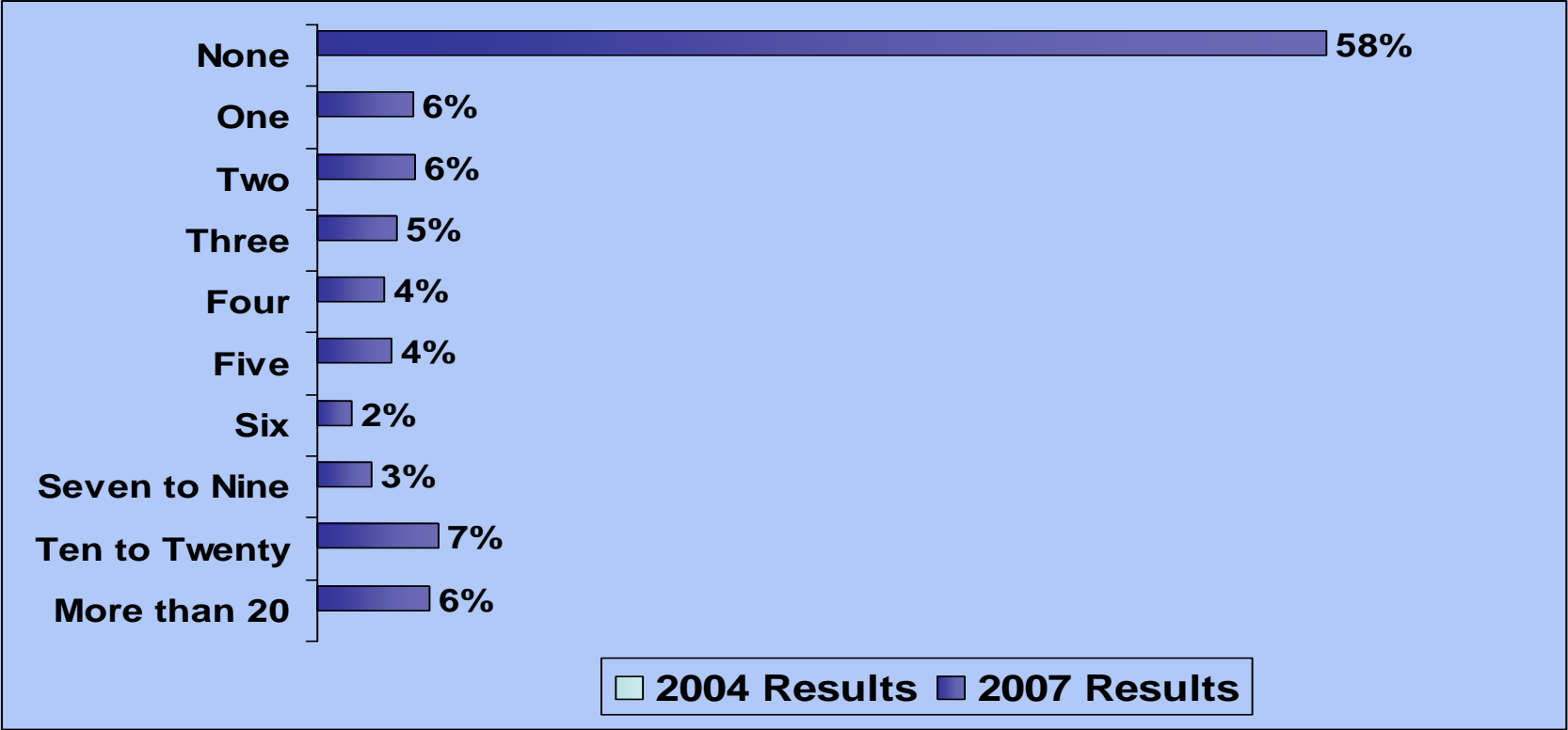
- Federal Bureau of Labor Statistics
- Request revision to Standard Occupational Codes for 2010 Census
- Include Informatics Nurse (Major Code)
 - Informatics Nurse
 - Informatics Nurse Specialist
 - Informatics Nurse Researcher (Minor Codes)

To Which Department Do You Report?



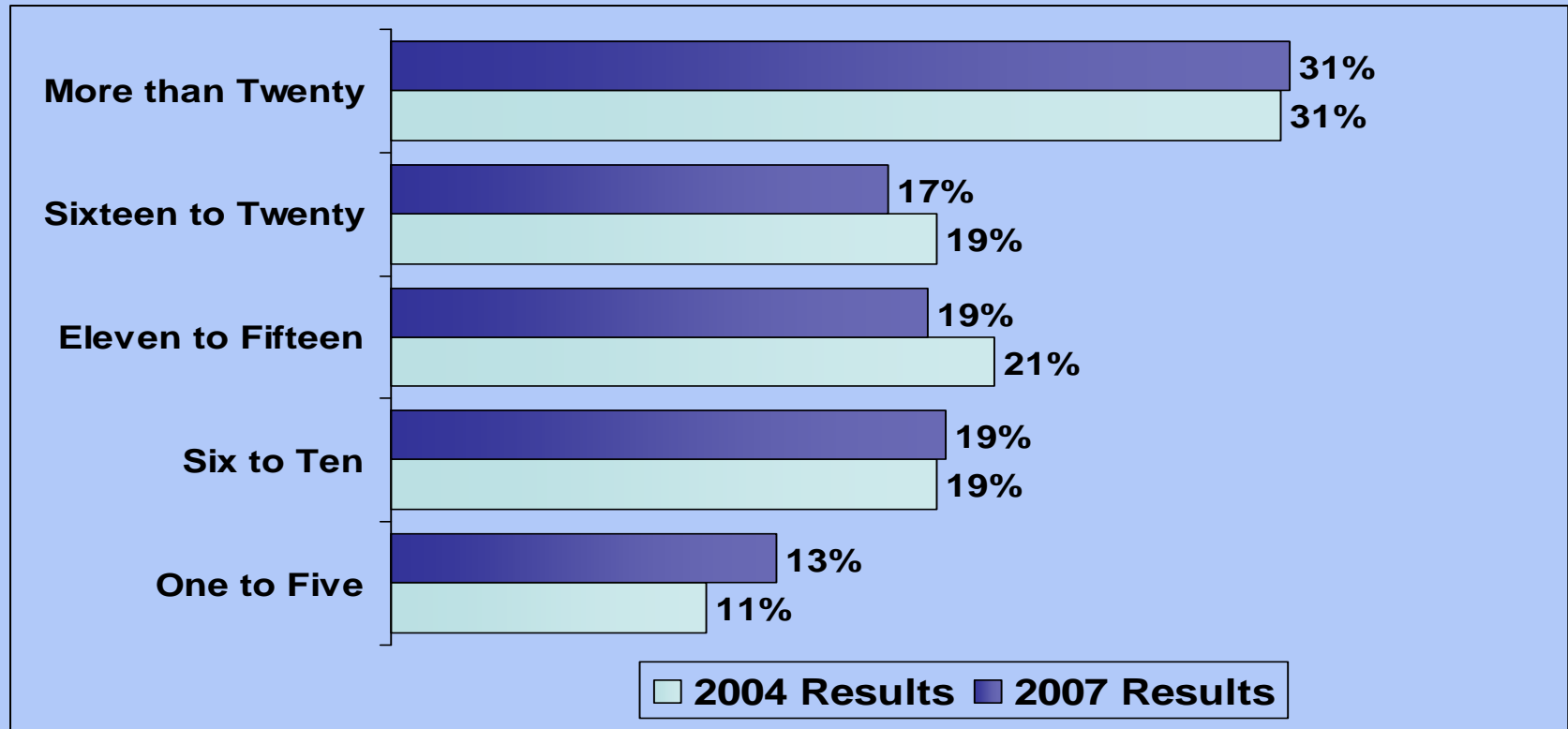
Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

Number of Reports (Direct & Indirect)



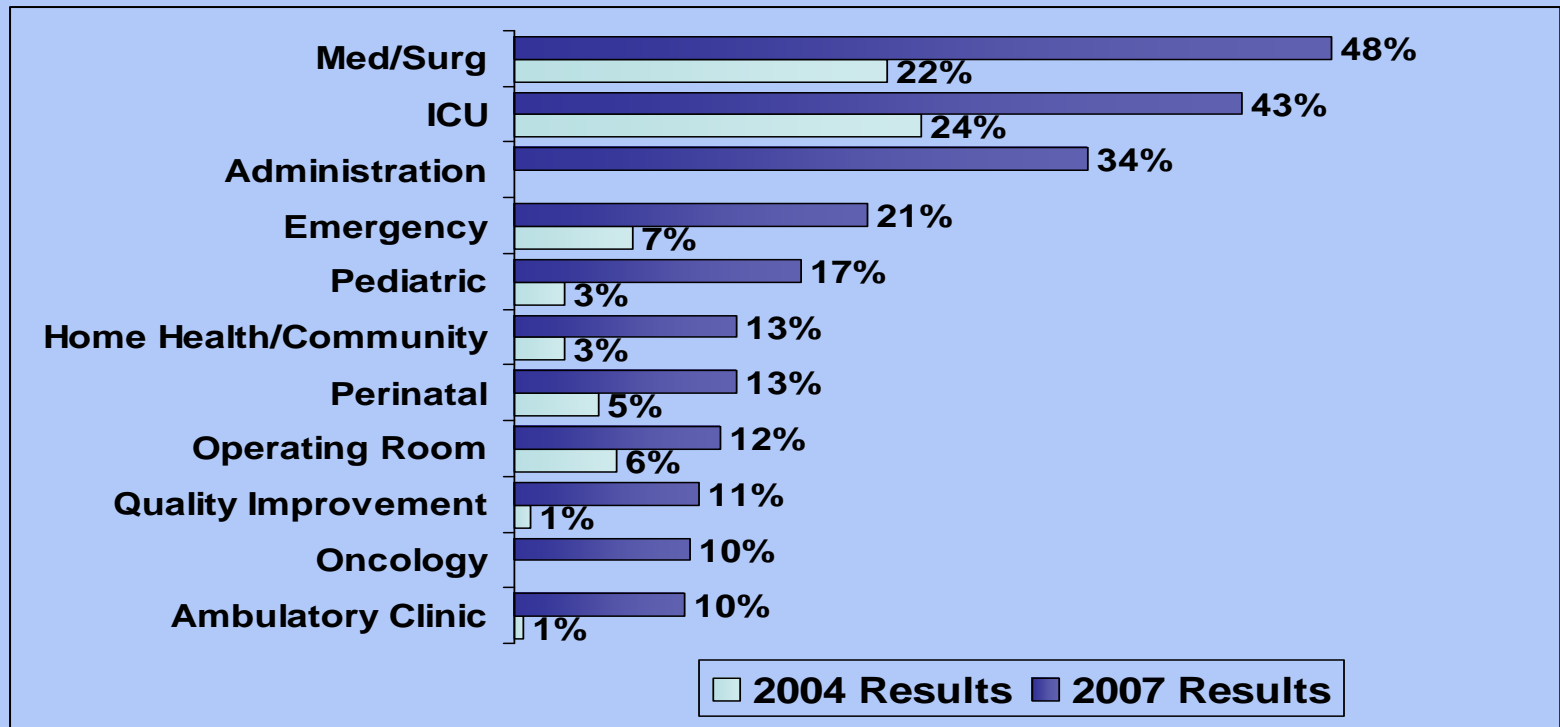
Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

Years of Clinical Experience Prior to Becoming a Nurse Informaticist



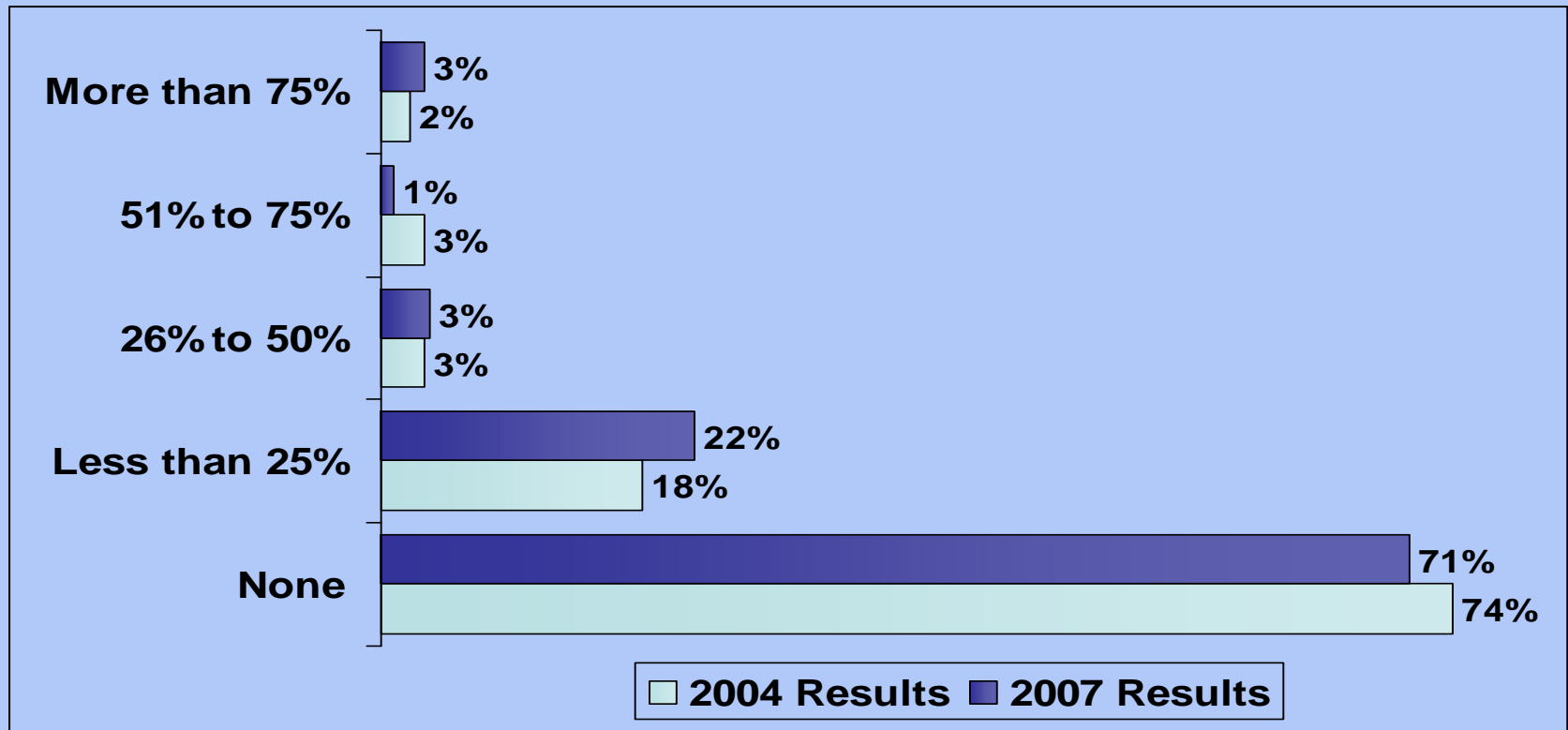
Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

Nursing Experience



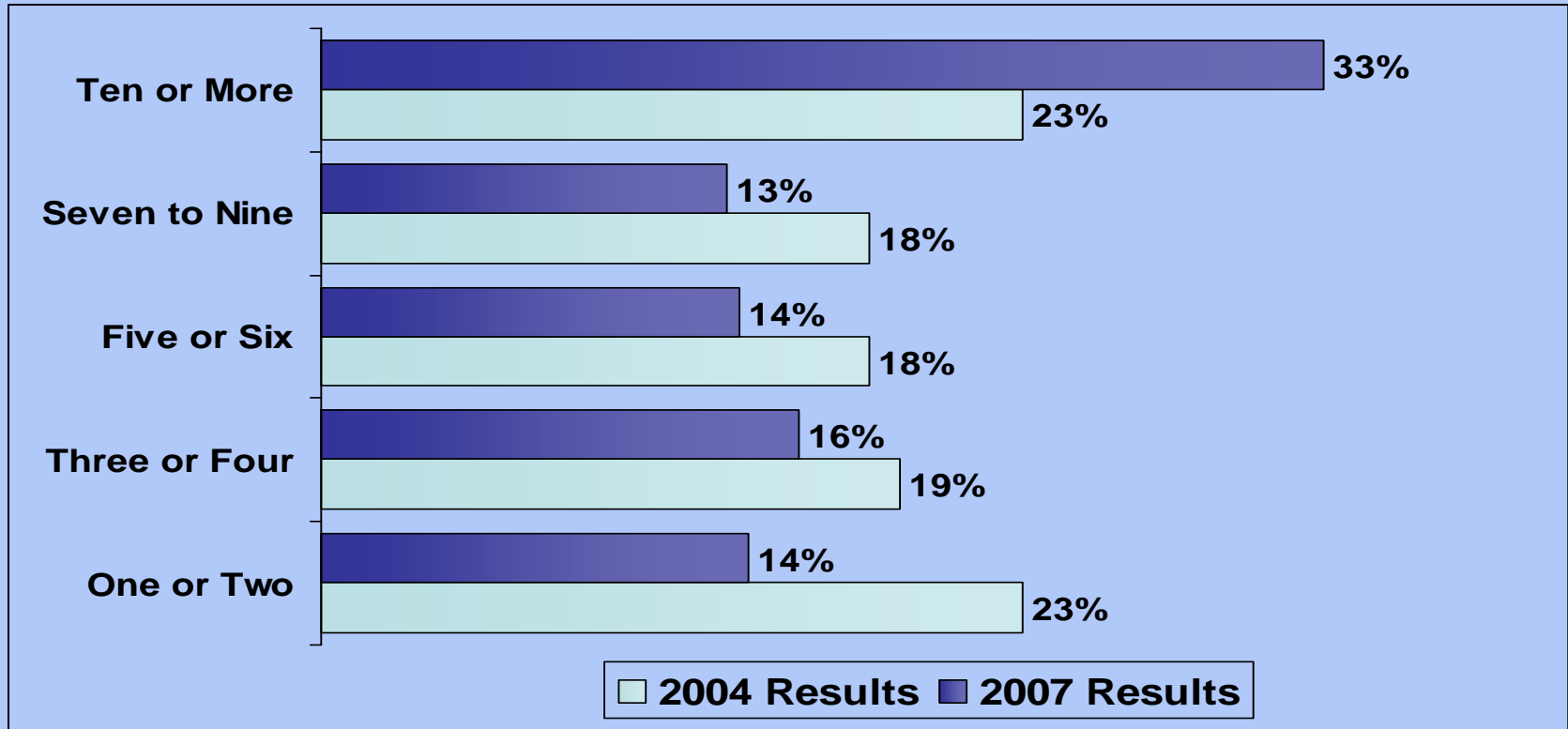
**In 2007, respondents were able to choose all that apply; in 2004 they could choose one.*

Percent of Time Devoted to Clinical Activities



Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

Years of Informatics Experience



Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

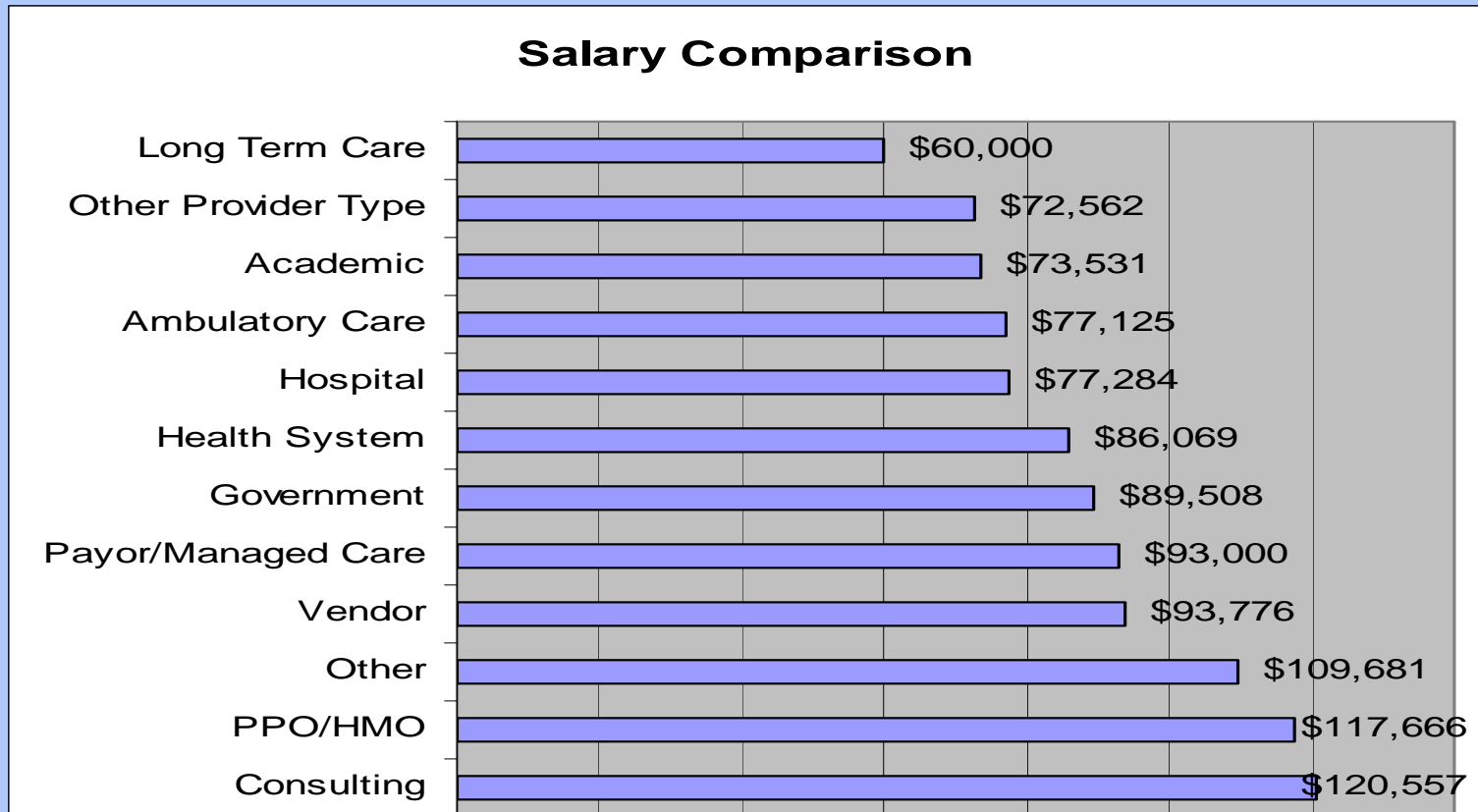
Salary

- **Salary 2004**
 - Average \$69,500
 - Impacted by years in NI, not clinical experience.
- **Salary 2007**
 - Average \$83,675
 - Median \$79,000

Salary

- **Highest average salary:**
 - Pacific Region- \$94,250
 - New England- \$90,500
- **< \$80,000 annual salary**
 - East South Central
 - East North Central
 - Mountain

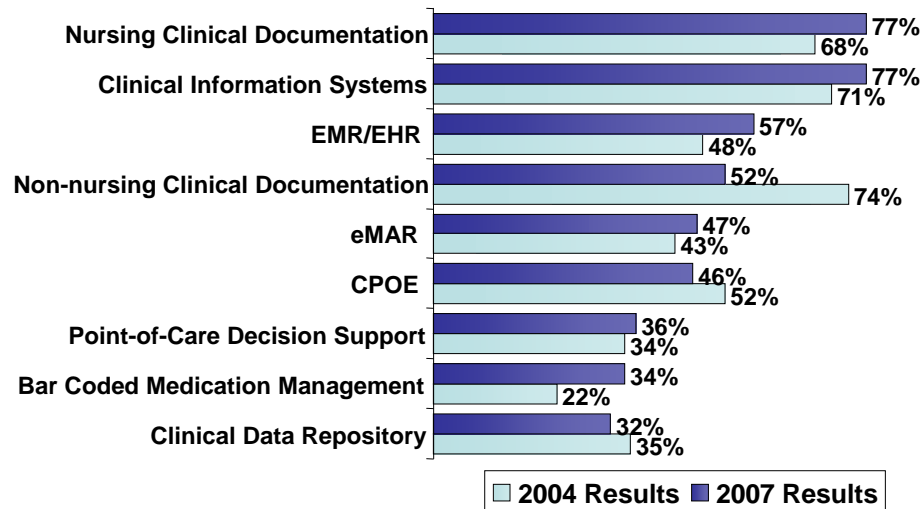
Salary Comparison



Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

Which Applications do you Currently Participate in Developing/Implementing

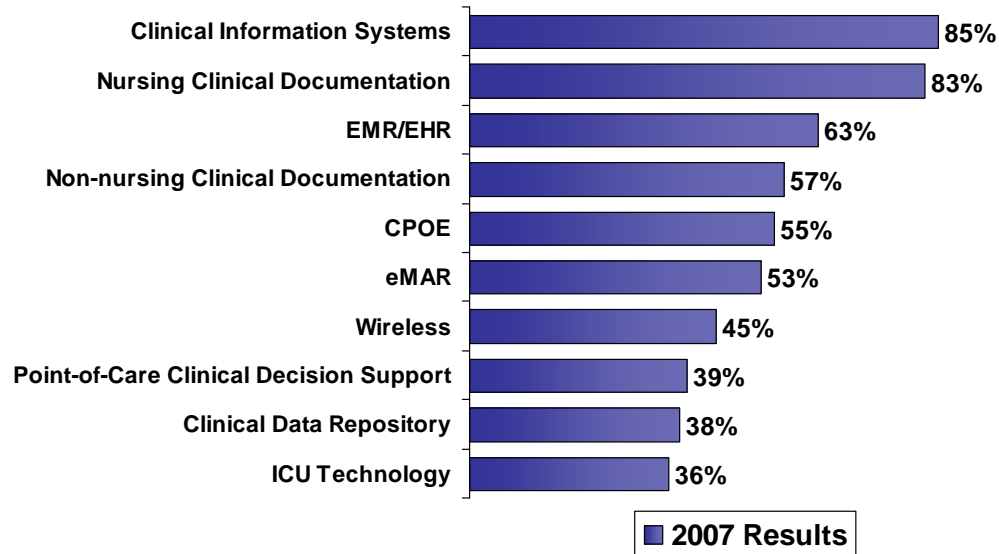
Which Applications do you Currently Participate in Developing/Implementing



Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson
© HIMSS
Top nine responses shown.

Experience with HIT Applications

Which Applications do you Have Experience With



Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson

© HIMSS

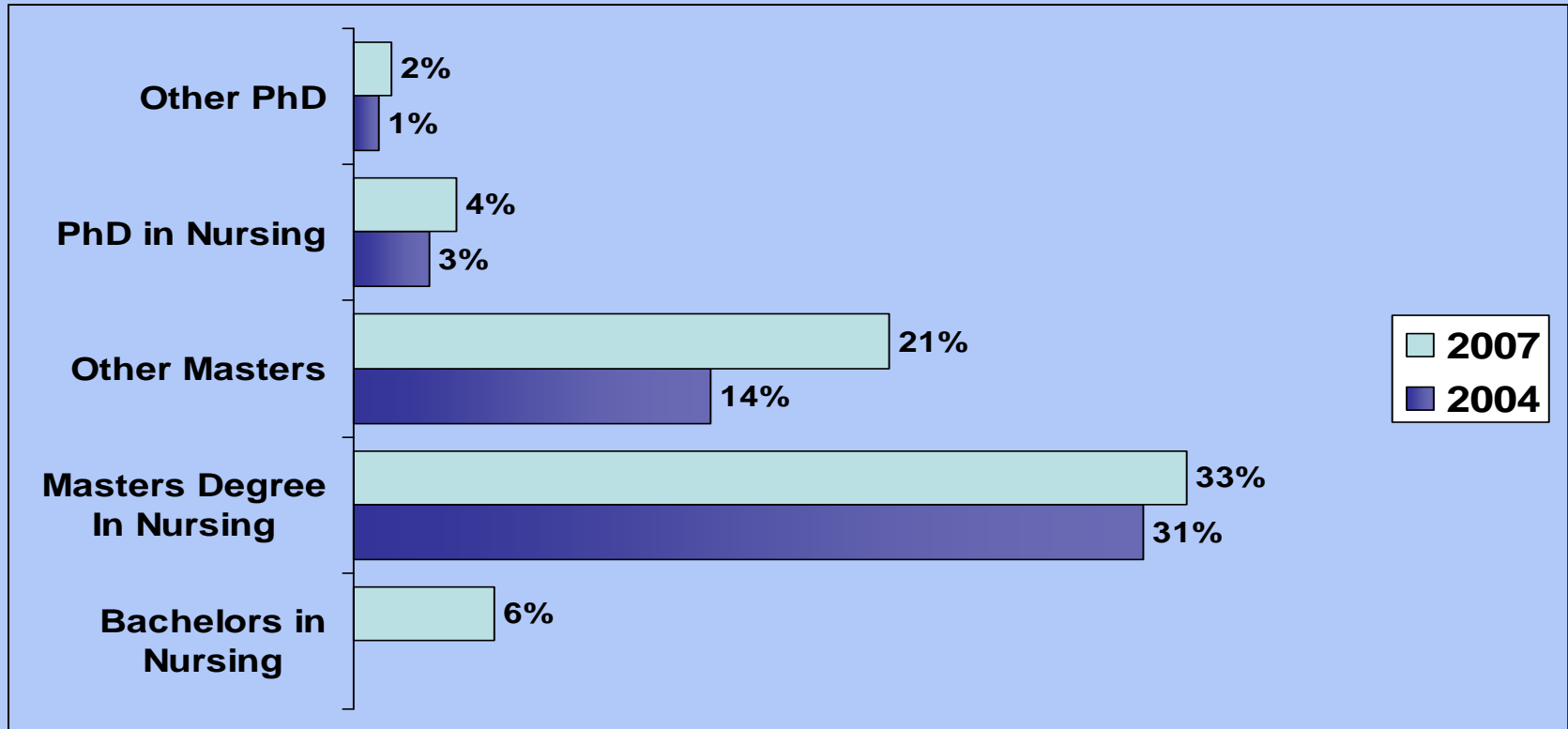
Top ten responses shown.

Largest Barrier to Success as a Nurse Informaticist



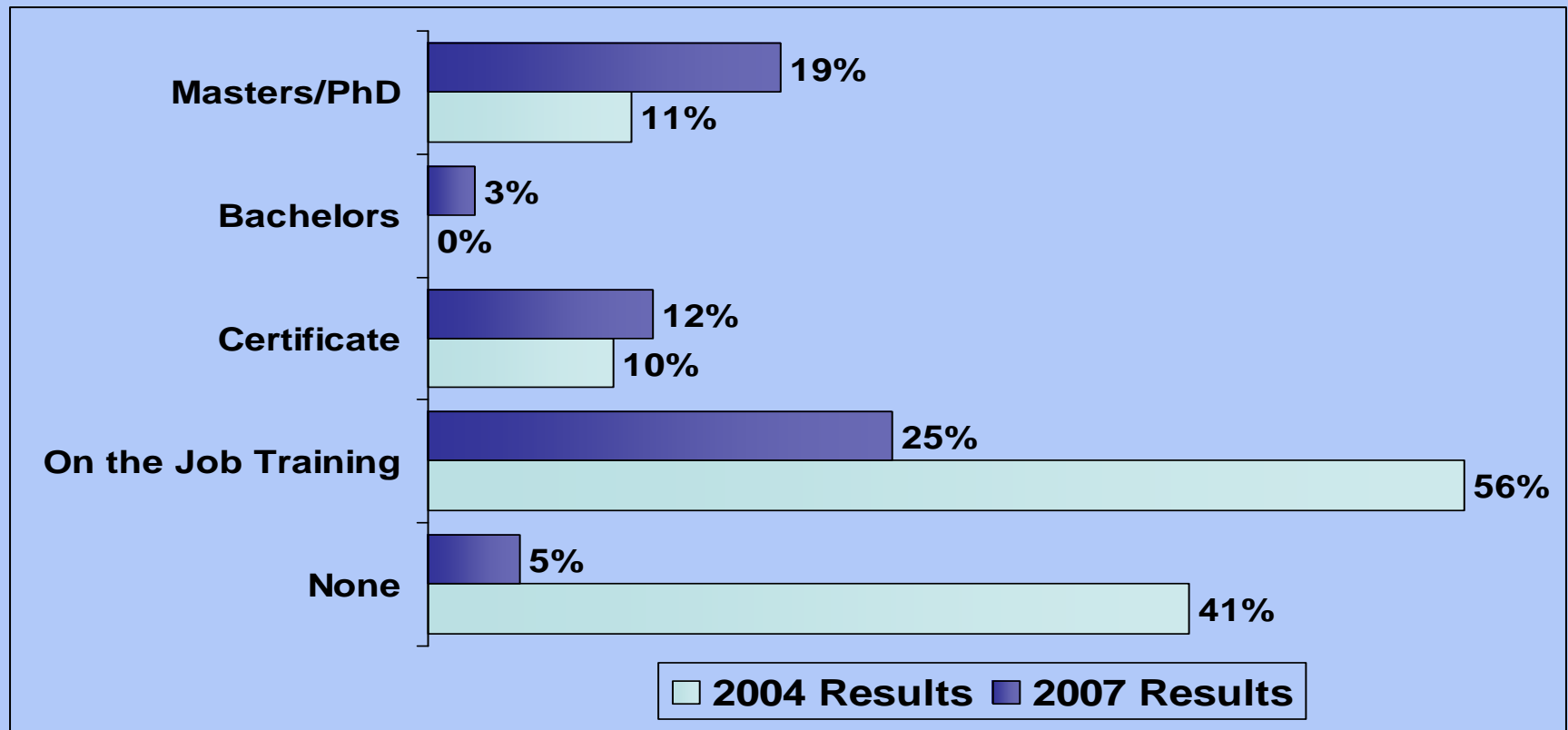
**Top ten responses shown.*

Nursing Education



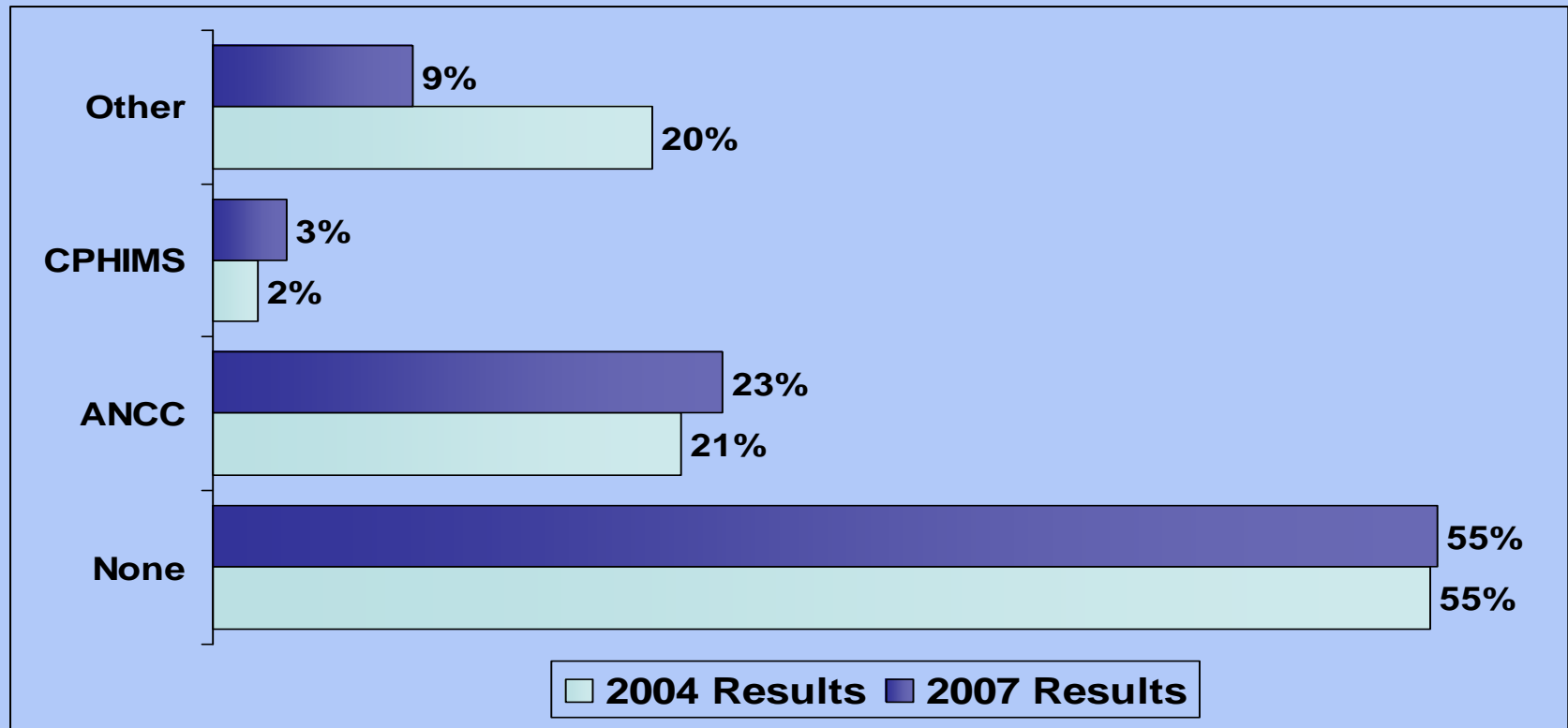
**While respondents may hold more than one degree, only highest degree is shown.*

Training as Nurse Informaticist



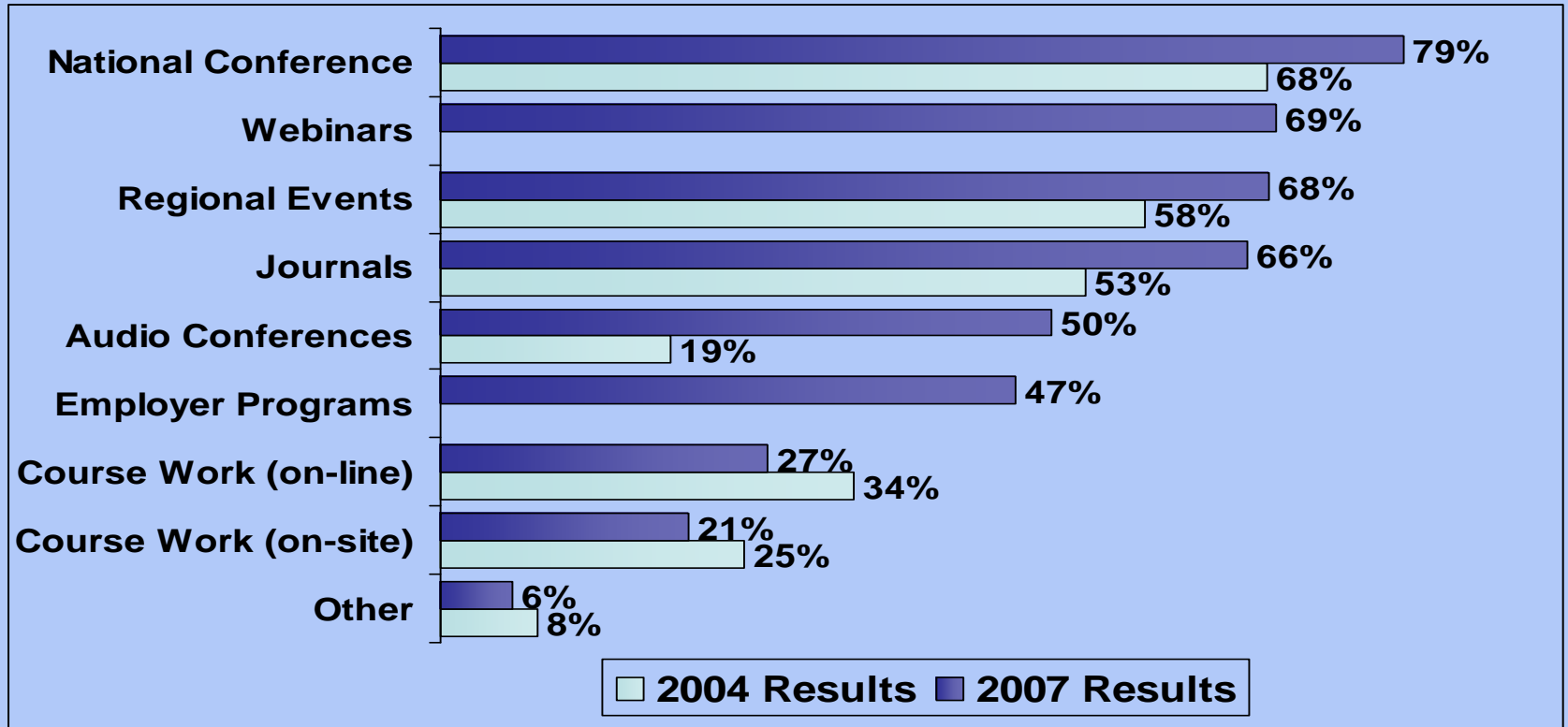
Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

Nursing Informatics Certification



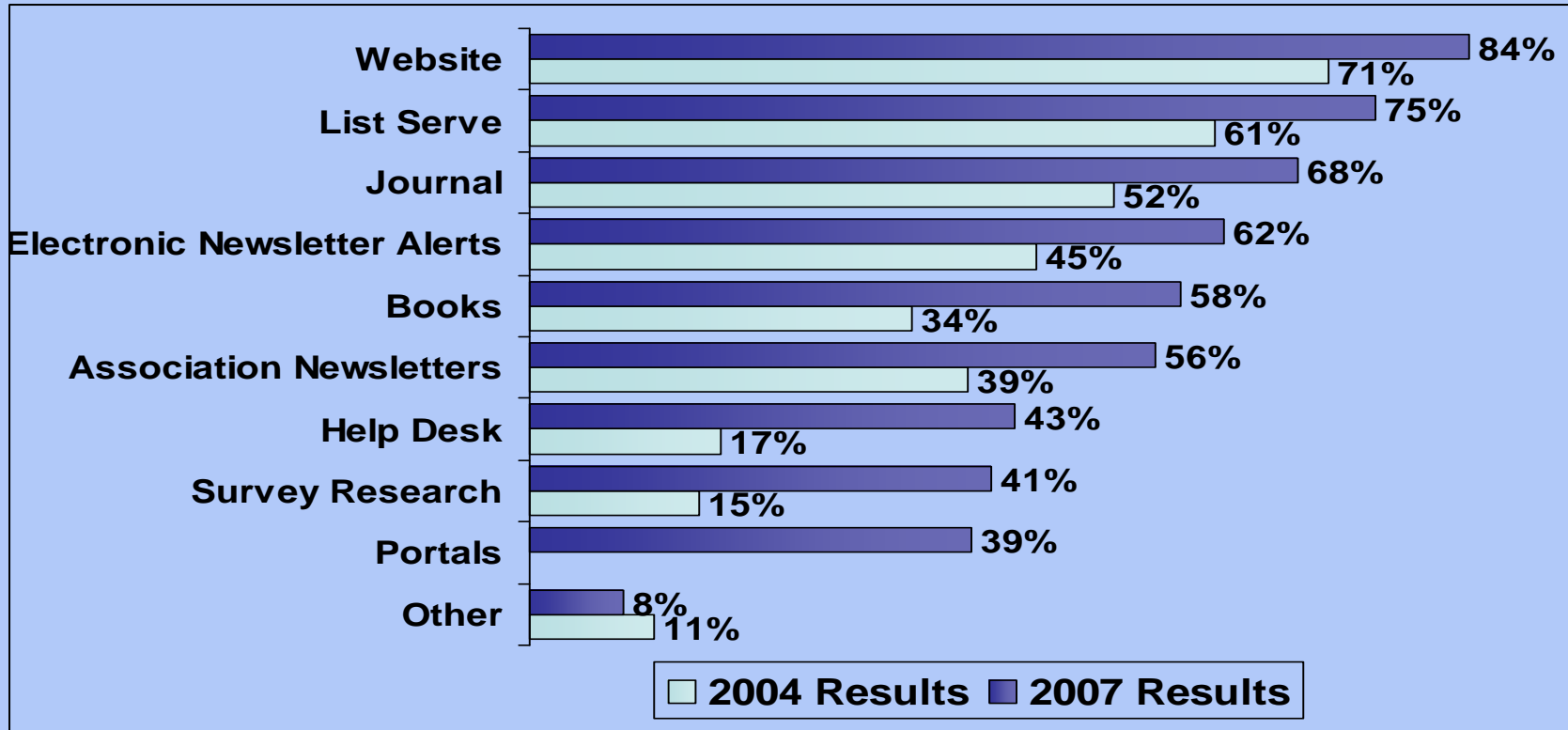
Data from the 2007 HIMSS Nursing Informatics Survey sponsored by McKesson ©HIMSS 2007

Resources for Continuing Education



**Top nine responses shown.*

Sources of Information (To Complete Job Responsibilities)



Top ten responses shown.

Qualitative: Future Trends

- 457 responses (59%) of respondents reported on future trends.
- **Most common responses related to the following:**
 - Nursing leadership in HIT development/selection/implementation
 - Interoperability and integration are key
 - Integration of informatics roles across nursing specialty areas
 - Systems to support patient-centric care
 - Education & training

Qualitative: Future Trends

- Nursing leadership in HIT development/selection/implementation
 - *“In the future the NI role should be a leadership role in organizations. Our role is different than Information Systems and I think we need to be at the table where strategic decisions are being made for our organizations.”*

Qualitative: Future Trends

- Nursing leadership in HIT development/selection/implementation
 - *“Nurses are the primary users of EHR and need to be involved in system development and design. The system needs to work for nursing not the other way around. If the system does not improve the workflow it won't be useful... or used!”*
 - *“...If we as nurses don't like the systems being developed, then we should go and fix them at the source. Would like to see the profession to address more the needs of nurses in the development environment, regardless of their role.”*
 - *“... I see nursing informatics shaping how rollouts are done and designing the continuing education that needs to be done to keep staff current and updated on the systems...”*

Qualitative: Future Trends

- Interoperability and integration are key
 - *“I'd like to see nursing embrace the use of standards that can be transferred across settings so that patient information can move with the patient to where ever healthcare is provided...Standard nursing language and data repositories with universal connectivity is the first step.”*
 - *“More focus on interoperability and integration...niche systems have no place currently and in the future.”*
 - *“...still too many stand alones that won't communicate with each other.”*

Qualitative: Future Trends

- **Systems to support patient-centric care**
 - *“At the bedside, we are the patient advocate. Beside the computer, we are still the patient advocate. I see us as continuing with this goal and having a positive influence on creating software that keeps the patient first and foremost as the top priority.”*

Qualitative: Future Trends

- **Systems to support patient-centric care**
 - *“Nursing has been the passive recipient of information for too long. Efficient and effective information management is vital to quality patient care. Patient care is a business; the business of providing care and support during periods of time when a patient can not do it for themselves. The end result is to produce outcomes that allow the patient a return to the highest possible quality of life possible. These are not new concepts, nor is informatics.”*

Qualitative: Future Trends

- **Education & training**

- *“Nursing needs to commit to constant re-education as technology changes and accept it as part of our modern world.”*
- *“I see it growing tremendously and there will be a shortage of trained professionals in the field... I feel the need for reaching out to further educate people in the field...to grow a population of nurses who are educated in informatics is vital.”*
- *“...I also see the education process becoming more formalized, instead of the OTJ training that a lot of us received out of necessity!”*
- *“The tertiary education will not be able to keep up and the level of sophistication of these systems will outstrip many of those hired to implement them.”*

Conclusions

- Nurse informaticists are increasingly recognized for their broad knowledge base and for the key roles that they play in system design, selection and implementation.
 - Multi-system/specialty Involvement
 - Titles
 - Education & Training
 - Salary