

Addressing Pending Health Information Technology Workforce Issues



Rural Health Information Technology Conference, September 12-14, 2007
Kansas City, Missouri

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Overview



- US Health Care Growth and Spending Trends
- Forces Driving Health Information Technology Adoption
- Trends Impacting HIT Workforce
- Steps to Address HIT Workforce Issues

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US Health Care Spending/Growth



- In 2005, total national health expenditures rose 6.9 percent -- two times the rate of inflation. Total spending was **\$2 TRILLION** in 2005, or \$6,700 per person. Total health care spending represented **16 percent of the gross domestic product (GDP)**.
- U.S. health care spending is expected to increase at similar levels for the next decade reaching **\$4 TRILLION by 2015**, or 20 percent of GDP.

Source: The National Coalition on Health Care

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Health Care IT Lags Behind ...

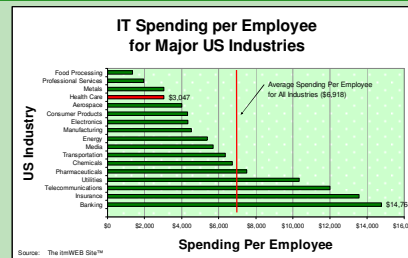


- The US Health Care Industry Lags most other major US industries in the broad adoption of information technology.
- "Our doctors and nurses have to manage 21st century medical technology and complex medical information with 19th century tools. America's medical professionals are the best and brightest in the world, and set the standard for the world. It is a testament to their skill that they are able to achieve high-quality care in this antiquated system ... an outdated, paper-based system."

Source: Promoting Innovation and Competitiveness: President Bush's Technology Agenda

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IT Spending Per Employee for Major US Industries



Source: The iMWEB Site™

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Drivers Behind Health IT Expansion



- There is an emerging consensus from both political and health care leaders that health care information technology (HIT) is an important component of efforts to improve the **quality, safety, cost, and satisfaction** of the health care system in the 21st century.

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HIT Benefits Will Outweigh Costs

- The HIT Leadership Panel's outlook for economic benefits of HIT are consistent with certain recent and ongoing analyses indicating that **the potential benefits of HIT will significantly outweigh conservative estimates of the costs.**
- The Office of the National Coordinator for Health Information Technology estimates that **the annual savings attributable to widespread EHR adoption are likely to lie between 7.5% and 30% of annual health care spending.**

Source: Health Information Technology Leadership Panel Final Report

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So ... The Race is On!

Everyone is lining up to...

- ... acquire technology
- ... deploy technology
- ... create infrastructure and build complex systems and Health Information Exchanges
- ... deploy systems to take full advantage of what HIT has to offer

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But Wait!

Who is talking about the individuals that develop, implement, and evaluate these Health IT systems?

Who is talking about Health IT Workforce demands?

Who is talking about Health IT Education?

These are not explicitly identified and/or supported in many current discussions and debates.

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Unprecedented Growth is Anticipated

- **18 of the top 20 fastest growing occupations** will be in health care and computer science related professions
- **More new wage and salary jobs** – about 19 percent, or 3.6 million—created between 2004 and 2014 **will be in health care than in any other industry.**
- Employment of **medical records and health information technicians** is expected to grow much **faster than average (27%+)** for all occupations through 2014
- Employment of **computer support specialists** is expected to increase **faster than average (18-26%)** for all occupations through 2014
- A 49 percent growth in the number of **health information management (HIM) workers** by 2010, making this occupation one of the **fastest-growing** health occupations.

Source: Bureau of Labor Statistics - Occupational Outlook Handbook 2006

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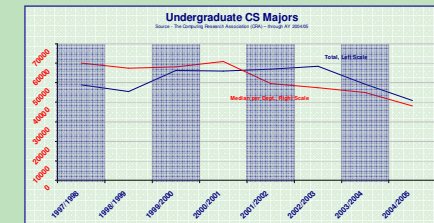
Meeting the Demand for a Trained HIT Workforce

- Health Care Industry will look for solutions to train its future HIT Workforce
 - Colleges and Universities
 - All levels - Certificate, Associate, Bachelors, Masters, and PhD
 - Professional Development Training Opportunities for Existing Staff (i.e. AMIA's 10x10)
 - Outcomes-based, job-specific training

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Declines in Computer Science Enrollments are Alarming

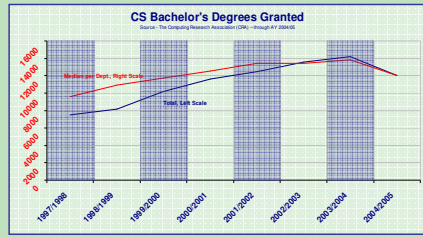


Undergraduate enrollment in computer science programs has dropped 27% over the last three reporting years.

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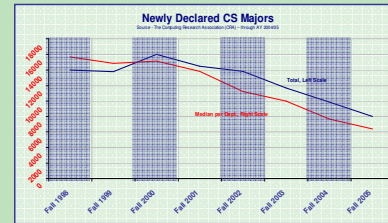


The total number of bachelor's degrees granted in CS fell 17 percent between AY 2003/2004 and 2004/2005 to 11,808

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Declines in Computer Science Enrollments are Alarming



After five years of declines, the number of new CS majors in fall 2005 was half of what it was in fall 2000 (7,952 compared to 15,958)

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Baby Boomers Complicate Workforce Issues

- "This year's big story is people," says the report. "Baby Boomers are beginning to retire in droves and there are simply not enough young people to replace them...This talent crisis - which is expected to last for decades - has the potential to make the dot-com talent crunch of the late 1990s look like a walk in the park."

Source: *ITWire*. By Stuart Corner, Monday, 02 July 2007

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Forces Collide

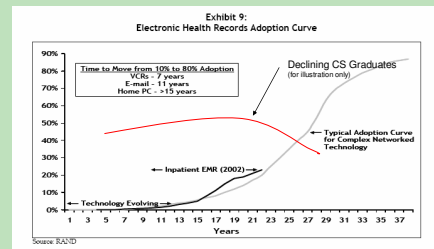
As the US Healthcare Industry is finally beginning to rapidly advance information technology ...

- The Bureau of Labor Statistics is projecting significant growth in Health IT and CS occupations (for all industries)
- Fewer and fewer students are choosing Computer Science and Information Technology as a career.
- The top of the workforce will begin to erode as baby boomers retire.
- Few new programs are in place at Colleges and Universities nationally to meet the anticipated demand.
- Healthcare will be competing with all other industries for fewer and fewer IT graduates.

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Forces Collide



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Need to Quantify Demand -vs- Supply for HIT Professionals

- Little data or published work is available to accurately predict the future demand for HIT Professionals
- Consensus is needed to conduct a national HIT Workforce Study
- Action is required to advance a national dialogue regarding HIT Workforce Development Issues

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HIT Workforce Study

- A National HIT Workforce Study could:
 - Identify the HIT Workforce needs of urban and rural health care
 - Identify appropriate levels of HIT training required (professional development, certificate, associate, bachelors, masters, PhD)
 - Identify existing educational standards for HIT programs and recommend new standards as appropriate
 - Inventory existing academic and training programs (with enrollment trends and projections)
 - Quantify projected demand with existing and projected supply of qualified workers

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A Call to Action

- Action is required to:
 - Seek funding for a National HIT Workforce Study
 - Support Funding Opportunities – HR 1467
 - Publish findings of the Workforce Study
 - Develop strategies to train our future HIT Workforce (existing employees and new hires)
 - Involve all players who have a stake in supporting HIT Workforce Development
 - Broadly promote HIT careers

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Thank You!

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