Health Informatics (HI)

Snapshot:
- Federal policies impacting growth in demand for health informatics professionals
- Educational programs from continuing education to doctorate programs in demand
- Opportunities exist to build the HI workforce, train the current health workforce, and integrate HI coursework into existing health care profession education programs
- New demands for HI workforce may result in adjustments to the number of HI graduates produced, the educational content provided, and the extent/depth of degree offerings

What is Health Informatics (HI)?
- Broadly defined, an emerging discipline comprising intersection of information technology, computer science, healthcare administration, and medical areas
- Provides information to improve individual health, healthcare delivery, research, etc.
- Includes such systems/technology and uses as:
  - Tele-health services
  - Electronic health records
  - Data management
  - Public health oversight

Changing Policy Landscape:
- Office of the National Coordinator for Health Information Technology (ONC) established in 2004 in the U.S. Department of Health and Human Services (HHS)
  - Charged with coordination of nationwide efforts to implement and use the most advanced health information technology (HIT) and electronic exchange of health information
- Health Information Technology for Economic and Clinical Health Act (HITECH Act) of the American Recovery and Reinvestment Act (ARRA) of 2009 ($19.2 billion)
  - Provides funding to train a skilled workforce ($84 million)
  - Provides incentives ($17 billion) for hospitals and healthcare professionals to encourage widespread adoption of electronic health records (EHRs)
  - Physicians and hospitals that do not adopt EHRs by 2015 will be penalized through reductions in Medicare and Medicaid payments

Educational Programs:
- USG, TCSG, and private institutions each offer degree programs
- Educational offerings range from certificate programs to doctorate degrees, with majority of programs at the certificate and associate’s degree levels
- HI programs include those accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIM) and other related/affiliated fields
- Degrees offered include those in:
  - Cancer Registry Management
  - Health Information Assisting
  - Health Information Technology
  - Medical Administrative Technology
  - Medical Coding/Billing

<table>
<thead>
<tr>
<th>Institutions Offering Health Informatics Programs (2010)</th>
<th>Number of institutions with health informatics programs</th>
<th>Number of programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>USG</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>TCSG</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td>Private institutions</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>
Medical Coding Specialist
- Others such as Computer Information Systems, Network Engineering, etc. also relevant

- Most USG programs are HIT oriented
- Some programs buried in other disciplines such as business degrees with a specialization in HI
- Additional degree programs and focus areas likely needed to address demand
- Current educational programs may need to be revamped to include HI component as part of their curriculum for established disciplines (e.g., nursing, medicine, psychology) to ensure that future clinicians are familiar with HI systems and operations
- Nature of HI-related work indicates need for programs, ranging from those offering degrees, to limited coursework such as continuing education
- Significant opportunity exists for professional education offerings

Workforce Opportunities:

- HI workforce difficult to quantify, as multi-disciplinary in nature and frequently a specialization of multiple professions (e.g., MBA with HI specialization, MIS with HI specialization)
- Health informatics specialist identified in 2007 as one of 10 “ahead of the curve” careers
- National estimates project that up to 200,000 health information technology workers are needed to implement EHRs by 2014
  - Georgia’s share of this could include 6,500 new HI professionals (based on Georgia percentage of US population)
- U.S. Bureau of Labor Statistics (BLS) occupation titles include only one focused on HI professions (other occupations captured in broad categories that do not delineate HI specialty)
- Between 2006 and 2016, the U.S. Bureau of Labor Statistics estimates a national growth rate of 17.8% for medical records and health information technicians while Georgia’s growth rate is faster than the national average at 26.0%

### Georgia Employment Projections (2006 – 2016)

<table>
<thead>
<tr>
<th>Position</th>
<th>2006</th>
<th>2016</th>
<th>Annual Openings</th>
<th>Percent Change in Annual Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical records and health information technician positions</td>
<td>4,290</td>
<td>5,410</td>
<td>230</td>
<td>26.0%</td>
</tr>
</tbody>
</table>


### Georgia Statewide Employment Projections by Industry (2006 – 2016)

<table>
<thead>
<tr>
<th>Industry</th>
<th>2006</th>
<th>2016</th>
<th>Change</th>
<th>% Change</th>
<th>Projected Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory health care services</td>
<td>135,330</td>
<td>180,360</td>
<td>45,030</td>
<td>33.3%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Hospitals</td>
<td>148,450</td>
<td>180,920</td>
<td>32,470</td>
<td>21.9%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Nursing and residential care facilities</td>
<td>52,980</td>
<td>72,650</td>
<td>19,670</td>
<td>37.1%</td>
<td>3.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>336,760</td>
<td>433,930</td>
<td>19,670</td>
<td>28.9%</td>
<td></td>
</tr>
</tbody>
</table>


### Professional Development Opportunities for Existing Workforce:

- Large growth in the health sector workforce coupled with growing HI use will result in significant opportunities for training of existing workforce
- Georgia’s health sector employment expected to grow by 28.9% between 2006 to 2016, to a total of nearly 435,000 individuals employed in health care sector

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1 U.S. News and World Report, December 19, 2007
2 Office of the National Coordinator, 2010
3 Based on Georgia population of 9,829,211 and national population of 307,006,550 as of 2009 U.S. Census Bureau counts