Certified Coding Specialist
2012 Job Analysis Summary Report

Prepared for the
American Health Information Management Association

By
www.knappinternational.com

November 2012
INTRODUCTION

In May 2012, the American Health Information Management Association (AHIMA) commissioned a national job analysis study to identify: (a) the professional tasks and knowledge required to competently perform the role of the coding specialist and (b) the changes that had occurred in professional practice since the last job analysis study, which was conducted in 2006. The procedures used in conducting the job analysis study involved an interactive process that combined:

- the job analysis expertise of Knapp & Associates International, Inc. (Knapp) staff;
- the professional knowledge of a task force comprised of experienced hospital-based coding specialists; and,
- the judgments of a nationwide sample of coding specialists.

METHOD

The design and implementation of the job analysis study consisted of a number of steps carried out between May and October of 2012. These steps are described in subsequent sections of this report.

The methodology selected for the job analysis study is consistent with the validation processes recommended in the Standards for Educational and Psychological Testing (1999), published jointly by the American Psychological Association, the American Educational Research Association, and the National Council on Measurement in Education; the National Commission for Certifying Agencies’ Standards for the Accreditation of Certification Programs; and international standard ISO/IEC 17024 - General requirements for bodies operating certification schemes for persons, published by the International Organization for Standardization/International Electrotechnical Commission.

Establishment of a Job Analysis Task Force

Early in the job analysis process, AHIMA formed a CCS Job Analysis Task Force comprised of individuals with significant experience in the coding role. Task force members were selected to be representative of the diversity of the profession with respect to:

- education/training;
- type of work setting;
- geographic location;
- gender; and
- ethnic diversity.

The role of the task force was to participate in the: (a) identification of tasks and knowledge associated with the role of the hospital-based coding specialist, (b) development of the job analysis survey instrument, (c) interpretation of the survey findings, and (d) creation of examination specifications based on the survey findings. Appendix A contains a list of the task force members.
At the start of the job analysis, the task force was convened via web conference for an orientation meeting. The purpose of this meeting was to:

- explain the goals of the job analysis process and its role in supporting the validity of the Certified Coding Specialist (CCS) certification examination;
- review the action plan for the CCS job analysis study and outline the task force’s role and responsibilities with respect to the study; and
- explain the work which task force members were expected to do prior to the survey development meeting (i.e., review the tasks and knowledge areas derived from the prior job analysis and evaluate their relevancy to current practice and with respect to trends/changes anticipated to occur over the next five years).

**Creation of Draft Job Analysis Survey**

**Analysis of Changes in Professional Practice**

The CCS Job Analysis Task Force was convened June 4-5, 2012 to create the draft survey instrument. The survey development meeting began with a lengthy and in-depth discussion of the changes which have taken place in the work environment of the coding specialist over the last five years and those expected to occur over the next five years. Changes relating to the broader healthcare environment and to the settings in which professionals work were cited, followed by an exploration of whether and how these changes have/will impact the role and practices of the coding specialist.

**Review and Updating of Tasks**

Following the discussion of changes in the practice of coding specialists, the task force reviewed the tasks which form the basis for the current CCS certification examination specifications and were asked to consider the following questions:

- What tasks can remain “as is”?
- What tasks should be revised?
- What new tasks should be added?
- What tasks should be deleted?

The final task list consisted of a total of 39 tasks.
Review of Survey Rating Scale and Demographic Questions

The task force reviewed and discussed an “importance” rating scale for the tasks which was proposed by Knapp and AHIMA staff. The task force concurred that the scale and anchor points were appropriate for use with the survey tasks. This scale is presented below.

<table>
<thead>
<tr>
<th>IMPORTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>How important is this task to competent performance of your current coding role?</td>
</tr>
<tr>
<td>Not at all important</td>
</tr>
<tr>
<td>Slightly important</td>
</tr>
<tr>
<td>Moderately important</td>
</tr>
<tr>
<td>Very important</td>
</tr>
</tbody>
</table>

The final survey was structured such that respondents were first asked whether they performed a task (Yes/No), and if they answered in the affirmative, the importance scale was then presented for the task.

Knapp and AHIMA staff also proposed a series of demographic questions for the survey which would aid in describing the survey sample and provide a basis for identifying differences in subgroup responses. These questions were reviewed and discussed, and in some cases, revised by the task force.

Identification of Required Knowledge and Task-Knowledge Linkages

Identification of Knowledge Areas

In addition to identifying the tasks performed by coding specialists, the task force was asked to specify the knowledge necessary to competently perform the tasks. This process was similar to that used to identify professional tasks. The task force reviewed the knowledge areas generated by the prior job analysis and were asked to consider the following questions:

- What knowledge areas can remain “as is”?
- What knowledge areas should be revised?
- What new knowledge areas should be added?
- What knowledge areas should be deleted?

The final knowledge list consisted of a total of 44 knowledge areas.
Completion of Preliminary Task-Knowledge Linkages

After finalizing the knowledge areas, the task force established the preliminary linkages between the tasks and knowledge areas. For each task, the group selected from the list of knowledge areas those required for competent performance of the task. This activity was conducted in break-out groups and the output of each group was subsequently reviewed and discussed by the entire task force and, when appropriate, revised (the linkages are presented in Appendix B). These linkages were deemed “preliminary,” as it was necessary to validate the tasks via the job analysis survey prior to finalizing the linkages. AHIMA currently is in the process of finalizing the linkages.

It should be noted that the knowledge areas and the task-knowledge linkages were not included on the job analysis survey. Rather, the purpose of compiling this information was to provide more detailed guidance to: (a) candidates preparing for the CCS certification examination and (b) the subject matter experts responsible for creating and reviewing the items for the examination.

Piloting of Survey

The survey drafted by the task force was piloted online with a group of practitioners who had no previous involvement in the development of the survey. These individuals, who were recommended by Job Analysis Task Force members, were asked to:

- confirm that the directions were clear and the rating scale was easy to use;
- evaluate whether the survey content was accurate; and
- determine whether there were any important tasks missing from the draft survey instrument.

Based on the feedback received from the pilot participants, Knapp and AHIMA staff determined that no changes to the draft survey were necessary. AHIMA staff subsequently approved the survey for administration. The final survey can be found in Appendix C.

Selection of the Survey Sample

The survey sample was drawn randomly from the population of CCS certificants for whom AHIMA had e-mail addresses.

Administration of the Job Analysis Survey

In July 2012, the job analysis survey was administered online by AHIMA. The mailing list consisted of 1,909 e-mail addresses, of which 28 bounced back, leaving 1,887 potentially viable addresses.

The sample was invited to participate in the survey via an e-mail communication explaining the purpose of the study. An incentive of two Continuing Education Units was offered to those who completed the survey. To further encourage participation, two follow-up e-mail reminders were sent to the sample following the initial invitation. These communications can be found in Appendix D.
RESULTS

Response Rate

As shown in Table 1, the overall survey return rate was 23% (426 completed surveys). This return rate could be a conservative estimate as an unknown number of surveys may have been trapped by SPAM filters and not delivered. The percentage of surveys completed is acceptable for surveys of this type.

Table 1. Survey response rate

<table>
<thead>
<tr>
<th># surveys sent</th>
<th># successful e-mail transmissions</th>
<th># surveys completed</th>
<th>return rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,909</td>
<td>1,887</td>
<td>426</td>
<td>23%</td>
</tr>
</tbody>
</table>

The confidence interval at the 95% confidence level was +/- 4.7, which is acceptable.

Demographic Characteristics of Respondents

The demographic characteristics of the survey sample are presented in Tables 2-11. It was the consensus of the CCS Job Analysis Task Force that the demographic characteristics of the respondents were reasonably consistent with those of CCS certificants nationwide.

Table 2. Number of years CCS credential has been held

<table>
<thead>
<tr>
<th>Number of years</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1</td>
<td>3</td>
</tr>
<tr>
<td>1-2</td>
<td>4</td>
</tr>
<tr>
<td>3-5</td>
<td>6</td>
</tr>
<tr>
<td>6-10</td>
<td>14</td>
</tr>
<tr>
<td>11-15</td>
<td>27</td>
</tr>
<tr>
<td>16 or more</td>
<td>46</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding
## Table 3. Other credentials currently held

<table>
<thead>
<tr>
<th>Credential</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHIT – Registered Health Information Technician</td>
<td>54</td>
</tr>
<tr>
<td>RHIA – Registered Health Information Administrator</td>
<td>26</td>
</tr>
<tr>
<td>CCS-P – Certified Coding Specialist – Physician-based</td>
<td>7</td>
</tr>
<tr>
<td>CDIP – Certified Documentation Improvement Practitioner</td>
<td>4</td>
</tr>
<tr>
<td>CPC-H – Certified Professional Coder – Outpatient Hospital</td>
<td>3</td>
</tr>
<tr>
<td>CHDA – Certified Health Data Analyst</td>
<td>&lt;1</td>
</tr>
<tr>
<td>CPC-P – Certified Professional Coder – Payer</td>
<td>&lt;1</td>
</tr>
<tr>
<td>CCA – Certified Coding Associate</td>
<td>&lt;1</td>
</tr>
<tr>
<td>CHP – Certified in Healthcare Privacy</td>
<td>&lt;1</td>
</tr>
<tr>
<td>CIRCC – Certified Interventional Radiology Cardiovascular Coder CPC –</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Certified Professional Coder</td>
<td></td>
</tr>
<tr>
<td>CPMA – Certified Professional Medical Auditor</td>
<td>0</td>
</tr>
<tr>
<td>CHPS – Certified in Healthcare Privacy and Security</td>
<td>0</td>
</tr>
<tr>
<td>No other credentials held</td>
<td>14</td>
</tr>
</tbody>
</table>

*Multiple responses permitted*
Table 4. Primary work setting

<table>
<thead>
<tr>
<th>Work setting</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>62</td>
</tr>
<tr>
<td>Consultant/vendor</td>
<td>11</td>
</tr>
<tr>
<td>Multi-hospital system</td>
<td>6</td>
</tr>
<tr>
<td>Corporate office of a multi-hospital system</td>
<td>3</td>
</tr>
<tr>
<td>Educational institution (university/community college)</td>
<td>3</td>
</tr>
<tr>
<td>Independent coding company</td>
<td>3</td>
</tr>
<tr>
<td>Government</td>
<td>2</td>
</tr>
<tr>
<td>Insurance</td>
<td>2</td>
</tr>
<tr>
<td>Integrated delivery system (hospital, physician, home health, SNF)</td>
<td>2</td>
</tr>
<tr>
<td>Non-provider setting</td>
<td>2</td>
</tr>
<tr>
<td>Ambulatory care facility</td>
<td>1</td>
</tr>
<tr>
<td>Physician office</td>
<td>1</td>
</tr>
<tr>
<td>Currently not employed</td>
<td>1</td>
</tr>
<tr>
<td>Behavioral/mental health facility</td>
<td>&lt;1</td>
</tr>
<tr>
<td>HIM specialty setting</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Long-term care facility</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Managed care/HMO/PPO office</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Multi-specialty group practice</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Home health care agency</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding*
Table 5. Geographic location of the facility(ies) in which the majority of work related to coding is conducted

<table>
<thead>
<tr>
<th>Geographic location</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>1</td>
</tr>
<tr>
<td>AK</td>
<td>&lt;1</td>
</tr>
<tr>
<td>AZ</td>
<td>1</td>
</tr>
<tr>
<td>AR</td>
<td>&lt;1</td>
</tr>
<tr>
<td>CA</td>
<td>7</td>
</tr>
<tr>
<td>CO</td>
<td>2</td>
</tr>
<tr>
<td>CT</td>
<td>1</td>
</tr>
<tr>
<td>DE</td>
<td>&lt;1</td>
</tr>
<tr>
<td>FL</td>
<td>2</td>
</tr>
<tr>
<td>GA</td>
<td>2</td>
</tr>
<tr>
<td>HI</td>
<td>0</td>
</tr>
<tr>
<td>ID</td>
<td>0</td>
</tr>
<tr>
<td>IL</td>
<td>6</td>
</tr>
<tr>
<td>IN</td>
<td>3</td>
</tr>
<tr>
<td>IA</td>
<td>2</td>
</tr>
<tr>
<td>KS</td>
<td>1</td>
</tr>
<tr>
<td>KY</td>
<td>3</td>
</tr>
<tr>
<td>LA</td>
<td>1</td>
</tr>
<tr>
<td>ME</td>
<td>1</td>
</tr>
<tr>
<td>MD</td>
<td>1</td>
</tr>
<tr>
<td>MA</td>
<td>2</td>
</tr>
<tr>
<td>MI</td>
<td>5</td>
</tr>
<tr>
<td>MN</td>
<td>2</td>
</tr>
<tr>
<td>MS</td>
<td>1</td>
</tr>
<tr>
<td>MO</td>
<td>2</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding
Table 5 (cont’d)

<table>
<thead>
<tr>
<th>Geographic location</th>
<th>% survey respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT</td>
<td>&lt;1</td>
</tr>
<tr>
<td>NV</td>
<td>&lt;1</td>
</tr>
<tr>
<td>NH</td>
<td>&lt;1</td>
</tr>
<tr>
<td>NJ</td>
<td>3</td>
</tr>
<tr>
<td>NM</td>
<td>0</td>
</tr>
<tr>
<td>NY</td>
<td>5</td>
</tr>
<tr>
<td>NC</td>
<td>3</td>
</tr>
<tr>
<td>ND</td>
<td>&lt;1</td>
</tr>
<tr>
<td>OH</td>
<td>4</td>
</tr>
<tr>
<td>OK</td>
<td>&lt;1</td>
</tr>
<tr>
<td>OR</td>
<td>&lt;1</td>
</tr>
<tr>
<td>PA</td>
<td>6</td>
</tr>
<tr>
<td>RI</td>
<td>&lt;1</td>
</tr>
<tr>
<td>SC</td>
<td>1</td>
</tr>
<tr>
<td>SD</td>
<td>1</td>
</tr>
<tr>
<td>TN</td>
<td>3</td>
</tr>
<tr>
<td>TX</td>
<td>8</td>
</tr>
<tr>
<td>UT</td>
<td>1</td>
</tr>
<tr>
<td>VT</td>
<td>0</td>
</tr>
<tr>
<td>VA</td>
<td>2</td>
</tr>
<tr>
<td>WA</td>
<td>2</td>
</tr>
<tr>
<td>WV</td>
<td>1</td>
</tr>
<tr>
<td>WI</td>
<td>2</td>
</tr>
<tr>
<td>WY</td>
<td>&lt;1</td>
</tr>
<tr>
<td>District of Columbia (DC)</td>
<td>0</td>
</tr>
<tr>
<td>Puerto Rico (PR)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Multiple states</td>
<td>7</td>
</tr>
<tr>
<td>Other (International)</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 6. Current job role

<table>
<thead>
<tr>
<th>Job role</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coder</td>
<td>33</td>
</tr>
<tr>
<td>Auditor</td>
<td>15</td>
</tr>
<tr>
<td>Coding manager</td>
<td>12</td>
</tr>
<tr>
<td>Director</td>
<td>12</td>
</tr>
<tr>
<td>Consultant</td>
<td>8</td>
</tr>
<tr>
<td>Coder/biller/reimbursement specialist</td>
<td>5</td>
</tr>
<tr>
<td>Academic educator</td>
<td>3</td>
</tr>
<tr>
<td>Compliance officer/manager</td>
<td>2</td>
</tr>
<tr>
<td>DRG and/or APC coordinator</td>
<td>2</td>
</tr>
<tr>
<td>Registrar, cancer or other</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Revenue cycle manager</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Retired</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Currently not employed</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Charge master analyst/coordinator</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Facility-based educator</td>
<td>0</td>
</tr>
<tr>
<td>Nurse</td>
<td>0</td>
</tr>
<tr>
<td>Physician</td>
<td>0</td>
</tr>
<tr>
<td>Privacy officer</td>
<td>0</td>
</tr>
<tr>
<td>Student</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding
Table 7. Percentage of time spent performing coding and/or coding-related activities daily

<table>
<thead>
<tr>
<th>Percentage of time</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>1-9</td>
<td>4</td>
</tr>
<tr>
<td>10-19</td>
<td>5</td>
</tr>
<tr>
<td>20-29</td>
<td>6</td>
</tr>
<tr>
<td>30-39</td>
<td>3</td>
</tr>
<tr>
<td>40-49</td>
<td>3</td>
</tr>
<tr>
<td>50-59</td>
<td>7</td>
</tr>
<tr>
<td>60-69</td>
<td>3</td>
</tr>
<tr>
<td>70-79</td>
<td>10</td>
</tr>
<tr>
<td>80-89</td>
<td>16</td>
</tr>
<tr>
<td>90-100</td>
<td>41</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding

Table 8. Years of experience in coding

<table>
<thead>
<tr>
<th>Years of experience</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>0</td>
</tr>
<tr>
<td>1-2 years</td>
<td>1</td>
</tr>
<tr>
<td>3-5 years</td>
<td>2</td>
</tr>
<tr>
<td>6-10 years</td>
<td>2</td>
</tr>
<tr>
<td>11-15 years</td>
<td>4</td>
</tr>
<tr>
<td>16-20 years</td>
<td>18</td>
</tr>
<tr>
<td>21 years or more</td>
<td>74</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding
### Table 9. Highest level of education completed

<table>
<thead>
<tr>
<th>Level of education</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school diploma/GED</td>
<td>11</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>48</td>
</tr>
<tr>
<td>Baccalaureate degree</td>
<td>34</td>
</tr>
<tr>
<td>Master's degree</td>
<td>6</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Doctor of Law/Doctor of Jurisprudence</td>
<td>0</td>
</tr>
<tr>
<td>Doctor of Medicine/Doctor of Osteopathic Medicine</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding

### Table 10. Type of coding education

<table>
<thead>
<tr>
<th>Coding education</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHIMA ICD-10-CM/PCS Academy</td>
<td>27</td>
</tr>
<tr>
<td>AHIMA ISP Program</td>
<td>15</td>
</tr>
<tr>
<td>AHIMA Coding Basics</td>
<td>1</td>
</tr>
<tr>
<td>Coding certificate program</td>
<td>23</td>
</tr>
<tr>
<td>Other</td>
<td>28</td>
</tr>
<tr>
<td>No coding education completed</td>
<td>12</td>
</tr>
</tbody>
</table>

*Multiple responses permitted

### Table 11. Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>% survey respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>96</td>
</tr>
</tbody>
</table>
Analysis of Importance Ratings for Professional Tasks

Total means and standard deviations for the task importance ratings were calculated. These data can be found in Appendix E. Table 12 presents the means and standard deviations for the task domains.

Table 12. Mean importance ratings for task domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean*</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Health Information Documentation</td>
<td>2.86</td>
<td>.23</td>
</tr>
<tr>
<td>II. Diagnosis and Procedure Coding</td>
<td>2.94</td>
<td>.14</td>
</tr>
<tr>
<td>III. Regulatory Guidelines and Reporting Requirements for Acute Care Service</td>
<td>2.88</td>
<td>.25</td>
</tr>
<tr>
<td>IV. Regulatory Guidelines and Reporting Requirements for Outpatient Services</td>
<td>2.91</td>
<td>.26</td>
</tr>
<tr>
<td>V. Data Quality and Management</td>
<td>2.84</td>
<td>.35</td>
</tr>
<tr>
<td>VI. Information and Communication Technologies</td>
<td>2.74</td>
<td>.40</td>
</tr>
<tr>
<td>VII. Privacy, Confidentiality, Legal, and Ethical Issues</td>
<td>2.90</td>
<td>.24</td>
</tr>
<tr>
<td>VIII. Compliance</td>
<td>2.80</td>
<td>.41</td>
</tr>
</tbody>
</table>

* On a scale of 0-3 where 0 = not at all important, 1 = slightly important, 2 = moderately important, 3 = very important
Task Domain Weights

Respondents were asked to indicate what percentage of future CCS examinations should be devoted to each of the eight task domains included on the survey. This information was used to inform the task force’s decision making regarding the relative weighting of each domain included in the specifications for the examination. The mean percentages and standard deviations of the respondent data for each domain are shown in Table 13.

Table 13. Mean percentages and standard deviations for weighting of examination content

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean %*</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Health Information Documentation</td>
<td>14</td>
<td>7.89</td>
</tr>
<tr>
<td>II. Diagnosis and Procedure Coding</td>
<td>39</td>
<td>18.76</td>
</tr>
<tr>
<td>III. Regulatory Guidelines and Reporting Requirements for Acute Care Service</td>
<td>12</td>
<td>5.90</td>
</tr>
<tr>
<td>IV. Regulatory Guidelines and Reporting Requirements for Outpatient Services</td>
<td>11</td>
<td>5.42</td>
</tr>
<tr>
<td>V. Data Quality and Management</td>
<td>7</td>
<td>4.18</td>
</tr>
<tr>
<td>VI. Information and Communication Technologies</td>
<td>6</td>
<td>3.46</td>
</tr>
<tr>
<td>VII. Privacy, Confidentiality, Legal, and Ethical Issues</td>
<td>6</td>
<td>3.79</td>
</tr>
<tr>
<td>VIII. Compliance</td>
<td>7</td>
<td>4.06</td>
</tr>
</tbody>
</table>

*Figures do not add up to 100 due to rounding*
Survey Content Coverage

Survey respondents were asked to judge the adequacy of the survey content by rating how well the tasks within each domain represented the job role of the coding specialist. Table 14 presents the mean ratings, based on a scale of 0-4 where 0 = very poorly and 4 = very well. The ratings indicate that the survey content was reflective of the job role.

Table 14. Survey coverage

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean*</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Health Information Documentation</td>
<td>3.62</td>
<td>.64</td>
</tr>
<tr>
<td>II. Diagnosis and Procedure Coding</td>
<td>3.78</td>
<td>.49</td>
</tr>
<tr>
<td>III. Regulatory Guidelines and Reporting Requirements for Acute Care Service</td>
<td>3.76</td>
<td>.50</td>
</tr>
<tr>
<td>IV. Regulatory Guidelines and Reporting Requirements for Outpatient Services</td>
<td>3.67</td>
<td>.58</td>
</tr>
<tr>
<td>V. Data Quality and Management</td>
<td>3.59</td>
<td>.63</td>
</tr>
<tr>
<td>VI. Information and Communication Technologies</td>
<td>3.64</td>
<td>.61</td>
</tr>
<tr>
<td>VII. Privacy, Confidentiality, Legal, and Ethical Issues</td>
<td>3.62</td>
<td>.61</td>
</tr>
<tr>
<td>VIII. Compliance</td>
<td>3.52</td>
<td>.70</td>
</tr>
</tbody>
</table>

* On a scale of 0-4 where 0 = very poorly, 1 = poorly, 2 = adequately, 3 = well, and 4 = very well
Education and Work Experience Required for Competence

The survey respondents were asked, “In your opinion, what is the minimum level of education required to competently perform the tasks listed in this survey? The findings (Table 15) indicate that respondents believed the desired level of education (associate’s degree or above) is higher than that currently required (high school diploma or equivalent).

Table 15. Level of education necessary to competently perform the tasks required of a coding specialist

<table>
<thead>
<tr>
<th>Level of education</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a high school diploma</td>
<td>0</td>
</tr>
<tr>
<td>High school diploma /GED</td>
<td>17</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>79</td>
</tr>
<tr>
<td>Baccalaureate degree</td>
<td>4</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding

Respondents also were asked how many years of on-the-job experience in hospital-based coding were necessary to competently perform the tasks listed in this survey. Although work-related experience is not currently required for CCS certification, AHIMA may wish to consider the survey findings (Table 16) when evaluating program eligibility requirements in the future.

Table 16. Years of on-the-job experience in hospital-based coding necessary to competently perform the tasks required of a coding specialist

<table>
<thead>
<tr>
<th>Years experience</th>
<th>% survey respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>&lt;1</td>
</tr>
<tr>
<td>1-2 years</td>
<td>28</td>
</tr>
<tr>
<td>3-5 years</td>
<td>63</td>
</tr>
<tr>
<td>6-10 years</td>
<td>7</td>
</tr>
<tr>
<td>10 years or more</td>
<td>2</td>
</tr>
</tbody>
</table>

*Figures may not add up to 100 due to rounding
DEVELOPMENT OF EXAMINATION SPECIFICATIONS

Review of Survey Data

The CCS Job Analysis Task Force met via web conferences on October 8 and 10, 2012 to review and discuss the survey findings and to develop the examination specifications. The first step in the process of developing the examination specifications was a review of the overall patterns in the survey data. Next, the task force conducted an item-by-item review and discussion of the mean importance ratings for each task. To facilitate this process, the item means were assigned to quartiles and color coded to indicate that they were in the first (i.e., highest means), second, third, or fourth quartile compared to other items in the survey. The use of decision rules for determining whether to include or exclude individual tasks from the examination specifications was discussed at this time. Given that even the lowest means fell above the mid-point between “moderately important” and “slightly important,” the task force concluded that a decision rule was not necessary. Ultimately, the task force confirmed that all of the tasks should be retained for the examination specifications.

After reviewing the survey data, the task force recommended the addition of two tasks to better align the examination specifications with trends in practice. These tasks were as follows:

- Domain I: “Compose a compliant physician query.”
- Domain IV: “Apply clinical laboratory service requirements.”

Determination of Examination Content

Following its review of the job analysis survey data, the CCS Job Analysis Task Force proceeded to develop the proposed specifications for the examination. These examination specifications outline:

- the specific tasks to be covered on the CCS examination;
- the relative weighting of each domain and task; and
- the types of items to be used to assess examinees on each task.

Basing the examination specifications on the findings of the job analysis study ensures that the assessment procedures will realistically reflect the tasks necessary for effective performance of the coding specialist role. Realistic examination content and assessment procedures are required to meet both legal guidelines and testing industry standards. Each facet of the specifications development process is described below.
Weighting of Item Types

The CCS certification examination is comprised of three item types:

- **Multiple-Choice.** Four options are provided and there is a single correct answer.
- **Multiple-Select.** A list of options is provided and examinees are instructed to select X number of options. A point is received for each correct option selected.
- **Quantity Fill-in-the-Blank.** A series of text boxes is provided following the presentation of a medical case and examinees are instructed to type in the codes for the case. A point is received for each correct code submitted by the examinee.

The current examination specifications require that 64 points come from multiple-choice items, 6 points from multiple-select items, and 80 from quantity fill-in-the-blank items (a total of 150 points from scored items). The task force re-affirmed that this weighting was appropriate for the new examination specifications.

For the Quantity Fill-in-the-Blank items, the task force also determined, based on their expert consensus, the type and number of cases to be assessed with this item type (see Appendix F).

**Task Domain Weights**

Although all of the tasks included in the job analysis survey are part of the scope of practice for coding specialists, they do not all necessarily contribute equally to competent professional practice. Some tasks may be of greater importance or may be utilized more frequently than others when carrying out day-to-day responsibilities. Consequently, the CCS Job Analysis Task Force assigned weights to each task domain and each specific task within the domains to indicate their relative emphasis within the scope of practice and correspondingly, within the CCS examination. The task force assigned domain and task weights based on the survey findings and their expert judgment.

Table 17 presents the overall weightings for the major task domains.
Table 17. Weighting of major task domains on examination specifications

<table>
<thead>
<tr>
<th>Domain</th>
<th>% of examination points</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Health Information Documentation</td>
<td>8-10</td>
</tr>
<tr>
<td>II. Diagnosis and Procedure Coding</td>
<td>64-66</td>
</tr>
<tr>
<td>III. Regulatory Guidelines and Reporting Requirements for Acute Care Service</td>
<td>6-8</td>
</tr>
<tr>
<td>IV. Regulatory Guidelines and Reporting Requirements for Outpatient Services</td>
<td>6-8</td>
</tr>
<tr>
<td>V. Data Quality and Management</td>
<td>2-4</td>
</tr>
<tr>
<td>VI. Information and Communication Technologies</td>
<td>1-3</td>
</tr>
<tr>
<td>VII. Privacy, Confidentiality, Legal, and Ethical Issues</td>
<td>2-4</td>
</tr>
<tr>
<td>VIII. Compliance</td>
<td>2-4</td>
</tr>
</tbody>
</table>

The weighting of the *Diagnosis and Procedure Coding* domain is considerably higher than that suggested by data obtained from survey respondents. The rationale for this lies in the types of items used on the CCS examination. The multiple-select and quantity fill-in-the-blank items assess application of knowledge and focus exclusively on the *Diagnosis and Procedure Coding* domain. And because the scope of the codes is so broad, AHIMA also uses standard multiple-choice items to ensure adequate sampling of the domain. Thus, the total weighting (from a point perspective) for the examination specifications is necessarily higher than that suggested by respondents.

Weights for each task can be found in the examination specifications in Appendix F.

**CONCLUSION**

The primary purpose of the job analysis study was to validate the scope of practice for hospital-based coding specialists. The survey results confirmed the tasks identified by the CCS Job Analysis Task Force and provided data to inform the determination of the most crucial tasks associated with the job role. The linkage of the CCS examination specifications to the findings of the job analysis study will serve as evidence of the content validity of future examinations.
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molly DeMink</td>
<td>Navigant</td>
<td>Rock Island, IL</td>
</tr>
<tr>
<td>Ellen Berkowitz</td>
<td>ProMedica Quality &amp; Process Innovation</td>
<td>Toledo, OH</td>
</tr>
<tr>
<td>Stacey Butler</td>
<td>Arkansas Children's Hospital</td>
<td>Little Rock, AR</td>
</tr>
<tr>
<td>Dawn Shepard</td>
<td>NMRMC</td>
<td>Chanute, KS</td>
</tr>
<tr>
<td>Lynn Farmer</td>
<td>Hugh Chatham Memorial Hospital</td>
<td>Elkin, NC</td>
</tr>
<tr>
<td>Karl Koob</td>
<td>University of Kansas Medical Center</td>
<td>Kansas City, KS</td>
</tr>
<tr>
<td>Sally Gibbs</td>
<td>Sutter Health</td>
<td>Sacramento, CA</td>
</tr>
<tr>
<td>Jennifer Avenson</td>
<td>The Nebraska Medical Center</td>
<td>Omaha, NE</td>
</tr>
<tr>
<td>Katherine Pollard Lovendahl</td>
<td>St. Mark's Outpatient Surgery Center</td>
<td>Medsave USA (remote)</td>
</tr>
<tr>
<td>Debbie Henderson</td>
<td>Houston Orthopedic and Spine Hospital</td>
<td>Houston, TX</td>
</tr>
<tr>
<td>Marilee Knaack</td>
<td>Carl R. Darnall Army Medical Center</td>
<td>Fort Hood, TX</td>
</tr>
<tr>
<td>William Melendez</td>
<td>Chilton Memorial Hospital</td>
<td>Pequannock, NJ; Philadelphia, PA</td>
</tr>
<tr>
<td>Sharyn Brown</td>
<td>Robert Wood Johnson University Hospital</td>
<td>New Brunswick, NJ</td>
</tr>
<tr>
<td>Jeana Reed</td>
<td>Community Health Network</td>
<td>Indianapolis, IN</td>
</tr>
<tr>
<td>Cheryl Lee</td>
<td>Capital Health Regional Medical Center</td>
<td>Trenton, NJ</td>
</tr>
</tbody>
</table>
APPENDIX B
DOMAIN I: Health Information Documentation

1. Interpret health record documentation using knowledge of anatomy, physiology, clinical indicators and disease processes, pharmacology and medical terminology to identify codeable diagnoses and/or procedures.

1.1. Components of a record

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

2.1. ICD-9-CM

2.2. CPT

2.3. HCPCS Level II

2.4. Difference between soft and hard coding

2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7e. Coding and reporting requirements for outpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
      2.7g. Signs, symptoms, or manifestations requiring separate code assignments
   2.7h. Coding specificity (third, fourth, or fifth digit)
2.7i. V-Codes
2.7j. E-Codes
2.7k. Modifiers
2.7l. CPT/HCPCS Level II
2.7m. Evaluation and management code assignment (facility)

5.4. Electronic health records

6.1. AHIMA Code of Ethics/Standards of Ethical Coding

6.2. HIPAA:
   6.2a. Privacy
   6.2b. Security

7.2. Definition of fraud
7.3. Definition of abuse

2. Determine when additional clinical documentation is needed to assign the diagnosis and/or procedure code(s).

1.2. Contents of a record

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7e. Coding and reporting requirements for outpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
   2.7g. Signs, symptoms, or manifestations requiring separate code assignments
   2.7h. Coding specificity (third, fourth, or fifth digit)
   2.7i. V-Codes
   2.7j. E-Codes
   2.7k. Modifiers
   2.7l. CPT/HCPCS Level II
   2.7m. Evaluation and management code assignment (facility)

4.1. Case Mix Index (CMI)

7.2. Definition of fraud
7.3. Definition of abuse
3. Consult with physicians and other healthcare providers to obtain further clinical documentation to assist with code assignment.

1.2. Contents of a record

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e. Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

1.5. Roles and responsibilities of health care providers

2.1. ICD-9-CM
2.2. CPT
2.3. HCPCS Level II

6.1. AHIMA Code of Ethics/Standards of Ethical Coding
7.2. Definition of fraud
7.3. Definition of abuse

4. Consult reference materials to facilitate code assignment.

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e. Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

2.1. ICD-9-CM
2.2. CPT
2.3. HCPCS Level II

2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
2.6f. Diagnostic (test) values
2.6g. Anatomy and Physiology

4.5. Physician Query (follow correct guidelines)

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

5.4. Electronic health records

6.1. AHIMA Code of Ethics/Standards of Ethical Coding

5. Identify patient encounter type.

1.1. Components of a record

1.4. Data Sets (e.g., demographics, identifiers)

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

1.7. Documentation requirements in Outpatient type/place of service:

1.7a. Observation stay
1.7b. Recurring/Series Accounts
1.7c. Emergency services
1.7d. Same day surgery
1.7e. Clinic
1.7f. Ancillary

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:

2.7c. Coding and reporting requirements for inpatient services
2.7e. Coding and reporting requirements for outpatient services

4.13. Revenue Cycle Components (from registration to payment)

6. Identify and post charges for healthcare services based on documentation.

1.2. Contents of a record

2.4. Difference between soft and hard coding

2.5. Chargemaster

4.13. Revenue Cycle Components (from registration to payment)
DOMAIN II: Diagnosis and Procedure Coding

**Diagnosis:**

1. Select the diagnoses that require coding according to current coding and reporting requirements for acute care (inpatient) services.

1.1. Components of a record

1.2. Contents of a record

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

1.5. Roles and responsibilities of health care providers

1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.1. ICD-9-CM

2.2. CPT

2.3. HCPCS Level II

2.4. Difference between soft and hard coding

2.5. Chargemaster

2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology
2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   
   2.7a. Definitions
   2.7b. Sequencing
   2.7e. Coding and reporting requirements for outpatient services
   2.7f. Coding conventions:
      
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
   2.7g. Signs, symptoms, or manifestations requiring separate code assignments
   2.7h. Coding specificity (third, fourth, or fifth digit)
   2.7i. V-Codes
   2.7j. E-Codes
   2.7k. Modifiers
   2.7l. CPT/HCPCS Level II
   2.7m. Evaluation and management code assignment (facility)

3.2. Government agencies:
   
   3.2a. Centers for Medicare and Medicaid Services (CMS)

3.3. Payment Systems:
   
   3.3a. Prospective:
      
      3.3a1. APCs (OPPS)
   3.3b. Non-Prospective:
      
      3.3b2. Fee Schedule

3.4. Uniform billing data elements

3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)

4.2. Correct Coding Initiative (CCI)

4.5. Physician Query (follow correct guidelines)

4.9. Data Integrity

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

5.4. Electronic health records

6.1. AHIMA Code of Ethics/Standards of Ethical Coding
2. Select the diagnoses that require coding according to current coding and reporting requirements for outpatient services.

1.1 Components of a record

1.2 Contents of a record

1.3 Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

1.5 Roles and responsibilities of health care providers

1.6 Documentation requirements in Inpatient type/place of service: Acute Care

2.6 Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology

2.7 Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
   2.7g. Signs, symptoms, or manifestations requiring separate code assignments
   2.7h. Coding specificity (third, fourth, or fifth digit)
   2.7i. V-Codes
   2.7j. E-Codes
3.2. Government agencies:
   3.2a Centers for Medicare and Medicaid Services (CMS)

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a2. DRG (IPPS)
   3.3b. Non-Prospective:
      3.3b1. Severity Adjusted (e.g., APR)

3.4. Uniform billing data elements

4.2. Correct Coding Initiative (CCI)

4.5. Physician Query (follow correct guidelines)

4.9. Data Integrity

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

5.4. Electronic health records

6.1. AHIMA Code of Ethics/Standards of Ethical Coding

3. Interpret conventions, formats, instructional notations, tables, and definitions of the classification system to select diagnoses, conditions, problems, or other reasons for the encounter that require coding.

1.1. Components of a record

1.2. Contents of a record

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)
4. Sequence diagnoses and other reasons for encounter according to notations and conventions of the classification system and standard data set definitions (such as Uniform Hospital Discharge Data Set [UHDDS]).

1.1. Components of a record

1.2. Contents of a record

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

1.4. Data Sets (e.g., demographics, identifiers)

1.5. Roles and responsibilities of health care providers

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7e. Coding and reporting requirements for outpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
2.7g. Signs, symptoms, or manifestations requiring separate code assignments
2.7h. Coding specificity (third, fourth, or fifth digit)
2.7i. V-Codes
2.7j. E-Codes
2.7k. Modifiers
2.7l. CPT/HCPCS Level II

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a2. DRG (IPPS)
   3.3b. Non-Prospective:
      3.3b1. Severity Adjusted (e.g., APR)

3.4. Uniform billing data elements
3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)

5. Apply the official ICD-9-CM coding guidelines.

1.1. Components of a record
1.2. Contents of a record
1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e. Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)
1.5. Roles and responsibilities of health care providers
1.6. Documentation requirements in Inpatient type/place of service: Acute Care
1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.1. ICD-9-CM
2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
   2.7g. Signs, symptoms, or manifestations requiring separate code assignments
   2.7h. Coding specificity (third, fourth, or fifth digit)
   2.7i. V-Codes
   2.7j. E-Codes

3.1. Accrediting bodies (e.g., The Joint Commission, Medicare Conditions of Participation)

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a2. DRG (IPPS)
   3.3b. Non-Prospective:
      3.3b1. Severity Adjusted (e.g., APR)

4.5. Physician Query (follow correct guidelines)

4.6. Abstracted data

4.10. Payor types

4.11. Payor documentation requirements

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding
Procedure:

1. Select the procedures that require coding according to current coding and reporting requirements for acute care (inpatient) services.

1.1. Components of a record

1.2. Contents of a record

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

2.1. ICD-9-CM

2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7h. Coding specificity (third, fourth, or fifth digit)

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)
   3.2c. CMS Contractors [e.g., FI, Carrier, QIO, Revenue Audit Contractor (RAC), Medicare Administrative Contractor (MACS), Zone Program Integrity Contractor (ZPIC)]

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a2. DRG (IPPS)

3.4. Uniform billing data elements

3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)
4.2. Correct Coding Initiative (CCI)
4.4. Medicare Code Editor (MCE)
4.5. Physician Query (follow correct guidelines)
4.9. Data Integrity
5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)
6.1. AHIMA Code of Ethics/Standards of Ethical Coding
7.2. Definition of fraud
7.3. Definition of abuse

2. Select the procedures that require coding according to current coding and reporting requirements for outpatient services.
   1.1. Components of a record
   1.2. Contents of a record
   1.3. Clinical concepts:
       1.3a. Medical terminology and standard abbreviations
       1.3b. Anatomy and Physiology
       1.3c. Pharmacology
       1.3d. Clinical findings
   1.7. Documentation requirements in Outpatient type/place of service:
       1.7a. Observation stay
       1.7c. Emergency services
       1.7d. Same day surgery
2.1. ICD-9-CM
2.2. CPT
2.3. HCPCS Level II
2.4. Difference between soft and hard coding
2.5. Chargemaster
2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
2.7e. Coding and reporting requirements for outpatient services

2.7f. Coding conventions:
   2.7f1. Formats
   2.7f2. Instructional notations
   2.7f3. Tables
   2.7f4. Symbols

2.7h. Coding specificity (third, fourth, or fifth digit)

2.7k. Modifiers

2.7l. CPT/HCPCS Level II

2.7m. Evaluation and management code assignment (facility)

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)
   3.2c. CMS Contractors [e.g., FI, Carrier, QIO, Revenue Audit Contractor (RAC), Medicare Administrative Contractor (MACS), Zone Program Integrity Contractor (ZPIC)]

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a1. APC (OPPS)

3.7 CMS 3-day rule

4.2. Correct Coding Initiative (CCI)

4.3. Outpatient Code Editor (OCE)

4.4. Medicare Code Editor (MCE)

4.5. Physician Query (follow correct guidelines)

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding

7.2. Definition of fraud

7.3. Definition of abuse

3. Interpret conventions, formats, instructional notations, and definitions of the classification system and/or nomenclature to select procedures/services that require coding.

1.1. Components of a record

1.2. Contents of a record

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
4. Sequence procedures according to notations and conventions of the classification system/nomenclature and standard data set definitions (such as UHDDS).

1.1. Components of a record
1.2. Contents of a record
1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

1.4. Data Sets (e.g., demographics, identifiers)

1.5. Roles and responsibilities of health care providers

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7e. Coding and reporting requirements for outpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
2.7h. Coding specificity (third, fourth, or fifth digit)
2.7k. Modifiers
2.7l. CPT/HCPCS Level II

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a2. DRG (IPPS)
   3.3b. Non-Prospective:
      3.3b1. Severity Adjusted (e.g., APR)

3.4. Uniform billing data elements
3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)

5. Apply the official ICD-9-CM coding guidelines.

1.1. Components of a record
1.2. Contents of a record
1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
1.5. Roles and responsibilities of health care providers
1.6. Documentation requirements in Inpatient type/place of service: Acute Care
1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.1. ICD-9-CM
2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
2.6f. Diagnostic (test) values
2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
   2.7h. Coding specificity (third, fourth, or fifth digit)

3.1. Accrediting bodies (e.g., The Joint Commission, Medicare Conditions of Participation)

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a2. DRG (IPPS)
   3.3b. Non-Prospective:
      3.3b1. Severity Adjusted (e.g., APR)

4.5. Physician Query (follow correct guidelines)

4.6. Abstracted data

4.10. Payor types

4.11. Payor documentation requirements

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding


1.1. Components of a record

1.2. Contents of a record

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
1.5. Roles and responsibilities of health care providers

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.1. ICD-9-CM

2.2. CPT

2.3. HCPCS Level II

2.4. Difference between soft and hard coding

2.5. Chargemaster

2.6. Coding references:
   2.6a. AHA Coding Clinics (HCPCS Level II)
   2.6b. AMA CPT Assistant
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7e. Coding and reporting requirements for outpatient services
   2.7f. Coding conventions:
       2.7f1. Formats
       2.7f2. Instructional notations
       2.7f3. Tables
       2.7f4. Symbols
   2.7h. Coding specificity (third, fourth, or fifth digit)
   2.7k. Modifiers
   2.7l. CPT/HCPCS Level II
   2.7m. Evaluation and management code assignment (facility)
3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a1. APC (OPPS)

3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)

3.7 CMS 3-day rule

4.2. Correct Coding Initiative (CCI)

4.3. Outpatient Code Editor (OCE)

4.4. Medicare Code Editor (MCE)

4.5. Physician Query (follow correct guidelines)

4.13. Revenue Cycle Components (from registration to payment)

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding

7.2. Definition of fraud

7.3. Definition of abuse

**DOMAIN III: Regulatory Guidelines and Reporting Requirements for Acute Care (Inpatient) Service**

1. Select the principal diagnosis, principal procedure, complications, comorbid conditions, other diagnoses and procedures that require coding according to UHDDS definitions and Coding Clinic for ICD-9-CM.

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

2.1. ICD-9-CM

2.2. CPT

2.3. HCPCS Level II

2.4. Difference between soft and hard coding

2.5. Chargemaster
2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7e. Coding and reporting requirements for outpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
      2.7f. Signs, symptoms, or manifestations requiring separate code assignments
   2.7g. Coding specificity (third, fourth, or fifth digit)
   2.7i. V-Codes
   2.7j. E-Codes
   2.7k. Modifiers
   2.7l. CPT/HCPCS Level II
   2.7m. Evaluation and management code assignment (facility)

3.1. Accrediting bodies (e.g., The Joint Commission, Medicare Conditions of Participation)

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)
   3.2b. Office of Inspector General (OIG)
   3.2c. CMS Contractors [e.g., FI, Carrier, QIO, Revenue Audit Contractor (RAC), Medicare Administrative Contractor (MACS), Zone Program Integrity Contractor (ZPIC)]

3.4. Uniform billing data elements

3.5. HIPAA designated code sets

3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

5.4. Electronic health records

6.1. AHIMA Code of Ethics/Standards of Ethical Coding
6.2. HIPAA:
   6.2a. Privacy
   6.2b. Security

7.2. Definition of fraud
7.3. Definition of abuse

2. Assign the present on admission (POA) indicators
   1.1. Components of a record
   1.2. Contents of a record
   1.3. Clinical concepts:
      1.3a. Medical terminology and standard abbreviations
      1.3b. Anatomy and Physiology
      1.3c. Pharmacology
      1.3d. Clinical findings
      1.3e Clinical indicators
      1.3f. Signs and symptoms
      1.3g. Pathophysiology (disease processes)
   1.6. Documentation requirements in Inpatient type/place of service: Acute Care

2.1. ICD-9-CM

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7d. Reporting requirements for present on admission (POA) indicators

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)
   3.2b. Office of Inspector General (OIG)
   3.2c. CMS Contractors [e.g., FI, Carrier, QIO, Revenue Audit Contractor (RAC), Medicare Administrative Contractor (MACS), Zone Program Integrity Contractor (ZPIC)]

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a2. DRG (IPPS)
   3.3b. Non-Prospective:
      3.3b1. Severity Adjusted (e.g., APR)
      3.3b2. Fee Schedule
      3.3b3. Cost-based reimbursement systems (e.g., critical access hospitals, waivered states)

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding
3. Evaluate the impact of code selection on Diagnosis Related Group (DRG) assignment.

1.1. Components of a record

1.2. Contents of a record

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

2.1. ICD-9-CM

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)
   3.2b. Office of Inspector General (OIG)
   3.2c. CMS Contractors [e.g., FI, Carrier, QIO, Revenue Audit Contractor (RAC), Medicare Administrative Contractor (MACS), Zone Program Integrity Contractor (ZPIC)]

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a1. APC (OPPS)
      3.3a2. DRG (IPPS)
   3.3b. Non-Prospective:
      3.3b1. Severity Adjusted (e.g., APR)
      3.3b2. Fee Schedule
      3.3b3. Cost-based reimbursement systems (e.g., critical access hospitals, waived states)

3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding


7.2. Definition of fraud

7.3. Definition of abuse

4. Verify DRG assignment based on Inpatient Prospective Payment System (IPPS) definitions.

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

2.1. ICD-9-CM

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)
   3.2b. Office of Inspector General (OIG)
   3.2c. CMS Contractors [e.g., FI, Carrier, QIO, Revenue Audit Contractor (RAC), Medicare Administrative Contractor (MACS), Zone Program Integrity Contractor (ZPIC)]

3.3. Payment Systems:
   3.3a. Prospective:
      3.3a1. APC (OPPS)
      3.3a2. DRG (IPPS)
3.3b. Non-Prospective:
   3.3b1. Severity Adjusted (e.g., APR)
   3.3b2. Fee Schedule
   3.3b3. Cost-based reimbursement systems (e.g., critical access hospitals, waived states)

4.9. Data Integrity
5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding
7.2. Definition of fraud
7.3. Definition of abuse

5. Assign and/or validate the discharge disposition.

1.5. Roles and responsibilities of health care providers
1.6. Documentation requirements in Inpatient type/place of service: Acute Care
1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

3.7 CMS 3-day rule
4.9. Data Integrity
4.13. Revenue Cycle Components (from registration to payment)

**DOMAIN IV: Regulatory Guidelines and Reporting Requirements for Outpatient Services**

1. Select the reason for encounter, pertinent secondary conditions, primary procedure, and other procedures that require coding according to UHDDS definitions, CPT Assistant, Coding Clinic for ICD-9-CM, and HCPCS.

1.1. Components of a record
1.2. Contents of a record
1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e. Clinical indicators
1.3f. Signs and symptoms
1.3g. Pathophysiology (disease processes)

1.4. Data Sets (e.g., demographics, identifiers)

1.5. Roles and responsibilities of health care providers

1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.1. ICD-9-CM
2.2. CPT
2.3. HCPCS Level II
2.4. Difference between soft and hard coding

2.5. Chargemaster

2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7d. Reporting requirements for present on admission (POA) indicators
   2.7e. Coding and reporting requirements for outpatient services
   2.7f. Coding conventions:
      2.7f1. Formats
      2.7f2. Instructional notations
      2.7f3. Tables
      2.7f4. Symbols
   2.7g. Signs, symptoms, or manifestations requiring separate code assignments
   2.7h. Coding specificity (third, fourth, or fifth digit)
   2.7i. V-Codes
2.7j. E-Codes
2.7k. Modifiers
2.7l. CPT/HCPCS Level II
2.7m. Evaluation and management code assignment (facility)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding

2. Apply Outpatient Prospective Payment System (OPPS) reporting requirements:
   a. Modifiers
   b. CPT/HCPCS Level II
   c. Medical necessity
   d. Evaluation and Management code assignment (facility reporting)

2.1. ICD-9-CM
2.2. CPT
2.3. HCPCS Level II
2.4. Difference between soft and hard coding
2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7i. V-Codes
   2.7j. E-Codes
   2.7k. Modifiers

3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding

**DOMAIN V: Data Quality and Management**

1. Assess the quality of coded data.
   1.1. Components of a record
   1.2. Contents of a record
   1.3. Clinical concepts:
      1.3a. Medical terminology and standard abbreviations
      1.3b. Anatomy and Physiology
      1.3c. Pharmacology
      1.3d. Clinical findings
      1.3e. Clinical indicators
1.3f. Signs and symptoms

1.3g. Pathophysiology (disease processes)

1.4. Data Sets (e.g., demographics, identifiers)

1.5. Roles and responsibilities of health care providers

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.1. ICD-9-CM

2.2. CPT

2.3. HCPCS Level II

2.4. Difference between soft and hard coding

2.5. Chargemaster

2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
   2.7c. Coding and reporting requirements for inpatient services
   2.7d. Reporting requirements for present on admission (POA) indicators
   2.7e. Coding and reporting requirements for outpatient services

2.7f. Coding conventions:
   2.7f1. Formats
   2.7f2. Instructional notations
   2.7f3. Tables
   2.7f4. Symbols
2.7g. Signs, symptoms, or manifestations requiring separate code assignments
2.7h. Coding specificity (third, fourth, or fifth digit)
2.7i. V-Codes
2.7j. E-Codes
2.7k. Modifiers
2.7l. CPT/HCPCS Level II
2.7m. Evaluation and management code assignment (facility)

4.5. Physician Query (follow correct guidelines)
4.6. Abstracted data
6.1. AHIMA Code of Ethics/Standards of Ethical Coding

2. Communicate with healthcare providers regarding reimbursement methodologies, documentation rules, and regulations related to coding.

1.5. Roles and responsibilities of health care providers
1.6. Documentation requirements in Inpatient type/place of service: Acute Care
1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.1. ICD-9-CM
2.2. CPT
2.3. HCPCS Level II
2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant
3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)
4.5. Physician Query (follow correct guidelines)
6.1. AHIMA Code of Ethics/Standards of Ethical Coding
7.2. Definition of fraud
7.3. Definition of abuse
3. Analyze health record documentation for quality and completeness of coding.

1.1. Components of a record

1.2. Contents of a record

1.3. Clinical concepts:
   1.3a. Medical terminology and standard abbreviations
   1.3b. Anatomy and Physiology
   1.3c. Pharmacology
   1.3d. Clinical findings
   1.3e Clinical indicators
   1.3f. Signs and symptoms
   1.3g. Pathophysiology (disease processes)

1.4. Data Sets (e.g., demographics, identifiers)

1.5. Roles and responsibilities of health care providers

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

1.7. Documentation requirements in Outpatient type/place of service:
   1.7a. Observation stay
   1.7b. Recurring/Series Accounts
   1.7c. Emergency services
   1.7d. Same day surgery
   1.7e. Clinic
   1.7f. Ancillary

2.1. ICD-9-CM

2.2. CPT

2.3. HCPCS Level II

2.4. Difference between soft and hard coding

2.5. Chargemaster

2.6. Coding references:
   2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   2.6b. AMA CPT Assistant
   2.6c. Medical Dictionary
   2.6d. Abbreviations/acronyms
   2.6e. Pharmacology
   2.6f. Diagnostic (test) values
   2.6g. Anatomy and Physiology

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   2.7a. Definitions
   2.7b. Sequencing
2.7c. Coding and reporting requirements for inpatient services
2.7d. Reporting requirements for present on admission (POA) indicators
2.7e. Coding and reporting requirements for outpatient services
2.7f. Coding conventions:
   2.7f1. Formats
   2.7f2. Instructional notations
   2.7f3. Tables
   2.7f4. Symbols
2.7g. Signs, symptoms, or manifestations requiring separate code assignments
2.7h. Coding specificity (third, fourth, or fifth digit)
2.7i. V-Codes
2.7j. E-Codes
2.7k. Modifiers
2.7l. CPT/HCPCS Level II
2.7m. Evaluation and management code assignment (facility)

4.5. Physician Query (follow correct guidelines)
6.1. AHIMA Code of Ethics/Standards of Ethical Coding

4. Review the accuracy of abstracted data elements for database integrity and claims processing.
4.1. Case Mix Index (CMI)
4.6. Abstracted data
4.7. Public data (e.g., Core Measures, Registries)
4.9. Data Integrity
5.2. Common software applications
5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

5. Review and resolve coding edits such as Correct Coding Initiative (CCI), Medicare Code Editor (MCE) and Outpatient Code Editor (OCE).
3.4. Uniform billing data elements
3.5. HIPAA designated code sets
4.2. Correct Coding Initiative (CCI)
4.3. Outpatient Code Editor (OCE)
4.4. Medicare Code Editor (MCE)
6.1. AHIMA Code of Ethics/Standards of Ethical Coding
DOMAIN VI: Information and Communication Technologies

1. Use computer to ensure data collection, storage, analysis, and reporting of information.
   5.1. Computer concepts (e.g., hardware, software)
   5.2. Common software applications
   5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

2. Use common software applications (for example, word processing, spreadsheets, and e-mail) in the execution of work processes.
   5.1. Computer concepts (e.g., hardware, software)
   5.2. Common software applications

3. Use specialized software in the completion of HIM processes.
   5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)
   5.4. Electronic health records

DOMAIN VII: Privacy, Confidentiality, Legal, and Ethical Issues

1. Apply policies and procedures for access and disclosure of personal health information.
   1.1. Components of a record
   1.2. Contents of a record
   1.4. Data Sets (e.g., demographics, identifiers)
   1.5. Roles and responsibilities of health care providers
   5.4. Electronic health records
   6.2. HIPAA:
      6.2a. Privacy
      6.2b. Security

   6.1. AHIMA Code of Ethics/Standards of Ethical Coding

3. Recognize and report privacy and/or security concerns.
   6.1. AHIMA Code of Ethics/Standards of Ethical Coding
   6.2. HIPAA:
      6.2a. Privacy
      6.2b. Security
4. Protect data integrity and validity using software or hardware technology.

4.9. Data Integrity

5.1. Computer concepts (e.g., hardware, software)

5.2. Common software applications

5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)

5.4. Electronic health records

6.2. HIPAA:
   - 6.2a. Privacy
   - 6.2b. Security

**DOMAIN VIII: Compliance**

1. Evaluate the accuracy and completeness of the patient record as defined by organizational policy and external regulations and standards.

1.1. Components of a record

1.2. Contents of a record

1.4. Data Sets (e.g., demographics, identifiers)

1.5. Roles and responsibilities of health care providers

1.6. Documentation requirements in Inpatient type/place of service: Acute Care

1.7. Documentation requirements in Outpatient type/place of service:
   - 1.7a. Observation stay
   - 1.7b. Recurring/Series Accounts
   - 1.7c. Emergency services
   - 1.7d. Same day surgery
   - 1.7e. Clinic
   - 1.7f. Ancillary

2.4. Difference between soft and hard coding

2.5. Chargemaster

2.6. Coding references:
   - 2.6a. AHA Coding Clinics (ICD-9-CM and HCPCS Level II)
   - 2.6b. AMA CPT Assistant
   - 2.6d. Abbreviations/acronyms

2.7. Official coding and UHDDS guidelines for diagnoses and procedures:
   - 2.7c. Coding and reporting requirements for inpatient services
   - 2.7e. Coding and reporting requirements for outpatient services
   - 2.7g. Signs, symptoms, or manifestations requiring separate code assignments
   - 2.7h. Coding specificity (third, fourth, or fifth digit)
   - 2.7i. V-Codes
2.7j. E-Codes
2.7k. Modifiers
2.7l. CPT/HCPCS Level II
2.7m. Evaluation and management code assignment (facility)

3.1. Accrediting bodies (e.g., The Joint Commission, Medicare Conditions of Participation)

3.2. Government agencies:
   3.2a. Centers for Medicare and Medicaid Services (CMS)
   3.2b. Office of Inspector General (OIG)
   3.2c. CMS Contractors [e.g., FI, Carrier, QIO, Revenue Audit Contractor (RAC), Medicare Administrative Contractor (MACS), Zone Program Integrity Contractor (ZPIC)]

3.4. Uniform billing data elements
3.6. Medical necessity and coverage policies (e.g., NCD, LCD, ABN)
3.7 CMS 3-day rule
4.5. Physician Query (follow correct guidelines)
4.6. Abstracted data
4.9. Data Integrity
4.10. Payor types
4.11. Payor documentation requirements
4.13. Revenue Cycle Components (from registration to payment)
5.3. HIM specific software applications (e.g., Encoder, Grouper, Record Completion, CAC)
5.4. Electronic health records
6.1. AHIMA Code of Ethics/Standards of Ethical Coding
6.2. HIPAA:
   6.2a. Privacy
   6.2b. Security
7.2. Definition of fraud
7.3. Definition of abuse
7.4. Corporate Integrity Agreement (CIA)

4.2. Correct Coding Initiative (CCI)
4.3. Outpatient Code Editor (OCE)
4.4. Medicare Code Editor (MCE)
4.5. Physician Query (follow correct guidelines)
4.6. Abstracted data
4.9. Data Integrity
4.11. Payor documentation requirements
4.13. Revenue Cycle Components (from registration to payment)

7.2. Definition of fraud

7.3. Definition of abuse

3. Recognize and report compliance concerns.

1.4. Data Sets (e.g., demographics, identifiers)

3.1. Accrediting bodies (e.g., The Joint Commission, Medicare Conditions of Participation)

3.2. Government agencies:
   - 3.2a. Centers for Medicare and Medicaid Services (CMS)
   - 3.2b. Office of Inspector General (OIG)
   - 3.2c. CMS Contractors [e.g., FI, Carrier, QIO, Revenue Audit Contractor (RAC), Medicare Administrative Contractor (MACS), Zone Program Integrity Contractor (ZPIC)]

3.3. Payment Systems:
   - 3.3a. Prospective:
     - 3.3a1. APC (OPPS)
     - 3.3a2. DRG (IPPS)
   - 3.3b. Non-Prospective:
     - 3.3b1. Severity Adjusted (e.g., APR)
     - 3.3b2. Fee Schedule
     - 3.3b3. Cost-based reimbursement systems (e.g., critical access hospitals, waivered states)

4.9. Data Integrity

4.11. Payor documentation requirements

4.13. Revenue Cycle Components (from registration to payment)

6.1. AHIMA Code of Ethics/Standards of Ethical Coding

7.2. Definition of fraud

7.3. Definition of abuse
Welcome to the 2012 CCS Job Analysis Survey!

Thank you for participating in this important research study. The purpose of this job analysis survey is to identify the tasks that coding specialists must master in order to perform their jobs competently. Your input is vital to the success of this research project.

This survey is divided into two parts. The first part covers tasks performed by coding specialists; the second focuses on background information about you and asks some questions about the CCS credential.

Those who submit a completed survey will receive two (2) continuing education units (CEUs).

Part One

The purpose of this section of the survey is to determine the most important tasks performed by coding specialists. For each task listed, you will first be asked whether you perform the task in your current coding role. If you do perform the task, you will then be asked to make a judgment about its importance using the rating scale presented below.

How important is this task to the competent performance of your current coding role?

Not at all important
Slightly important
Moderately important
Very important

DOMAIN I: Health Information Documentation

1. Interpret health record documentation using knowledge of anatomy, physiology, clinical indicators and disease processes, pharmacology and medical terminology to identify codeable diagnoses and/or procedures.
2. Determine when additional clinical documentation is needed to assign the diagnosis and/or procedure code(s).
3. Consult with physicians and other healthcare providers to obtain further clinical documentation to assist with code assignment.
4. Consult reference materials to facilitate code assignment.
5. Identify patient encounter type.
6. Identify and post charges for healthcare services based on documentation.
Adequacy of Survey Content

How well do the items you just rated cover the tasks that coding specialists should be able to perform within the domain of Health Information Documentation?

Very poorly
Poorly
Adequately
Well
Very well

Please list any important tasks that you believe should be added to this domain.

DOMAIN II: Diagnosis and Procedure Coding

Diagnosis:
1. Select the diagnoses that require coding according to current coding and reporting requirements for acute care (inpatient) services.
2. Select the diagnoses that require coding according to current coding and reporting requirements for outpatient services.
3. Interpret conventions, formats, instructional notations, tables, and definitions of the classification system to select diagnoses, conditions, problems, or other reasons for the encounter that require coding.
4. Sequence diagnoses and other reasons for encounter according to notations and conventions of the classification system and standard data set definitions (such as Uniform Hospital Discharge Data Set [UHDDS]).
5. Apply the official ICD-9-CM coding guidelines.

Procedure:
1. Select the procedures that require coding according to current coding and reporting requirements for acute care (inpatient) services.
2. Select the procedures that require coding according to current coding and reporting requirements for outpatient services.
3. Interpret conventions, formats, instructional notations, and definitions of the classification system and/or nomenclature to select procedures/services that require coding.
4. Sequence procedures according to notations and conventions of the classification system/nomenclature and standard data set definitions (such as UHDDS).
5. Apply the official ICD-9-CM coding guidelines.
Adequacy of Survey Content

How well do the items you just rated cover the tasks that coding specialists should be able to perform within the domain of Diagnosis and Procedure Coding?

Very poorly
Poorly
Adequately
Well
Very well

Please list any important tasks that you believe should be added to this domain.

DOMAIN III: Regulatory Guidelines and Reporting Requirements for Acute Care Service

1. Select the principal diagnosis, principal procedure, complications, comorbid conditions, other diagnoses and procedures that require coding according to UHDDS definitions and Coding Clinic for ICD-9-CM.

2. Assign the present on admission (POA) indicators.

3. Evaluate the impact of code selection on Diagnosis Related Group (DRG) assignment.

4. Verify DRG assignment based on Inpatient Prospective Payment System (IPPS) definitions.

5. Assign and/or validate the discharge disposition.

Adequacy of Survey Content

How well do the items you just rated cover the tasks that coding specialists should be able to perform within the domain of Regulatory Guidelines and Reporting Requirements for Acute Care Service?

Very poorly
Poorly
Adequately
Well
Very well

Please list any important tasks that you believe should be added to this domain.
DOMIAN IV: Regulatory Guidelines and Reporting Requirements for Outpatient Services

1. Select the reason for encounter, pertinent secondary conditions, primary procedure, and other procedures that require coding according to UHDDS definitions, CPT Assistant, Coding Clinic for ICD-9-CM, and HCPCS.

2. Apply Outpatient Prospective Payment System (OPPS) reporting requirements:
   a. Modifiers
   b. CPT/HCPCS Level II
   c. Medical necessity
   d. Evaluation and Management code assignment (facility reporting)

Adequacy of Survey Content

How well do the items you just rated cover the tasks that coding specialists should be able to perform within the domain of Regulatory Guidelines and Reporting Requirements for Outpatient Services?

Very poorly
Poorly
Adequately
Well
Very well

Please list any important tasks that you believe should be added to this domain.

DOMIAN V: Data Quality and Management

1. Assess the quality of coded data.

2. Communicate with healthcare providers regarding reimbursement methodologies, documentation rules, and regulations related to coding.

3. Analyze health record documentation for quality and completeness of coding.

4. Review the accuracy of abstracted data elements for database integrity and claims processing.

5. Review and resolve coding edits such as Correct Coding Initiative (CCI), Medicare Code Editor (MCE) and Outpatient Code Editor (OCE).
Adequacy of Survey Content

How well do the items you just rated cover the tasks that coding specialists should be able to perform within the domain of Data Quality and Management?

Very poorly
Poorly
Adequately
Well
Very well

Please list any important tasks that you believe should be added to this domain.

DOMAIN VI: Information and Communication Technologies

1. Use computer to ensure data collection, storage, analysis, and reporting of information.
2. Use common software applications (for example, word processing, spreadsheets, and e-mail) in the execution of work processes.
3. Use specialized software in the completion of HIM processes.

Adequacy of Survey Content

How well do the items you just rated cover the tasks that coding specialists should be able to perform within the domain of Information and Communication Technologies?

Very poorly
Poorly
Adequately
Well
Very well

Please list any important tasks that you believe should be added to this domain.
DOMA IN VII: Privacy, Confidentiality, Legal, and Ethical Issues

1. Apply policies and procedures for access and disclosure of personal health information.
3. Recognize and report privacy and/or security concerns.
4. Protect data integrity and validity using software or hardware technology.

Adequacy of Survey Content

How well do the items you just rated cover the tasks that coding specialists should be able to perform within the domain of Privacy, Confidentiality, Legal, and Ethical Issues?

Very poorly
Poorly
Adequately
Well
Very well

Please list any important tasks that you believe should be added to this domain.

DOMA IN VIII: Compliance

1. Evaluate the accuracy and completeness of the patient record as defined by organizational policy and external regulations and standards.
3. Recognize and report compliance concerns.

Adequacy of Survey Content

How well do the items you just rated cover the tasks that coding specialists should be able to perform within the domain of Compliance?

Very poorly
Poorly
Adequately
Well
Very well

Please list any important tasks that you believe should be added to this domain.
Weighting of Examination Content

Below are eight domains that might be covered on future CCS examinations. What percentage of the examination should be devoted to each domain?

Indicate by distributing (in whole numbers) 100% across the domains below.

Do not list the percent (%) sign.

I. Health Information Documentation  
II. Diagnosis and Procedure Coding  
III. Regulatory Guidelines and Reporting Requirements for Acute Care (Inpatient) Service  
IV. Regulatory Guidelines and Reporting Requirements for Outpatient Services  
V. Data Quality and Management  
VI. Information and Communication Technologies  
VII. Privacy, Confidentiality, Legal, and Ethical Issues  
VIII. Compliance
Part Two

Please answer each item by marking the response that most clearly describes you and your professional activities. Background information is collected for purposes of group analysis. Your responses are anonymous and confidential.

For how long have you held the CCS credential?
- Less than 1 year
- 1-2 years
- 3-5 years
- 6-10 years
- 11-15 years
- 16 years or more

What other credentials do you currently hold? (Select all that apply)
- I hold no other credentials
- CCA – Certified Coding Associate
- CCS-P – Certified Coding Specialist – Physician-based
- CDIP – Certified Documentation Improvement Practitioner
- CHP – Certified in Healthcare Privacy
- CHPS – Certified in Healthcare Privacy and Security
- RHIA – Registered Health Information Administrator
- RHIT – Registered Health Information Technician
- CHDA – Certified Health Data Analyst
- CIRCC – Certified Interventional Radiology Cardiovascular Coder
- CPC – Certified Professional Coder
- CPC-H – Certified Professional Coder – Outpatient Hospital
- CPC-P – Certified Professional Coder – Payer
- CPMA – Certified Professional Medical Auditor

What is your PRIMARY work setting?
- Ambulatory care facility
- Behavioral/mental health facility
- Consultant/vendor
- Corporate office of a multi-hospital system
- Educational institution (university/community college)
- Government
- HIM specialty setting
- Home health care agency
- Hospital
- Independent coding company
- Insurance
- Integrated delivery system (hospital, physician, home health, SNF)
- Long-term care facility
- Managed care/HMO/PPO office
- Multi-hospital system
- Multi-specialty group practice
Non-provider setting
Physician office
Currently not employed
Other

What is the geographic location of the facility(ies) in which you conduct the majority of your work related to coding? (Select only one location)
AL
AK
AZ
AR
CA
CO
CT
DE
FL
GA
HI
ID
IL
IN
IA
KS
KY
LA
ME
MD
MA
MI
MN
MS
MO
MT
NE
NV
NH
NJ
NM
NY
NC
ND
OH
OK
OR
PA
RI
SC
SD
Which of the following BEST describes your current job role?

- Academic educator
- Auditor
- Charge master analyst/coordinator
- Coder
- Coder/biller/reimbursement specialist
- Coding manager
- Compliance officer/manager
- Consultant
- Director
- DRG and/or APC coordinator
- Facility-based educator
- Nurse
- Physician
- Privacy officer
- Registrar, cancer or other
- Revenue cycle manager
- Student
- Retired
- Currently not employed
- Other
On an average day, what percentage of time do you spend performing coding and/or coding-related activities?

- 0
- 1-9%
- 10-19%
- 20-29%
- 30-39%
- 40-49%
- 50-59%
- 60-69%
- 70-79%
- 80-89%
- 90-100%

How many years of experience do you have in coding?

- Less than 1 year
- 1-2 years
- 3-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21 years or more

What is the highest level of education you have completed to date? (Select one)

- High school diploma / GED
- Associate's degree
- Baccalaureate degree
- Master's degree
- Doctorate degree
- Doctor of Law/Doctor of Jurisprudence
- Doctor of Medicine/ Doctor of Osteopathic Medicine

What type of coding education have you completed? (Select all that apply)

- I have not completed coding education
- AHIMA ICD-10-CM/PCS Academy
- AHIMA ISP Program
- AHIMA Coding Basics
- Coding certificate program
- Other (please specify) [checkbox]
- Other (please specify) ________________________________

What is your gender?

- Male
- Female
In your opinion, what is the minimum level of education required to competently perform the tasks listed in this survey?
- Less than a high school diploma
- High school diploma / GED
- Associate's degree
- Bachelor's degree

In your opinion, how many years of on-the-job experience in hospital-based coding are necessary to competently perform the tasks listed in this survey?
- Less than 1 year
- 1-2 years
- 3-5 years
- 6-10 years
- 10 years or more

Do you plan to seek any other AHIMA credentials? (Select all that you plan to seek)
- I do not plan to seek another AHIMA credential
- CCS-P – Certified Coding Specialist – Physician-based
- CHPS – Certified in Healthcare Privacy and Security
- CHDA – Certified Health Data Analyst
- CDIP – Certified Documentation Improvement Practitioner
- RHIA – Registered Health Information Administrator
- RHIT – Registered Health Information Technician

The CCS certification has benefited me in the following ways: (Check all that apply)
- Increased salary
- Job promotion
- Job retention
- Better job opportunities
- Professional recognition by co-workers
- Professional recognition by supervisor
- Professional recognition from other peers in the healthcare industry
- Personal satisfaction from attaining the certification
- Increased knowledge/skills (through the preparation for certification)
- Other (please explain) [checkbox]
- Other (please explain) _________________________________

How can AHIMA increase the value of the CCS designation?
__________________________________________________________________________
How likely is it that you would recommend the CCS certification to other coding specialists?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all likely</td>
<td>Neutral</td>
<td>Extremely likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you for completing the survey. We greatly appreciate your time and input.

You can report two (2) continuing education units (CEUs) for completion of this survey.
Subject: CCS Job Analysis Survey Invitation

Body: [FirstName] [LastName],

I’d like to invite you to take the CCS job analysis survey. The purpose of this job analysis survey is to identify the tasks that coding specialists must master in order to perform their jobs competently. This data will also be used to develop the CCS exam blueprint.

You can report 2 CEUs for completion of this survey.

Please complete the survey by Friday, August 10th. You can access the survey here: https://www.surveymk.com/s.aspx

Thank you for your participation!

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list. https://www.surveymk.com/optout.aspx

Inger Sorlie, MA
Test Development Specialist
American Health Information Management Association
# Certified Coding Specialist (CCS) Survey Results

<table>
<thead>
<tr>
<th>CCS TASKS</th>
<th>% Perform</th>
<th>Importance</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOMA I: Health Information Documentation</strong></td>
<td>80</td>
<td>426</td>
<td>2.88</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>1 Interpret health record documentation using knowledge of anatomy, physiology, clinical indicators and disease processes, pharmacology and medical terminology to identify codeable diagnoses and/or procedures.</td>
<td>98</td>
<td>417</td>
<td>2.96</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>2 Determine when additional clinical documentation is needed to assign the diagnosis and/or procedure code(s).</td>
<td>95</td>
<td>404</td>
<td>2.94</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>3 Consult with physicians and other healthcare providers to obtain further clinical documentation to assist with code assignment.</td>
<td>82</td>
<td>348</td>
<td>2.90</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>4 Consult reference materials to facilitate code assignment.</td>
<td>97</td>
<td>412</td>
<td>2.86</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>5 Identify patient encounter type.</td>
<td>85</td>
<td>360</td>
<td>2.63</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>6 Identify and post charges for healthcare services based on documentation.</td>
<td>28</td>
<td>119</td>
<td>2.79</td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td><strong>DOMA II: Diagnosis and Procedure Coding</strong></td>
<td>86</td>
<td>420</td>
<td>2.94</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>Diagnosis:</td>
<td>89</td>
<td>419</td>
<td>2.94</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>1 Select the diagnoses that require coding according to current coding and reporting requirements for acute care (inpatient) services.</td>
<td>88</td>
<td>374</td>
<td>2.97</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>2 Select the diagnoses that require coding according to current coding and reporting requirements for outpatient services.</td>
<td>72</td>
<td>306</td>
<td>2.94</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>3 Interpret conventions, formats, instructional notations, tables, and definitions of the classification system to select diagnoses, conditions, problems, or other reasons for the encounter that require coding.</td>
<td>92</td>
<td>387</td>
<td>2.87</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>4 Sequence diagnoses and other reasons for encounter according to notations and conventions of the classification system and standard data set definitions (such as Uniform Hospital Discharge Data Set [UHDDS]).</td>
<td>93</td>
<td>394</td>
<td>2.93</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>5 Apply the official ICD-9-CM coding guidelines.</td>
<td>98</td>
<td>410</td>
<td>2.99</td>
<td>0.11</td>
<td></td>
</tr>
</tbody>
</table>

*Red shading=top quartile, Red font=2nd quartile, Blue font=3rd quartile, Blue shading=bottom quartile*
## Certified Coding Specialist (CCS) Survey Results

### DOMAIN II: Diagnosis and Procedure Coding (cont'd.)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Perform</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Select the procedures that require coding according to current coding and reporting requirements for acute care (inpatient) services.</td>
<td>89</td>
<td>369</td>
<td>2.98</td>
<td>0.14</td>
</tr>
<tr>
<td>2 Select the procedures that require coding according to current coding and reporting requirements for outpatient services.</td>
<td>69</td>
<td>292</td>
<td>2.96</td>
<td>0.22</td>
</tr>
<tr>
<td>3 Interpret conventions, formats, instructional notations, and definitions of the classification system and/or nomenclature to select procedures/services that require coding.</td>
<td>92</td>
<td>384</td>
<td>2.92</td>
<td>0.27</td>
</tr>
<tr>
<td>4 Sequence procedures according to notations and conventions of the classification system/nomenclature and standard data set definitions (such as UHDDS).</td>
<td>92</td>
<td>385</td>
<td>2.88</td>
<td>0.34</td>
</tr>
<tr>
<td>5 Apply the official ICD-9-CM coding guidelines.</td>
<td>98</td>
<td>409</td>
<td>2.97</td>
<td>0.20</td>
</tr>
<tr>
<td>6 Apply the official CPT/HCPCS Level II coding guidelines.</td>
<td>66</td>
<td>278</td>
<td>2.95</td>
<td>0.23</td>
</tr>
</tbody>
</table>

### DOMAIN III: Regulatory Guidelines and Reporting Requirements for Acute Care Service

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Perform</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Select the principal diagnosis, principal procedure, complications, comorbid conditions, other diagnoses and procedures that require coding according to UHDDS definitions and Coding Clinic for ICD-9-CM.</td>
<td>93</td>
<td>382</td>
<td>2.97</td>
<td>0.16</td>
</tr>
<tr>
<td>2 Assign the present on admission (POA) indicators.</td>
<td>83</td>
<td>340</td>
<td>2.83</td>
<td>0.45</td>
</tr>
<tr>
<td>3 Evaluate the impact of code selection on Diagnosis Related Group (DRG) assignment.</td>
<td>84</td>
<td>346</td>
<td>2.92</td>
<td>0.27</td>
</tr>
<tr>
<td>4 Verify DRG assignment based on Inpatient Prospective Payment System (IPPS) definitions.</td>
<td>76</td>
<td>315</td>
<td>2.90</td>
<td>0.32</td>
</tr>
<tr>
<td>5 Assign and/or validate the discharge disposition.</td>
<td>85</td>
<td>353</td>
<td>2.84</td>
<td>0.41</td>
</tr>
</tbody>
</table>

### DOMAIN IV: Regulatory Guidelines and Reporting Requirements for Outpatient Services

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Perform</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Select the reason for encounter, pertinent secondary conditions, primary procedure, and other procedures that require coding according to UHDDS definitions, CPT Assistant, Coding Clinic for ICD-9-CM, and HCPCS.</td>
<td>76</td>
<td>312</td>
<td>2.94</td>
<td>0.23</td>
</tr>
<tr>
<td>2 Apply Outpatient Prospective Payment System (OPPS) reporting requirements:</td>
<td>65</td>
<td>267</td>
<td>2.89</td>
<td>0.34</td>
</tr>
<tr>
<td>a. Modifiers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. CPT/ HCPCS Level II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Medical necessity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Evaluation and Management code assignment (facility reporting)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Red shading=top quartile, Red font=2nd quartile, Blue font=3rd quartile, Blue shading=bottom quartile
## Certified Coding Specialist (CCS) Survey Results

<table>
<thead>
<tr>
<th>DOMAIN V: Data Quality and Management</th>
<th>% Perform</th>
<th>Importance N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Assess the quality of coded data.</td>
<td>65</td>
<td>377</td>
<td>2.84</td>
<td>0.35</td>
</tr>
<tr>
<td>2 Communicate with healthcare providers regarding reimbursement methodologies, documentation rules, and regulations related to coding.</td>
<td>71</td>
<td>296</td>
<td>2.87</td>
<td>0.36</td>
</tr>
<tr>
<td>3 Analyze health record documentation for quality and completeness of coding.</td>
<td>69</td>
<td>282</td>
<td>2.84</td>
<td>0.40</td>
</tr>
<tr>
<td>4 Review the accuracy of abstracted data elements for database integrity and claims processing.</td>
<td>74</td>
<td>304</td>
<td>2.90</td>
<td>0.33</td>
</tr>
<tr>
<td>5 Review and resolve coding edits such as Correct Coding Initiative (CCI), Medicare Code Editor (MCE) and Outpatient Code Editor (OCE).</td>
<td>52</td>
<td>173</td>
<td>2.98</td>
<td>0.13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOMAIN VI: Information and Communication Technologies</th>
<th>% Perform</th>
<th>Importance N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Use computer to ensure data collection, storage, analysis, and reporting of information.</td>
<td>91</td>
<td>409</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>2 Use common software applications (for example, word processing, spreadsheets, and e-mail) in the execution of work processes.</td>
<td>87</td>
<td>358</td>
<td>2.80</td>
<td>0.47</td>
</tr>
<tr>
<td>3 Use specialized software in the completion of HIM processes.</td>
<td>93</td>
<td>384</td>
<td>2.61</td>
<td>0.58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOMAIN VII: Privacy, Confidentiality, Legal, and Ethical Issues</th>
<th>% Perform</th>
<th>Importance N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Apply policies and procedures for access and disclosure of personal health information.</td>
<td>79</td>
<td>406</td>
<td>2.90</td>
<td>0.24</td>
</tr>
<tr>
<td>2 Apply AHIMA Code of Ethics/Standards of Ethical Coding.</td>
<td>65</td>
<td>267</td>
<td>2.83</td>
<td>0.45</td>
</tr>
<tr>
<td>3 Recognize and report privacy and/or security concerns.</td>
<td>98</td>
<td>400</td>
<td>2.93</td>
<td>0.28</td>
</tr>
<tr>
<td>4 Protect data integrity and validity using software or hardware technology.</td>
<td>75</td>
<td>308</td>
<td>2.97</td>
<td>0.18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOMAIN VIII: Compliance</th>
<th>% Perform</th>
<th>Importance N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Evaluate the accuracy and completeness of the patient record as defined by organizational policy and external regulations and standards.</td>
<td>59</td>
<td>241</td>
<td>2.81</td>
<td>0.45</td>
</tr>
<tr>
<td>2 Monitor compliance with organization-wide health record documentation and coding guidelines.</td>
<td>63</td>
<td>258</td>
<td>2.84</td>
<td>0.38</td>
</tr>
<tr>
<td>3 Recognize and report compliance concerns.</td>
<td>75</td>
<td>306</td>
<td>2.82</td>
<td>0.46</td>
</tr>
</tbody>
</table>
APPENDIX F
<table>
<thead>
<tr>
<th>CCS Exam</th>
<th># points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOMAIN I: Health Information Documentation (8-10%)</strong></td>
<td></td>
</tr>
<tr>
<td>1 Interpret health record documentation using knowledge of anatomy,</td>
<td></td>
</tr>
<tr>
<td>physiology, clinical indicators and disease processes, pharmacology</td>
<td></td>
</tr>
<tr>
<td>and medical terminology to identify codeable diagnoses and/or</td>
<td></td>
</tr>
<tr>
<td>procedures.</td>
<td>5</td>
</tr>
<tr>
<td>2 Determine when additional clinical documentation is needed to</td>
<td></td>
</tr>
<tr>
<td>assign the diagnosis and/or procedure code(s).</td>
<td>2</td>
</tr>
<tr>
<td>3 Consult with physicians and other healthcare providers to obtain</td>
<td></td>
</tr>
<tr>
<td>further clinical documentation to assist with code assignment.</td>
<td>2</td>
</tr>
<tr>
<td>4 Compose a compliant physician query.</td>
<td></td>
</tr>
<tr>
<td>5 Consult reference materials to facilitate code assignment.</td>
<td>1</td>
</tr>
<tr>
<td>6 Identify patient encounter type.</td>
<td>1</td>
</tr>
<tr>
<td>7 Identify and post charges for healthcare services based on</td>
<td></td>
</tr>
<tr>
<td>documentation.</td>
<td>1</td>
</tr>
<tr>
<td><strong>DOMAIN II: Diagnosis and Procedure Coding (64-66%)</strong></td>
<td></td>
</tr>
<tr>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Multiple Select</td>
<td></td>
</tr>
<tr>
<td>Cases</td>
<td>80</td>
</tr>
<tr>
<td><strong>Diagnosis:</strong></td>
<td></td>
</tr>
<tr>
<td>1 Select the diagnoses that require coding according to current</td>
<td></td>
</tr>
<tr>
<td>coding and reporting requirements for acute care (inpatient) services.</td>
<td>1</td>
</tr>
<tr>
<td>2 Select the diagnoses that require coding according to current</td>
<td></td>
</tr>
<tr>
<td>coding and reporting requirements for outpatient services.</td>
<td>1</td>
</tr>
<tr>
<td>3 Interpret conventions, formats, instructional notations, tables,</td>
<td></td>
</tr>
<tr>
<td>and definitions of the classification system to select diagnoses,</td>
<td></td>
</tr>
<tr>
<td>conditions, problems, or other reasons for the encounter that</td>
<td></td>
</tr>
<tr>
<td>require coding.</td>
<td>1</td>
</tr>
<tr>
<td>4 Sequence diagnoses and other reasons for encounter according to</td>
<td></td>
</tr>
<tr>
<td>notations and conventions of the classification system and standard</td>
<td></td>
</tr>
<tr>
<td>data set definitions (such as Uniform Hospital Discharge Data Set</td>
<td></td>
</tr>
<tr>
<td>[UHDDS]).</td>
<td></td>
</tr>
<tr>
<td>5 Apply the official ICD-9-CM coding guidelines.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Procedure:</strong></td>
<td></td>
</tr>
<tr>
<td>1 Select the procedures that require coding according to current</td>
<td></td>
</tr>
<tr>
<td>coding and reporting requirements for acute care (inpatient) services.</td>
<td>1</td>
</tr>
<tr>
<td>2 Select the procedures that require coding according to current</td>
<td></td>
</tr>
<tr>
<td>coding and reporting requirements for outpatient services.</td>
<td>1</td>
</tr>
<tr>
<td>3 Interpret conventions, formats, instructional notations, and</td>
<td></td>
</tr>
<tr>
<td>definitions of the classification system and/or nomenclature to</td>
<td></td>
</tr>
<tr>
<td>select procedures/services that require coding.</td>
<td>1</td>
</tr>
<tr>
<td>4 Sequence procedures according to notations and conventions of the</td>
<td></td>
</tr>
<tr>
<td>classification system/nomenclature and standard data set definitions</td>
<td></td>
</tr>
<tr>
<td>(such as UHDDS).</td>
<td></td>
</tr>
<tr>
<td>5 Apply the official ICD-9-CM coding guidelines.</td>
<td>1</td>
</tr>
<tr>
<td>6 Apply the official CPT/HCPCS Level II coding guidelines.</td>
<td>1</td>
</tr>
<tr>
<td>**DOMAIN III: Regulatory Guidelines and Reporting Requirements for</td>
<td></td>
</tr>
<tr>
<td>Acute Care Service (6-8%)</td>
<td></td>
</tr>
<tr>
<td>1 Select the principal diagnosis, principal procedure, complications,</td>
<td></td>
</tr>
<tr>
<td>comorbid conditions, other diagnoses and procedures that require</td>
<td></td>
</tr>
<tr>
<td>coding according to UHDDS definitions and Coding Clinic for</td>
<td></td>
</tr>
<tr>
<td>ICD-9-CM.</td>
<td>5</td>
</tr>
<tr>
<td>2 Assign the present on admission (POA) indicators.</td>
<td>2</td>
</tr>
<tr>
<td>3 Evaluate the impact of code selection on Diagnosis Related Group</td>
<td></td>
</tr>
<tr>
<td>(DRG) assignment.</td>
<td>1</td>
</tr>
<tr>
<td>4 Verify DRG assignment based on Inpatient Prospective Payment System</td>
<td></td>
</tr>
<tr>
<td>(IPPS) definitions.</td>
<td>2</td>
</tr>
<tr>
<td>5 Assign and/or validate the discharge disposition.</td>
<td>1</td>
</tr>
<tr>
<td><strong>DOMAIN IV: Regulatory Guidelines and Reporting Requirements for Outpatient Services (6-8%)</strong></td>
<td># points</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1 Select the reason for encounter, pertinent secondary conditions, primary procedure, and other procedures that require coding according to UHDDS definitions, CPT Assistant, Coding Clinic for ICD-9-CM, and HCPCS.</td>
<td>5</td>
</tr>
<tr>
<td>2 Apply Outpatient Prospective Payment System (OPPS) reporting requirements:</td>
<td>4</td>
</tr>
<tr>
<td>a. Modifiers</td>
<td></td>
</tr>
<tr>
<td>b. CPT/HCPCS Level II</td>
<td></td>
</tr>
<tr>
<td>c. Medical necessity</td>
<td></td>
</tr>
<tr>
<td>d. Evaluation and Management code assignment (facility reporting)</td>
<td></td>
</tr>
<tr>
<td>3 Apply clinical laboratory service requirements</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DOMAIN V: Data Quality and Management (2-4%)</strong></th>
<th># points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Assess the quality of coded data.</td>
<td>1</td>
</tr>
<tr>
<td>2 Communicate with healthcare providers regarding reimbursement methodologies, documentation rules, and regulations related to coding.</td>
<td>1</td>
</tr>
<tr>
<td>3 Analyze health record documentation for quality and completeness of coding.</td>
<td>1</td>
</tr>
<tr>
<td>4 Review the accuracy of abstracted data elements for database integrity and claims processing.</td>
<td>1</td>
</tr>
<tr>
<td>5 Review and resolve coding edits such as Correct Coding Initiative (CCI), Medicare Code Editor (MCE) and Outpatient Code Editor (OCE).</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DOMAIN VI: Information and Communication Technologies (1-3%)</strong></th>
<th># points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Use computer to ensure data collection, storage, analysis, and reporting of information.</td>
<td>1</td>
</tr>
<tr>
<td>2 Use common software applications (for example, word processing, spreadsheets, and e-mail) in the execution of work processes.</td>
<td>1</td>
</tr>
<tr>
<td>3 Use specialized software in the completion of HIM processes.</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DOMAIN VII: Privacy, Confidentiality, Legal, and Ethical Issues (2-4%)</strong></th>
<th># points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Apply policies and procedures for access and disclosure of personal health information.</td>
<td>1</td>
</tr>
<tr>
<td>2 Apply AHIMA Code of Ethics/Standards of Ethical Coding.</td>
<td>2</td>
</tr>
<tr>
<td>3 Recognize and report privacy and/or security concerns.</td>
<td>1</td>
</tr>
<tr>
<td>4 Protect data integrity and validity using software or hardware technology.</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DOMAIN VIII: Compliance (2-4%)</strong></th>
<th># points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Evaluate the accuracy and completeness of the patient record as defined by organizational policy and external regulations and standards.</td>
<td>2</td>
</tr>
<tr>
<td>2 Monitor compliance with organization-wide health record documentation and coding guidelines.</td>
<td>1</td>
</tr>
<tr>
<td>3 Recognize and report compliance concerns.</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL POINTS** 150
<table>
<thead>
<tr>
<th>CCS Exam - Multiple Select</th>
<th># items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis and Procedure Coding</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CCS Exam - Case</th>
<th># of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inpatient</strong></td>
<td></td>
</tr>
<tr>
<td>Circulatory System (340-459)</td>
<td>1</td>
</tr>
<tr>
<td>Pregnancy, Childbirth, Puerperium (630-677)</td>
<td>1</td>
</tr>
<tr>
<td>Neoplasms (140-239)</td>
<td>1</td>
</tr>
<tr>
<td>Genitourinary System (580-629)</td>
<td>1</td>
</tr>
<tr>
<td>Musculoskeletal System and Connective Tissue (710-739)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>Respiratory System (460-519)</td>
<td>1</td>
</tr>
<tr>
<td>Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders (240-279)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Ambulatory Care</strong></td>
<td></td>
</tr>
<tr>
<td>Eye</td>
<td>1</td>
</tr>
<tr>
<td>Musculoskeletal System</td>
<td>1</td>
</tr>
<tr>
<td>Integumentary System</td>
<td>1</td>
</tr>
<tr>
<td>Nose, Mouth, and Pharynx</td>
<td>&lt;1</td>
</tr>
<tr>
<td>ENT</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Other</td>
<td>&lt;1</td>
</tr>
<tr>
<td><strong>Emergency Room</strong></td>
<td></td>
</tr>
<tr>
<td>Injury and Poisoning</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
</tr>
</tbody>
</table>

**NOTE:** "<1" indicates a case on this topic will be included on the exam less than annually (i.e., NOT on every exam form)