Beyond Coding to Content Analysis

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by Rosalind Richmond, CCS; Claudia Chapman, CPC; Jane Cook, CPC; and Brian Levy, MD

The health information technology (HIT) field can provide HIM professionals with many career opportunities at software and content companies. HIT roles require highly developed content analysis skills, including abstracting, coding, documentation compliance, and utilization review. The availability of rewarding healthcare careers for content analysts represents one of the best-kept secrets of the healthcare industry.

Working in HIT (e.g., a provider of electronic medical records or electronic decision support content) requires additional skills for HIM professionals. HIT vendors focus on creating content that covers a broad range of healthcare subjects. Content analysts work with content and data for large groups of patients or providers rather than on an individual patient basis.

This article describes the role of the content analyst, outlining some of the required skills and qualifications. A summary of the content analyst's role relating to other HIT professionals is also discussed. Finally, a general description of the different kinds of HIT companies is included.

The Content Analyst

Medical content in the healthcare industry includes many comprehensive vocabularies. HIM professionals currently use CPT, ICD, and HCPCS for medical content analysis. In the HIT world, content analysts deal with a wide range of clinical vocabularies such as SNOMED CT, LOINC, RxNorm, and others.

At HIT companies, content not only includes vocabularies but also drug information, decision support such as drug-interaction information, and monograph information for patients and physicians. HIM professionals working in HIT have an opportunity to learn other terminologies and content domains outside of the standard administrative code sets.

The qualifications to become a content analyst include expert knowledge of medical terminology, anatomy, and physiology. A content analyst is expected to be knowledgeable on all code sets for classification of diseases, procedures, billing, and reimbursement. Proficiency in the use of computers and software such as word processing and spreadsheets is a necessity. Additional computer skills such as database querying and programming are not required but may be advantageous.

Responsibilities of a content analyst include mapping and modeling code sets (i.e., ICD, CPT, HCPCS, and APC) to controlled medical vocabularies such as SNOMED CT. Other tasks performed by the content analyst include:

- Grouping related clinical terms into lists to support structured data entry. Based on billing and medical knowledge, content analysts choose the most common diagnosis and procedures to include in the lists.
- Reviewing billing revenue cycles from official sources and adding the information to software applications for customer use. This information is reviewed daily to meet the ever-changing billing and reimbursement guidelines.
- Reviewing and contacting information sources such as the Centers for Medicare and Medicaid Services, the Federal Register, the American Medical Association, and the World Health Organization.
- Writing documentation for all content releases. Technical writing skills are required.
- Using and understanding software used in data capture and communication such as Microsoft Office applications as well as other applications, some of which are homegrown.

Growing into Other Roles

Oportunities exist for HIM professionals to expand into project management and customer service roles as they become familiar with the role of the content analyst. Project managers plan, direct, and coordinate activities of designated projects to ensure that goals or objectives of a project are accomplished within the prescribed time frame. It is critical for project

managers to maintain a list of all current content projects and their deadlines, manage tool needs and issues, ensure that customer documentation is accurate and easily understood, and formalize methods to capture content changes and any corrections that must be made. Good customer interaction skills go hand in hand with this role, as project managers must be able to communicate with customers to quickly identify and resolve conflicts while maintaining high client satisfaction.

In addition to opportunities in analyst roles, HIM professionals can also become involved in training customers in the use of the tools and content offered by HIT companies. Training involves communication skills and considerable interaction with current and potential customers.

The HIT Team

HIT vendors that specialize in the delivery of content and terminologies require a wide range of skill sets. In this age of evolving standards and a wide audience for terminologies, a content team within a software company needs traditional content domain expertise as well as software and content engineers. Medical and nursing informaticists who have both clinical and computing experience and training are often required in order to understand the use and implementation of terminologies and other content within actual systems. Informaticists also play a large role in defining the content needs of users such as electronic health record companies and governments and in developing new kinds of content such as mapping among terminologies. Content analysts work closely with informaticists in HIT companies.

The actual delivery of content to users often requires a different set of skill sets: engineering and development. Software tools are required in order to build and maintain content. For example, when developing mappings among terminologies, a software tool should allow users to assign the work lists, perform the actual mappings, track the work history, and perform quality assurance testing. Software developers are required to create and maintain the tools as well as the various projects within them. Content analysts work with the software developers to design the requirements for the tools and also to report on bugs and maintenance issues.

Content delivery to users requires engineering in order to package the correct content that has been tested into the appropriate computerized formats. Expertise in software development and content engineering skills such as database creation, maintenance, querying, and delivering are required. Once the content is packaged into the software, the content analyst's skills are again required to certify that the content is correct. Often, a content analyst with domain expertise is the only individual who can determine whether the content is correctly loaded into the software.

The HIT Industry

The HIM professional's expertise in the use of coding terminologies is a natural fit in HIT companies that focus on billing applications. For example, companies that create billing and practice management software build applications to assist clinicians, hospitals, and offices in billing electronically. But with the expanded role of clinical terminologies such as SNOMED CT, opportunities exist in several other kinds of HIT companies. For example, electronic health record vendors create applications that present terminologies, including billing codes, to end users such as physicians and nurses. The content analyst can help these vendors transition from presenting billing codes to clinical terminology codes to end users.

Many HIT companies specialize in content such as drug information, patient education leaflets, and disease information. These content companies often require domain expertise from physicians, nurses, and pharmacists, but HIM professionals have the skills to help map and index this content to billing standards. In addition, HIM professionals can leverage expertise in anatomy and other specialties to grow into a content author role for these types of companies.

HIM professionals can take part in creating cutting-edge technology, making quantum leaps in healthcare delivery. The collection and use of medical data and knowledge is critical to the practice of good and safe healthcare. Content analysts with HIM backgrounds can make the difference now and in the future by working in the HIT field.

***Rosalind Richmond, Claudia Chapman, Jane Cook**, and **Brian Levy** (brian.levy@healthlanguage.com) work at Health Language, Inc.*

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