# New Name of the HIM Game

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The health information management (HIM) profession is evolving, with new and exciting careers emerging that didn't exist just a few years ago. HIM professionals and others interested in rapidly expanding health information systems should explore and understand terminology asset management (TAM). This emerging career opportunity requires certain competencies and, though different and challenging, the new roles are well suited for the HIM profession.

The introduction of standardized terminologies in electronic health information management has created new roles in TAM. But like all emerging roles, new competencies are required to meet the job requirements.

TAM is essential for the implementation and maintenance of electronic health information systems. Apelon, Inc. is the technology company that originally coined and trademarked the phrase "TAM." According to Apelon, "TAM is the collection of activities and business processes performed by people, assisted by technology, to implement, integrate, update, deploy and maintain terminologies."

TAM refers to the business processes and terminology management activities that support the introduction of terminologies into clinical applications. HIM professionals are uniquely qualified for these emerging roles given their background, education, and knowledge base. An example of a transitional skill is coding classification. The initial education and work experience in coding and biomedical sciences ideally places most HIM professionals in this role since they must be familiar with terminologies, classification systems, versioning, changes to standards, and the effect of changes on a historical review of data. All this work translates to the terminology world.

## HIM's Role in Terminology Asset Management

The word "asset" denotes an item of value owned by an individual or other entity. Assets have a distinct value in healthcare organizations—and data are considered a key asset. In healthcare terminology use, asset management refers to maintenance of data and information integrity and proper implementation and use of terminology assets within electronic system(s). Most organizations use principles of asset management for other types of assets, such as financial and enterprise assets, and recognize the importance of proper management of terminology assets in electronic environments.

Clinical reference terminologies are a key enabler for semantic interoperability. Semantic interoperability refers to the ability for clinical information to be entered into a system and have it retain its intended context independent of the person, place, electronic system, or time.

Terminologies are a powerful tool and multiple terminologies are required to support diverse electronic environments. This requirement for multiple terminologies within electronic systems fuels the need for individuals to manage terminology assets for reliable results. Without terminology standards, undesirable consequences can occur including health data that can't be compared and incompatible electronic health systems resulting in the inability to link or exchange data.

HIM professionals are slated to move into positions specific to TAM as long as they possess a strong background in biomedical sciences and detailed knowledge of current healthcare terminologies and classification systems. The skill set required to be a proficient HIM manager or advanced encoding specialist is also needed to transition into a TAM job opening. Common job titles include code mapping specialist and terminology standards specialist. A detailed listing of TAM job titles can be found in an appendix to this article posted to the AHIMA HIM Body of Knowledge.

## Terminology Asset Management Drivers in Canada and the US

One driver contributing to the importance of terminology asset management in Canada is Canada Health Infoway. This organization has created a unique approach to bring standards and clinical experts together in the Standards Collaborative. The Standards Collaborative mandate, as the home of the release center for key terminologies available for use in EHRs in Canada, is to:

1. Establish standards to support Infoway's mandate in fostering and accelerating the deployment and use of eHealth solutions
2. Provide services to support and maintain these standards
3. Act in a formal liaison role to international Standards Development Organizations
4. Maintain an InfoCentral webpage featuring terminologies including SNOMED CT, Logical Observation Identifiers Names and Codes (LOINC), pan-Canadian LOINC Observation Code Database (pCLOCD), and HL7 Version 3 vocabulary resources
5. Support a "request for change" procedure similar to processes used in other countries to request additions to terminology content
6. Serve as the main source for information regarding Canadian approved standards

Standards are approved through the Standards Collaborative Governance pan-Canadian Decision Making Process. This Standards Collaborative-managed inventory of standards provides information on the status of terminology standards for those working with eHealth projects. This structure supports a collaborative approach to standards approval and maintenance, educational offerings, resource materials, published standards, and information sharing communities. These activities are supplemented by Canadian involvement linkages with standards development organizations (SDO) including IHTSDO, HL7, IHE, and ISO TC 215 Health Informatics.

Standards advancement for use in Canada and internationally occurs through constituency and working group activities. The working groups are based on SDO practices and it is expected that Standards Collaborative Working Groups (SCWGs) will review and contribute to standards of interest to Canada.

The SCWG contributions to standards occur through participation in the international balloting process from HL7, and ISO TC 215 Health Informatics, in addition to balloting for Canadian standards. The SCWGs provide an excellent source of informal education and share lessons learned across Canada. From a terminology perspective, there is a Terminology Representation and Services Working Group (SCWG 9). SCWG 9 has been active in the following activities:

1. Discussing implementation challenges/opportunities with SNOMED CT
2. Learning about the use of SNOMED CT in Canada and other countries
3. Collaborating with other SCWGs regarding topics of interest, such as the Canadian Clinical Document Architecture (CDA) header

Another driver in Canada is the Canadian Institute for Health Information (CIHI). CIHI's mandate is to maintain health information to enable good policy decisions and effective management that improves health and healthcare in Canada. CIHI is the licensing body for Canada's classifications: ICD-10-CA and the Canadian Classification of Health Interventions (CCI). Subsets of ICD-10-CA and CCI provide the clinical diagnostic and intervention data within most of CIHI's data holdings. Data submitted by healthcare organizations to CIHI is also submitted to the provincial/territorial Ministries of Health for planning, accountability, and funding purposes. The financial impact of health data use and the increasing use of terminologies in EHRs make it imperative that Canadian HIM professionals understand TAM. TAM includes the management of multiple terminology assets such as SNOMED CT and classifications such as ICD-10-CA and CCI.

Within the United States, increased adoption of digital records is a significant driver for the use of standard terminologies. The accelerated use of terminology standards provides expanded career opportunities for HIM professionals. Incentives provided through the federal "meaningful use" EHR Incentive Program are driving interest in the application of SNOMED CT for problem lists and the recording of smoking status of patients—two measures called for in the program.

Drug terminologies including RXNorm are increasingly used in electronic systems, providing additional job opportunities for HIM professionals. LOINC is used for laboratory and other clinical data representation. Within the United States, terminology use is common for cancer care staging, encounter diagnosis capture, family health history, clinical genomics, electronic prescribing, immunizations, and in many other areas where clinical data is captured and stored.

The Office of the National Coordinator for Health IT (ONC) is driving and supporting additional health information technology for widespread use of international terminologies and classifications. ONC's Clinical Quality Measures Work Group and Vocabulary Task Force has proposed code set recommendations which include a number of recommendations beyond the ICD for data capture and representation. In addition to the terminology examples mentioned from Canada, the use of the International Classification of Functioning, Disability, and Health is recommended for categories of patient functions. Trends, additional requirements, and essential principles for TAM are provided in this article's online appendix.

# TAM Competencies and Roles

A variety of roles exist in relation to terminology, and these vary along a continuum of knowledge and experience. Some of the foundational roles include classification specialist or standards analyst; however, the titles can differ across and between organizations. The foundational roles often require the hands-on work of mapping or encoding. As knowledge and experience are gained, roles such as terminology specialists become increasingly more complex, often requiring a merger between HIM professional competencies and health information technology skills—particularly for tasks involving the EHR and interoperability. As a person progresses in their career, the roles will often start to require management and leadership competencies such as those involved with directing or facilitating work. Alternatively, these roles may involve educating or training frontline users or clinicians.

Information about TAM roles and competencies is available in the AHIMA Practice Brief "Guidelines for Managing Health Information, Appendix A: Roles and job elements that support EHR management" available in the HIM Body of Knowledge. In addition, the 2008 AHIMA article "HIM and Health IT: Discovering Common Ground in an Electronic Healthcare Environment" adds insight concerning important relationships between HIM and health information technology.

A general list of employment competencies are available in an appendix to this article posted to the HIM Body of Knowledge.

### Table 1: Terminology Asset Management Highlights

Important facts concerning data management assets are highlighted below. This table points out that asset management refers to maintenance of data and information integrity and proper implementation and use of terminology assets within an electronic system. The arrow down is giving examples of the value in the healthcare organization.

**Electronic Health Records are Assets**

- Meaningful data is stored within electronic systems requiring integrity management
- Standard terminology provides one or more data content sources for storage
- The entire information flow process requires asset management

**Quality of Care Data has High Value Which Requires Management**

- Reimbursement data is mission critical for business reasons
- Research data provides a ready source of dividends to be managed

# Preparing and Training for TAM Jobs

Job candidates for TAM must build upon their existing diploma or degree in HIM by pursuing continuing education. An additional academic degree or experience in health informatics, data manipulation, and analysis tools will assist in understanding the complexities of interfaces, information transformation, and exchange.

Continuing education may be obtained through formal education provided by professional associations or healthcare organizations. Entry level candidates may be expected to participate in work groups and committees, such as national and

international standards development organizations, to ensure that local activities in their domain are compliant with expectations of external organizations and to learn more about terminology standards.

Job opportunities at the specialist level build upon skills obtained at the entry level. Responsibilities become increasingly more complex and candidates must utilize management and information technology skills to serve as a resource for clinicians and other stakeholders. Extensive knowledge of the ICD family of classifications is a good starting point for HIM professionals interested in TAM due to the need to understand encoding and use of a purposeful code structure.

Terminology roles will always require development of an overall comprehension of the most common clinical terminologies' structure and use. As jobs progress into increasingly complex roles, candidates must be prepared to move into leadership roles developing tools, use cases, forms design, and clinical systems screens, all while incorporating requirements for data quality and integrity. These competencies are generally present in the HIM discipline.

Intermediate- and senior-level TAM roles feature work with workflow analysis and the development of policy and procedures for clinical documentation involving the use of terminological systems. It is important to be able to research evidence-based guidelines and clinical literature that addresses the implications of adoption and implementation of clinical vocabularies.

The focus will increasingly move away from HIM-specific standards to those related to clinical domains and patient care, such as with national requirements for activities that contribute toward improving patient care and safety.

As competencies continue to be developed, an opportunity exists to share knowledge by participating in research and publication on the subject. Through mentoring and a train-the-trainer approach, HIM professionals can practice leadership skills by helping entry level staff gain competencies.

# TAM Projects for HIM

After gaining the competencies for TAM mentioned above, HIM professionals can become involved in the development of a terminology set that addresses a specific terminology request. Key leadership activities that ensure effective results include:

- Development of use cases for deploying specified terminologies (i.e., SNOMED CT, LOINC)
- Map development related to terminologies (i.e., SNOMED CT to ICD-10-CM/PCS or ICD-10-CA)
- Maintenance of requests for change to the terminologies, including release management (i.e., Infoway, NLM, IHTSDO); Release management would involve managing the maintenance of encoded concepts within health information systems
- Modeling and development of terminology in alignment with information and terminology models (i.e., application of the terminology system rules and use of the information model to appropriately address the capture and use of the health information)
- Terminology-related education and training for peers and clinical experts to help with awareness and benefits of terminology use (i.e., free online or in-house education)
- Terminology tool use related to implementation (i.e., browsers and terminology maps)
- Terminology evaluation and selection based on business requirements and the purpose the terminology will be used to address (i.e., SNOMED CT for problem lists, LOINC for lab results, and ISO country code for country identification)
- Identifying differences and disparity between healthcare terminologies, classifications, and other coded data sets
- Monitoring SDO activities, work group projects, and decisions that might influence organizational situations (i.e., changes to values in HL7 harmonization)
- Managing legacy systems and use of terminologies (i.e., changes that require updates to screens and dictionaries to support effective maintenance of terminologies in legacy systems)

## Playbook for TAM Success

HIM professionals are uniquely qualified to provide TAM skills anywhere terminologies are deployed in a digital environment. To begin preparation for emerging roles in TAM, HIM professionals should take part in the following:

**Draw on current experience with systems using encoded data**

- Leverage knowledge of healthcare and clinical practices
- Build on experience with EHR systems
- Develop experience with workflow design for data flows
- Expand knowledge of data analytics beyond classifications and funding/reimbursement activities

**Learn more about terminologies used in digital record systems**

- Increase learning and experience through existing channels including professional associations, academic programs, and distance learning
- Monitor articles and websites to stay informed of trends and opportunities for terminology-related employment
- Volunteer to join work groups related to terminology topics or standards
- Attend demonstrations of technology tools—many are delivered virtually and are free
- Network; Take advantage of healthcare-related social media and attend conferences where terminologists are speakers

**Don't fear the challenges of moving into a new role**

- Acquire technology skills that are rapidly and constantly changing
- Strengthen one's HIM knowledge base with additional work in specialty practices where experience or knowledge is lacking
- Keep abreast of EHR capabilities and features involving the deployment and use of standardized terminologies
- Gain confidence in learning how to use unfamiliar terminological systems
- Work toward mastering evaluating, managing, and maintaining terminology assets for healthcare systems

# Resources

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## Read More

**Appendix: www.ahima.org**

An appendix to this article titled "Learning More About Terminology Asset Management Trends, Principles, and Definitions" can be found in the AHIMA HIM Body of Knowledge, located at www.ahima.org.
A detailed list of TAM competencies, a list of job titles, and a glossary of terms with definitions used in this article are all available in the appendix.

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