Cancer, Standards & Interoperability: Delivering Insights and Content

Travis Hicks Director, Web Operations American Society of Clinical Oncology

What is the American Society of Clinical Oncology?

- Founded in 1964, the American Society of Clinical Oncology promotes and provides for
 - o Lifelong learning for oncology professionals,
 - Cancer research, and
 - An improved environment for oncology practice,
- ASCO represents more than 45,000 oncology professionals

ASCO Taxonomy Project Goals

Search
Personalization
Inventorying content



About ASCO's Taxonomy Project

List of thesauri Subject/Topical Drugs Genes Organizational Entities Countries

ASCO Subject Taxonomy Breakdown



Governing Our Taxonomies

Why do we need to maintain our vocabularies, anyway?

- New content with new topics in the field, e.g., COVID-19
- Changes in terminology, e.g., acronym becomes preferred
- Ongoing review by collaboration with experts
- Capturing new NPTs

ASCO Enterprise Content Repository

- Stores all content and metadata, including taxonomy
- Enables ASCO to identify new content relationships
- Provides path to more accurate recommendations for related research
- Powers truly enterprise search
- Allows for personalized content discovery
- Creates pathway to content as a service to internal and external applications

CancerLinQ

- Collects, organizes, cleans, and structures real-world cancer care data from more than 100 oncology practices, representing more than 2,000 oncologists
- Data mapped to a standard model using ontologies
- Physicians review aggregated, de-identified patient data in interactive dashboards
- Researchers study curated sets of aggregated, de-identified data
- Used to host the "ASCO Survey on COVID-19 in Oncology Registry"

mCODE Initiative

- EHRs do not use common cancer data standards
- Goal is to facilitate cancer data interoperability and improve overall cancer data quality mCODE standard designed using widely available medical ontologies
- mCODE is fully open source



How Standardized Data Helps CancerLinQ

- One of primary challenges when CLQ launched was interoperability of data
- mCODE works to bridge that gap
- ASCO COVID-19 Registry uses mCODE data elements



Mapping Patient Data to ASCO Content

- Mapping CLQ data standards to ASCO taxonomy
- Content as a service to power recommendation engine
- Delivery of point of care content

