Oncology Working Group Update 2022
The OMOP Oncology module aims to provide a foundation for representing cancer data at the levels of granularity and abstraction required to support observational cancer research.
Oncology WG Structure

Observational Cancer Research

CDM & Standardized Vocabularies

Vocab & Development WG
2nd & 4th Thursday 1-2 pm EST

Genomic WG
2nd & 4th Tuesday 9-10 am EST

Research

Outreach & Research WG
2nd & 4th Tuesday 3-4 pm EST
What have we done in 2021?

- **Vocabularies**
  - Base diagnosis: integrated ICD-O3 into the SNOMED hierarchy
  - Cancer modifiers: finalized representation of metastasis, stage, grade and dimension
  - Treatment: HemOnc vocab adapted as the Standard Vocabulary for regimens
  - Lower-level representation of Disease Episodes (dimension and extent)
  - Developed and released OMOP Genomic Vocabularies

- **Model**
  - Introduced in 2020

- **Development**
  - Improvement of the NACCR ETL
  - Drug Regimen Algorithm V2.0
  - Analytical package and expansion with additional use cases
  - Conventions for derivation of initial disease episode from HER

- **Adaptation**
  - +20 data partners at different stage of ETL and conversion to Onc Extension

- **Research**
  - Initiated and led several oncology studies and research collaboration
What is our Future Plan?

• Focused to make it effective
• Implement the extension as part of the Vanilla OMOP

1. CDM to adopt the table
2. Stabilize the vocabularies
3. Fix genomics
4. Run studies
5. Onboarding onRamps
1. Improve and finalize ETL from NAACCR to OMOP
   - Finish vocabulary mapping for all NACCRR modifier
   - Improve and publish ETL package for mapping tumor registry to regular OMOP Tables
   - Develop post-ETL package to populate Episode Tables

Collaboration with the Health Systems Interest Group

2. Develop a roadmap for merging EHR and registry data
3. Develop the oncology extension reference implementation for EHR
4. **Enhance and validate the OMOP Genomic Vocabulary**
   - Continue validation of the vocabulary and model
   - Improve the totality of the OMOP Genomic vocabulary
   - ETL package for mapping institutional genomic data to OMOP
   - Publish the documentation of the OMOP Genomic vocabulary
   - Draft best practices in standardization of genomic and other omics data supporting observational research
5. **Dissemination and adaptation of the Oncology Module**
   - Documentation of the work
   - Develop training modules/workshops to support data partners on ETL and mapping

6. **Support data partners and investigators in the application of the Oncology Module for oncology research**
   - Optimize, validate and release the new oncology regimen extraction package
   - Finalize the ongoing oncology studies and analytic tools
   - +5 data partners with research ready data involved in at least one network studies
   - Develop at least 12 reusable Oncology phenotypes
Call for Community Engagement in Development & Research

• Data: US tumor registry, non-US tumor registry, EHR, Claims
• Research questions: High impact use cases
• Domain modelers and vocab developers: Radiology, surgery, precision medicine
• ETL developers
• Methodologists: Support of best practices

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https://github.com/OHDSI/OncologyWG/wiki