Clinical Trial Matching for Patients and Providers

By Tarun Kumar
Agenda

- About Cancer Insights
- Trial matching workflow and challenges
- Developing around standards
- The team
- Demo of Cancer Insights patient app
A Real-Time, Intelligent and Learning Health Platform for Oncology Decision Support

www.cancerinsights.com
Clinical trial matching at Sites

1. **Clinician / Nurse**
   - Creates clinical trials
   - Pulls patient records
   - Reviews the patient records
   - Calls the patient to setup time for discussion

2. **Patient**
   - Pulls patient records
   - Patient searches for clinical trials
   - Patient views the matched trials
   - Patient request for callback

3. **Select patients within organization**
   - Searches trials for specific patient

4. **Clinician views the matched trials**
Challenges in oncology and clinical trial matching

1. N² Problem
   - Unstructured clinical trials criterions
   - Unstructured and siloed medical records

2. Transparency of matching
   - Most matching services do not provide insights into match/mismatch
   - Being approximate right vs. exactly wrong / false positives vs. false negatives

3. Non-codified trial matching
   - Unstructured trials are interpreted differently by each trial service
   - Sparse usage of standards: ICD, CPT, SNOMED, LOINC

4. No available communication standards
   - Lack of standardization of matching elements
   - Lack of standards of matching results
Developing around standards

Exchange matching elements using common terminology
- Use mCode as the standard to send clinical elements extracted from medical records
- Codify all clinical elements to ICD/CPT/SNOMED/LOINC standard
- Each Clinical Trial Service sends back an HL7 research object

Adoption of oncology data model as a frontline system
- Codify data at the point of care
- Use clinical coding to drive better decision making

Transparent matching results
- Show matches / mismatches / unknowns for each inclusion / exclusion criterion
- Enable providers / patients to toggle inputs to evaluate modifiable / unmodifiable matching constraints
The team and collaboration updates

Project Updates

• September 2020: Public call to share Phase 0 accomplishments and Phase 1 plans
  • Phase 0: demonstrate the ability of a trial matching service to receive an mCODE record, analyze the record to make trial matches, and present these matches back to the patient/provider
  • The HL7 Biomedical Research and Regulation Group agreed to sponsor this project and approved the PSS
• January 2021: Phase I Launch
  • IRB Study: 10 patient study to validate that the optimized patient data can effectively filter clinical trials for patients
Enabling quality care one person at a time

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