Events in the NCR rely heavily on post-coordination. This is not supported in the OMOP-CDM.

INTRODUCTION

The Netherlands Cancer Registry (NCR) is a population-based structured cancer registry with nationwide coverage since 1989 and 3 million patients total. We commenced conversion of the NCR data to the OMOP-CDM in 2020. Here we describe our experiences and challenges with the mapping work still ongoing as part of an EHDEN type two grant.

METHODS

We focus on two tables from the NCR:
- The “Event” table, which contains clinical events such as diagnostic tests and primary treatment.
- The “Event Detail” table, which contains details of entries in the “Event” table and associated values.

Mapping workflow:
1. Selection of events and details to map,
2. Pre-processing of the source concepts,
3. Multiple mapping rounds and reviews,
4. Post-processing steps,
5. Final review by domain experts,
6. Implementation.

RESULTS

The first batch of source concepts from the NCR that we processed within the EHDEN grant were related to the most frequently occurring diagnostic events. After the pre-processing step around 350 pre-coordinated source concepts needed to be mapped, accounting for around 10% of all NCR diagnostic concepts.

CONCLUSIONS

So far, prior the medical review step, we have mapped around 10% of the diagnostic events from the NCR. If we consider only source concepts that we wanted to add to the CDM, but for which we could not find a suitable standard concept, then only 5% of these were mapped to 0.

Within the EHDEN grant effort, we will not be able to map all variables in the NCR, but we aim to have an interesting data set to participate in international studies, starting by adding primary treatment events.

We have already done so for a PIONEER study-a-thon in 2021 and we are currently participating in the HANA project on colon cancer treatment effects with South Korea.

Make sure to check the other two posters from IKNL!