Transforming Swedish Health Care Data to the OMOP CDM

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Vocabulary Mapping

Concept Domain	Source Vocabulary	Target Vocabulary	Mapping type
Condition	ICD10-SE	SNOMED	automatic
Procedure	NOMESCO	SNOMED	manual
Drug	NPL	RxNorm (Ext.)	automatic
Provider Specialty	*Local codes*	Specialty	manual

Vocabulary Mapping

Concept Domain	Source Vocabulary	Target Vocabulary	Mapping type	Coverage
Condition	ICD10-SE	SNOMED	automatic	99.5%
Procedure	NOMESCO	SNOMED	manual	13.6%
Drug	NPL	RxNorm (Ext.)	automatic	98.5%
Provider Specialty	*Local codes*	Specialty	manual	~100%

Drug target class

Pie chart showing drug target class distribution:
- Clinical Drug — 83%
- (Precise) Ingredient — 10%
- Clinical Drug Comp — 4%
- Not Mapped
- Clinical Drug Form
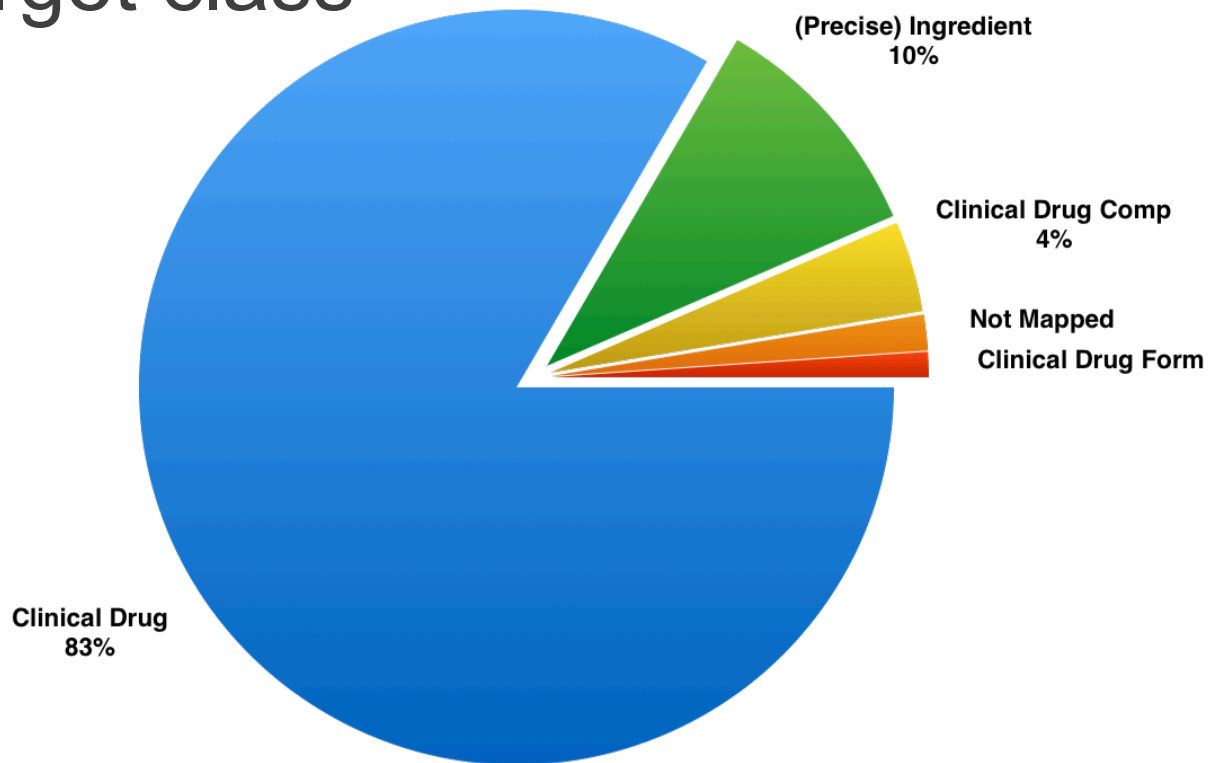
Mapping metrics

- Mapping Quality
  - Standardized expert review
  - Mapped lossless, up or down
- Percentage coverage 'to gain'
  - NOMESCO: +14.7% coverage by mapping top 10 unmapped concepts
- Quality score card

Domain	Source Vocabulary ID	Target Vocabulary ID	Unique Concepts	Coverage	To Gain	Quality
Drug	NPL Pack ID	RxNorm	67%	98.5%	0.9%	55
Condition	ICD10-SE	SNOMED	38%	99.5%	0.3%	87
Specialty	-	SNOMED	95%	100%	0%	100
Procedure	NOMESCO	SNOMED	7%	13.6%	14.7%	98

ETL decisions

- Multiple causes of death as <u>observation</u>

- Circumstances and place of death in <u>addendum table</u>

Death addendum

Column name	Type	Source Field
person_id	integer	DEATH.lpnr
alcohol	boolean	DEATH.alkohol
narcotic	boolean	DEATH.narkotik
work	boolean	DEATH.aolycka
abroad	boolean	DEATH.dodutl
surgical_procedure	boolean	DEATH.opererad
place_of_death_concept_id	integer	DEATH.dodspl

ETL decisions (*cont.*)

- Observation of a Marital Status

	Method 1	Method 2
observation_concept_id	Marital Status	Married
value_as_concept_id	Married	Yes

- Visit attributes as <u>observation</u>

  - Planned

  - Admitting from

  - Discharge to

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