## UI Representation

| Number of patients: 40 |  | SAVE QUERY | SEND |
| :---: | :---: | :---: | :---: |
| Inclusion criteria | Exclusion criteria |  |  |
| enter code or display | enter code or display |  |  |



## Structured-Query

```
{
    "version": "http://to_be_decided.com/draft-1/schema#",
    "inclusionCriteria": [
        [
            {
                "termCodes": [
                    {
                "code": "76689-9",
                    "system": "http://loinc.org",
                        "display": "Sex assigned at birth"
                    }
                ],
                "valueFilter": {
                    "type": "concept",
                    "selectedConcepts": [
                {
                    "code": "female",
                    "system": "http://hl7.org/fhir/administrative-gender",
                            "display": "Female"
                }
            ]
                }
            }
        ],
        [
            {
                "termCodes": [
                        {
                        "code": "E14",
                        "system": "http://fhir.de/CodeSystem/bfarm/icd-10-gm",
                        "display": "Nicht näher bezeichneter Diabetes mellitus"
                    }
                ]
            }
        ]
    ],
    "exclusionCriteria": [
        [
            {
            "termCodes": [
            {
                "code": "27113001",
                "system": "http://snomed.info/sct",
                "display": "Body weight (observable entity)"
                    }
                ],
                "valueFilter": {
                    "type": "quantity-comparator",
                    "comparator": "lt",
```

```
                    "unit": {
                                    "code": "kg",
                                    "display": "kg"
                    },
                    "value": 70.0
                }
        }
        ]
    ]
}
```


## CQL

```
library Retrieve
using FHIR version '4.0.0'
include FHIRHelpers version '4.0.0'
codesystem gender: 'http://hl7.org/fhir/administrative-gender'
codesystem icd10: 'http://fhir.de/CodeSystem/bfarm/icd-10-gm'
codesystem loinc: 'http://loinc.org'
codesystem snomed: 'http://snomed.info/sct'
context Patient
define Inclusion:
    exists from [Observation: Code '76689-9' from loinc] O
    where O.value.coding contains Code 'female' from gender and
(
exists [Condition: Code 'E14' from icd10] or
exists [Condition: Code 'E14.3' from icd10] or
exists [Condition: Code 'E14.31' from icd10] or
exists [Condition: Code 'E14.30' from icd10] or
exists [Condition: Code 'E14.1' from icd10] or
exists [Condition: Code 'E14.11' from icd10] or
exists [Condition: Code 'E14.0' from icd10] or
exists [Condition: Code 'E14.01' from icd10] or
exists [Condition: Code 'E14.2' from icd10] or
exists [Condition: Code 'E14.21' from icd10] or
exists [Condition: Code 'E14.20' from icd10] or
exists [Condition: Code 'E14.7' from icd10] or
exists [Condition: Code 'E14.75' from icd10] or
exists [Condition: Code 'E14.74' from icd10] or
exists [Condition: Code 'E14.73' from icd10] or
exists [Condition: Code 'E14.72' from icd10] or
exists [Condition: Code 'E14.4' from icd10] or
exists [Condition: Code 'E14.41' from icd10] or
exists [Condition: Code 'E14.40' from icd10] or
exists [Condition: Code 'E14.8' from icd10] or
exists [Condition: Code 'E14.81' from icd10] or
exists [Condition: Code 'E14.80' from icd10] or
exists [Condition: Code 'E14.5' from icd10] or
exists [Condition: Code 'E14.51' from icd10] or
exists [Condition: Code 'E14.50' from icd10] or
exists [Condition: Code 'E14.6' from icd10] or
exists [Condition: Code 'E14.61' from icd10] or
exists [Condition: Code 'E14.60' from icd10] or
exists [Condition: Code 'E14.9' from icd10] or
exists [Condition: Code 'E14.91' from icd10] or
exists [Condition: Code 'E14.90' from icd10])
define Exclusion:
    exists from [Observation: Code '27113001' from snomed] O
    where O.value as Quantity < 70.0 'kg'
define InInitialPopulation:
Inclusion and
not Exclusion
```


## FHIR Search

'http://localhost:8081/fhir/Observation?code=http\%3A\%2F\%2Floinc.org\|76689-9\&value-


#### Abstract

concept=http $\% 3 \mathrm{~A} \% 2 \mathrm{~F} \% 2 \mathrm{Fh} 77$. org $\% 2$ Ffhir $\% 2$ Fadministrative-gender $\% 7$ Cfemale"


],
[
"http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14", "http://localhost:8081/fhir/Condition?code=http $\% 3 \mathrm{~A} \% 2 \mathrm{~F} \% 2 \mathrm{Ffhir}$. de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\%7CE14.3", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.1", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.0", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.2", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.7", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.4" http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.8" "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.5", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.6", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.9", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.31", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.30", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.11", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.01", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.21", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir. de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\%7CE14. 20", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.75", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.74", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem 2 Fbfarm\%2Ficd-10-gm\%7CE14.73", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.72", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.41", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.40", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.81", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.80", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.51", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.50", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.61", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.60", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.91", "http://localhost:8081/fhir/Condition?code=http\%3A\%2F\%2Ffhir.de\%2FCodeSystem\%2Fbfarm\%2Ficd-10-gm\|E14.90" ]

