

## Annex 4 - Overview of data at the Estonian Genome Center of the University of Tartu

### 1. Participants questionnaire's (figure 1):

Through data collection following data has been received.

- Sickneses and women's health issues
- Behavioral data – objective data (height, weight, blood pressure)
- Information about alcohol consumption, smoking, eating habits, physical activity, sleep
- Information about education and the nature of work
- Genealogy

### 2. Core facility produces:

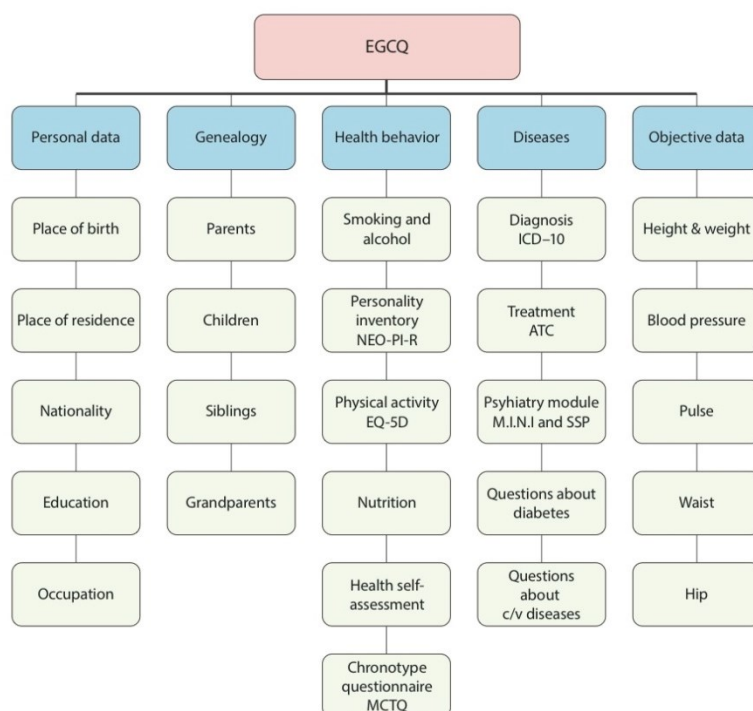
- Genotypes and sequencing data.
- Genetic expression, methylation data.
- Imputation data (calculated from genotypes).

### 3. Additional data from science projects:

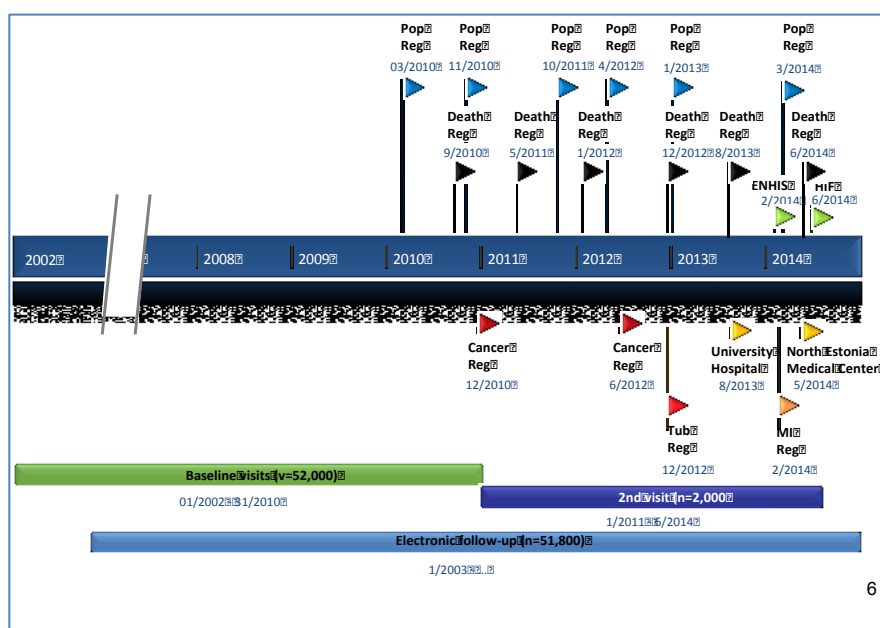
- Telomere measurements
- Personality tests
- Metabolomics measurements
- Blood chemistry analyses
- Serum analyses results
- Autoantibodies measuring results.

### 4. From external registers we can use the following data (figure 2):

- Population Registry – address data
- Causes of Death Registry – primary and other contributory reasons of death
- Cancer Registry – research methods confirming the diagnose, spreading of the tumor, course of treatment
- Myocardial infarction Registry – disease information, drugs
- Tuberculosis Registry – occurrences of tuberculosis (first time or repetitive), cure and treatment effectiveness
- E-Health – Information about epicrisis
- Estonian Health Insurance Fund – medical bills information
- Tartu University Clinic – illnesses, surgical procedures and lab data
- North Estonia Medical Center – illnesses, lab data



**Figure 1.** Illustration of the questionnaire of the Estonian Biobank (EGC)



**Figure 2.** Timeline – linkage with various registries and governmental databases.

*Pop* – Estonian Population Registry (51,800/99.8%);

*Death* – Estonian Causes of Death Registry (3,100/5.9%);

*Cancer* – Estonian Cancer Registry (2,644/5.1%);

*Tub* – Estonian Tuberculosis Registry (260/0.5%);

*MI* – Estonian Myocardial Infarction Registry (945/1.8%);

*ENHIS* – Estonian National Health Information System (39,880/76.9%);

*HIF* – Estonian Health Insurance Fund (51,600/99.5%);

Tartu University Hospital (22,500/43.4%);

North Estonian Medical Center (21,200/40.9%).

Numbers and percentages indicate Biobank participants successfully linked.