

Data sources and data collection:

ROSA 4 is a Norwegian population-based cross-sectional survey. GPs in three out of four Norwegian health regions were invited to participate in the study, and 282 GPs (77% of the invited) in 77 practices (73% of the invited) accepted.

We included individuals ≥ 18 years registered with type 2 diabetes in primary care electronic medical records (T89 and T90 in The International Classification of Primary Care) between January 1st, 2012 and December 31st, 2014.

The data collection was facilitated using a software program and a national diabetes annual review template from the Norwegian Diabetes Registry for Adults. The software program identified all adults (≥ 18 years) registered with a diagnosis of diabetes in the defined time period. The type of diabetes was based on the doctor's clinical diagnosis supported by measurements of beta cell antibodies and C-peptide when necessary. Predefined variables were extracted from the electronic medical records for each patient. Moreover, four study nurses, one in each study region, visited all practices included in each region to verify extracted data and search for missing data in the electronic medical records and reports from specialists. The data collection was performed from April to December 2015. The accuracy of the keywords used in the search for missing data was tested in a pilot.