

Patterns in general practitioners' performance of type 2 diabetes procedures and relations with patients' risk of cardiovascular disease

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The ROSA 4 study: Quality of care in type 2 diabetes in Norwegian general practice

- 77 GP practices, 283 GPs and 10248 patients
 - Cross-sectional data collected from electronic health charts
- Diagnoses manually validated
- Socioeconomic patient data
- Characteristics of participating GPs and GP practices



Outline of my study on variation in GP care

- Subjects: 275 GPs with 6015 type 2 diabetes patients aged less than 75 years and without cardiovascular disease
- Outcomes:
 - A composite measure of whether the GPs had performed recommended procedures on their type 2 diabetes patients
 - Measurement of HbA1c, LDL, BP, albuminuria and screening of feet and retinopathy
 - Estimated 10-year risk of CVD using NORRISK 2
- Aims:
 - Explore variation in process care and associated factors
 - Explore association of CVD risk and GP factors



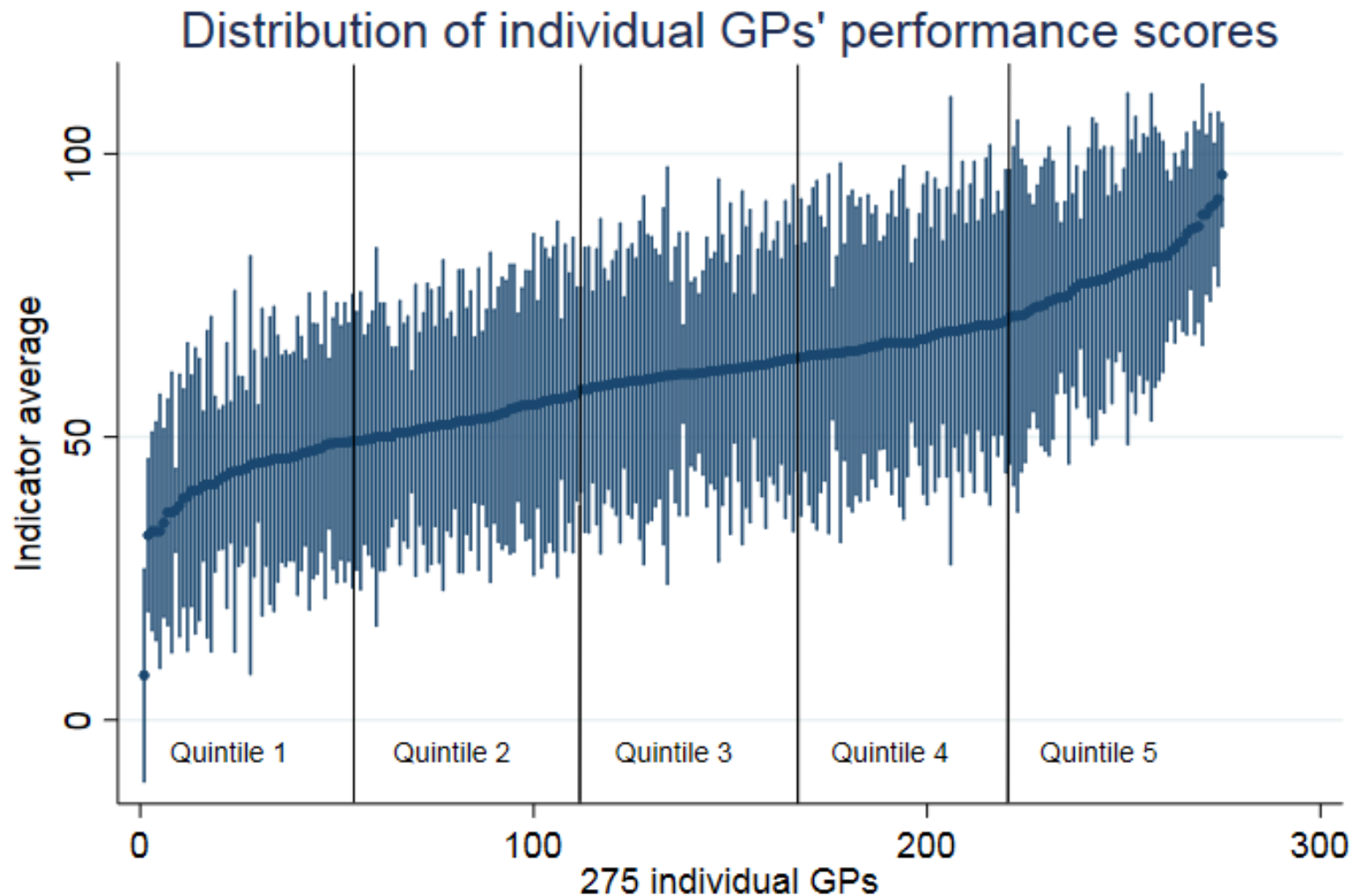
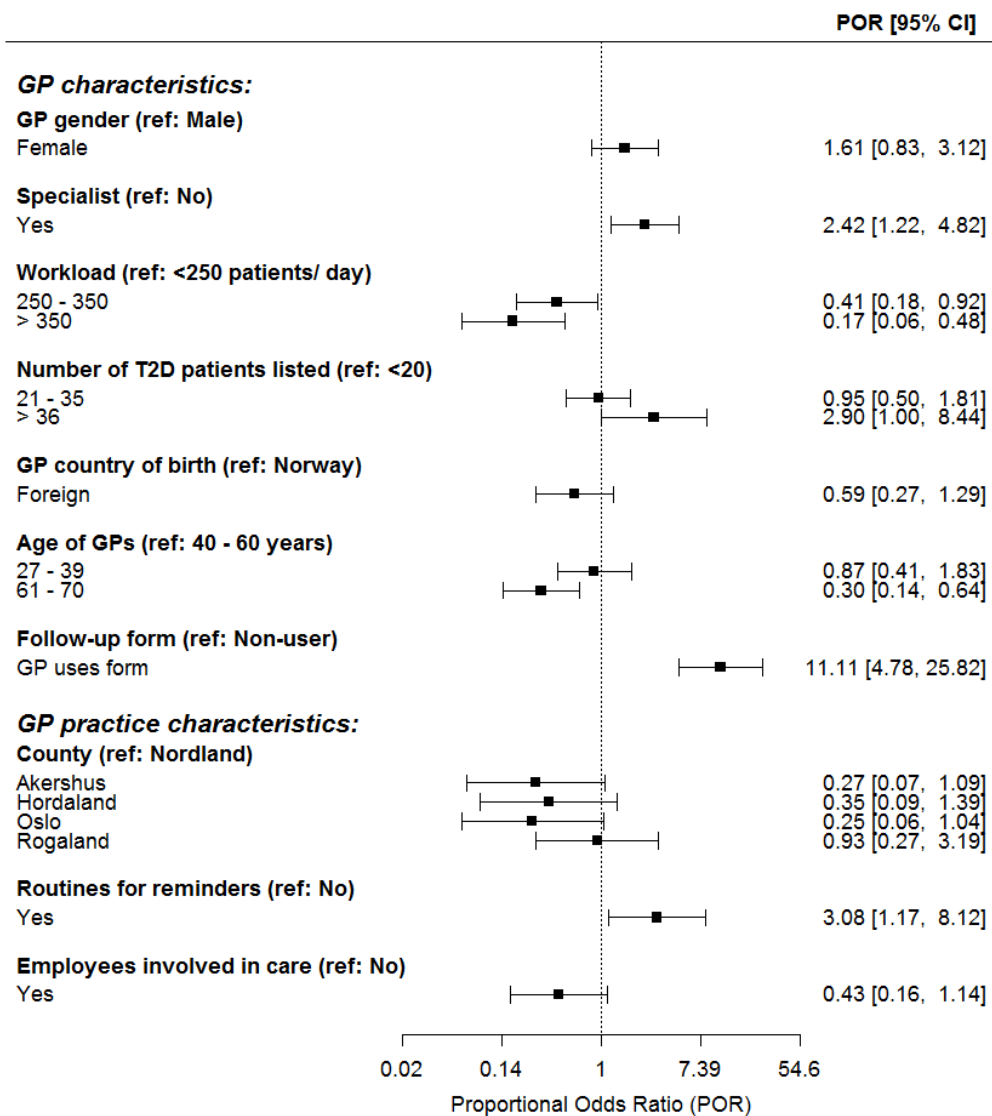


Fig 1. Distribution of the mean proportion of procedures for each of the 275 GPs. Standard error bars represent the variation of the number of procedures in the patients of each GP.

On average, the GPs performed 63% of the six procedures in their patients, ranging from 8 % to 96 %





- Structured follow-up form, routines of patient reminders and specialist status associated with better performance
- Higher workload and higher GP age associated with worse performance



Associations of estimated risk of CVD and GP factors

- Having a GP in the highest quintile is associated with a 9% reduced risk of CVD
- Having a GP using a structured follow-up-form is associated with a 6% reduced risk of CVD
- But only 4% of the variation in risk could be attributed to GPs and practices

