



Trends in rates of invasive revascularization procedures after an acute myocardial infarction during 1994-2009 in Norway: a CVDNOR project

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Background

Myocardial revascularization is considered the mainstay in treatment of acute myocardial infarction

Despite increasing use, gender inequalities in receiving such treatment have been reported

No nationwide information on rates and trends of PCI and CABG have been previously available in Norway

The aim was to explore trends in rates of revascularization procedures after an AMI in Norway during 1994-2009, focusing on possible gender differences

Methods

Study population: All AMI hospitalizations (ICD9 410; ICD10 I21, I22) during 1994-2009 in Norway for individuals 25-85 years in Norway were retrieved from the 'Cardiovascular disease in Norway' (CVDNOR) project

Outcome: PCI within 28 days and CABG within 8 weeks from hospitalization date

Age standardized rates of PCI and CABG and 95% CI were calculated using 10-year age strata and the population of hospitalized patients for an AMI in 2009 as the standard population

Time trends in PCI and CABG rates were explored by Joinpoint regression analyses
Annual percentage change in rates for each time period (APC) and 95% CI are presented

Age-adjusted gender differences in receiving PCI and CABG were analysed with Poisson regression and results expressed as Incidence Rate Ratio (IRR)

CONCLUSION

AMI patients (both men and women) experienced important increases in rates of revascularization procedures in Norway during 1994-2009

However, women were less likely to receive such procedures compared to men

Results

A total of 162,200 AMI patients (65% men) experienced 200,143 AMI hospitalizations (65.5% men)
PCI was performed in 19% of men and 5.5% of women
CABG was performed in 11.8% of men and 3.3% of women

Time trends in PCI and CABG age-standardized rates (Figure):

Men: PCI rates increased with 113% per year during 1994-2000, 30% per year during 2000-2004 and 5% per year during 2004-2009

Women: PCI rates increased with: 80% per year during 1994-2001, 20% per year until 2005 and stopped thereafter (2005-2009)

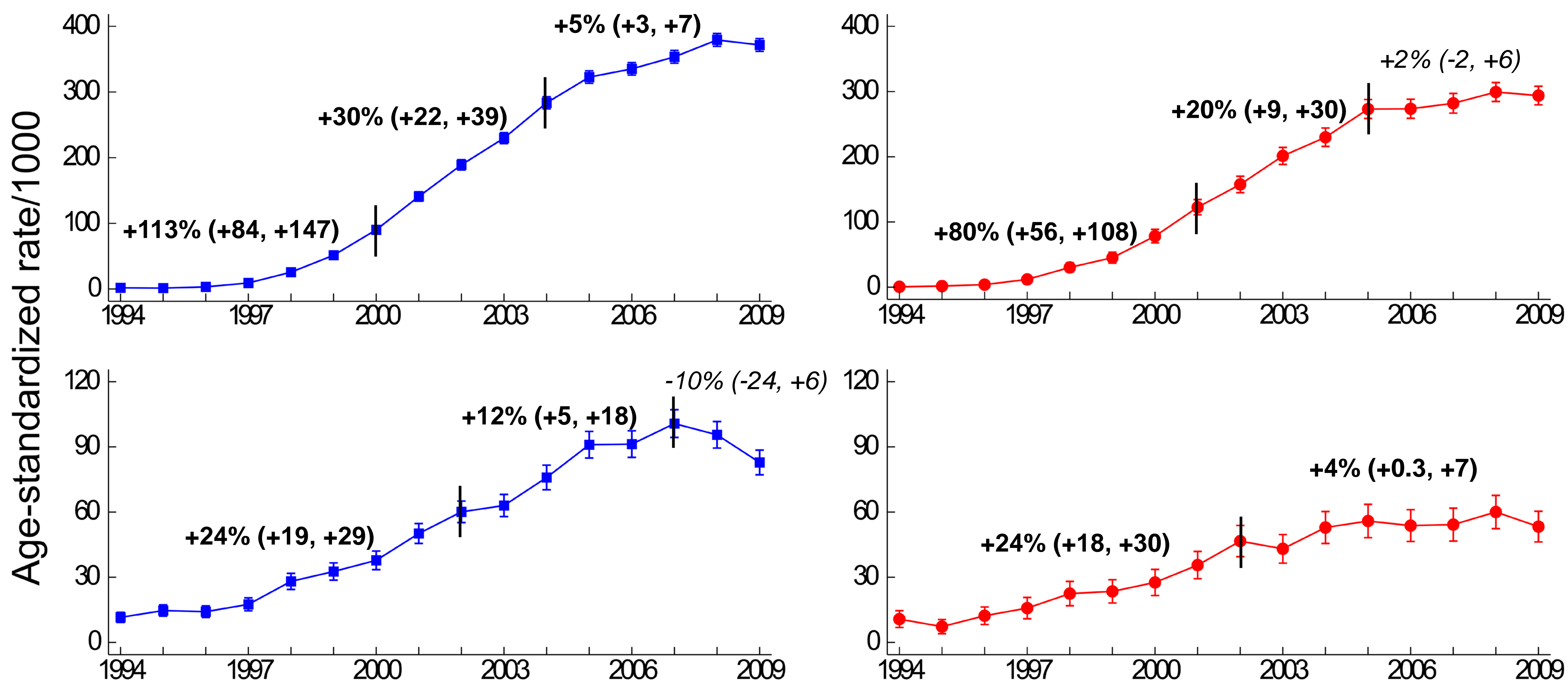
Men: CABG rates increased with 24% a year during 1994-2002, 12% a year during 2002-2007

Women: CABG rates increased with 24% a year during 1994-2002, 4% during 2002-2009

Gender differences in PCI and CABG rates:

Women had 21% lower PCI rates and 37% lower CABG rates compared to men during the study period

Figure . Age-standardized rates of percutaneous coronary intervention (top row) and coronary artery bypass grafting (bottom row) in men (blue) and women (red) in Norway during 1994-2009



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