Longer distance from home to invasive centre is associated with lower rate of coronary angiographies following acute coronary syndrome.

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Lower chance of coronary angiography after ACS if you live far away from an invasive centre

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Purpose
We investigated if there was a difference in the rate of coronary angiography (CAG) after first acute coronary syndrome (ACS) depending on distance between place of residence and invasive centre.

Methods
Background:
Denmark (population 5.5 million) has a universal health insurance coverage system and uniform national guidelines for the treatment of ACS. Invasive treatment of cardiac patients has been centralized to a few highly specialized units.

We included 24 910 patients (83.5% with myocardial infarction). Of those patients 1/3 lived less than 21 kilometers from an invasive centre and 1/3 lived more than 64 kilometres away. In all 18236 (73%) of the patients were examined with CAG.

The cumulative incidence of CAG after two months was 77% for the third living closest to a centre vs 68% for those living furthest away.

Distance to invasive centre was associated with less invasive examination after the event. Even after adjusting for other known risk factors such as gender, age, income, education, admission year, previous revasc, comorbidity and medicine use, there was a highly significant hazard ratio of 0.74 (95% CI 0.71-0.77, p < 0.0001) of receiving CAG for the patients living far away in comparison to those living closest.

Conclusion
Patients hospitalized with a first acute coronary syndrome are treated with a less aggressive invasive approach the further away they live from an invasive centre.

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* Danish National Acute Myocardial Infarction Cohort Study