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Paper:

Ansell, D., Khan, I., Proudfoot, C., Gbenedio, T., Joulain, F., Pockett, R., Catterick, D. & Gooch, K. (2015). Cardiovascular Event Rates in a High-Risk General Population Cohort of 340,000 Individuals in the United Kingdom. *Value in Health, 18*(7), A382-A383.

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OBJECTIVES: Healthcare policy for reducing cardiovascular (CV) event burden should be guided by current and generalisable data. The objective of the study was to estimate 1-year CV event rates in a high-risk general population cohort in the UK.

METHODS: The UK THIN Database was utilised, with inclusion criteria of age ≥18 years and evidence of a high-risk condition for CV events (prior CV disease [CVD], diabetes, or chronic kidney disease [CKD]) as of Jan 1, 2010 (index; initiation of follow-up). Both treated and untreated patients were included. Patient subgroups within CVD were: acute coronary syndrome (ACS) ≤12 months pre-index; ACS 12-24 months pre-index; history of ischaemic stroke; other coronary heart disease (CHD); and peripheral arterial disease (PAD). These subgroups were not mutually exclusive due to the potential of multiple CVD conditions. Other subgroups included diabetes without CVD, and CKD without CVD. One-year risk for the composite endpoint of ACS (myocardial infarction or unstable angina), coronary revascularisation, ischaemic stroke, and CV death (estimated as 62% of all-cause death based on published sources) was estimated via Kaplan-Meier (KM) analyses.

RESULTS: A total of 339,943 individuals met inclusion criteria. Estimated 1-year event rates (%, based on KM analysis) for the composite endpoint were: ACS ≤12 months, 12.9 (95% CI 11.3-14.5); ACS 12-24 months, 7.0 (95% CI 5.8-8.2); ischaemic stroke, 7.8 (95% CI 7.2-8.5); other CHD, 5.0 (95% CI 4.9-5.1); PAD, 6.7 (95% CI 6.4-7.1); diabetes without CVD, 1.9 (95% CI 1.9-1.9); CKD without CVD, 6.4 (95% CI 5.9-6.9).

CONCLUSIONS: This study suggests that CV event rates continue to remain high in the UK general population with CVD or CKD. Patients who experienced an ACS event during the past 12 months and those with a history of ischaemic stroke are at a particularly elevated risk for recurrent events.