Long-term survival after a heart attack or acute myocardial infarction in Australia and New Zealand

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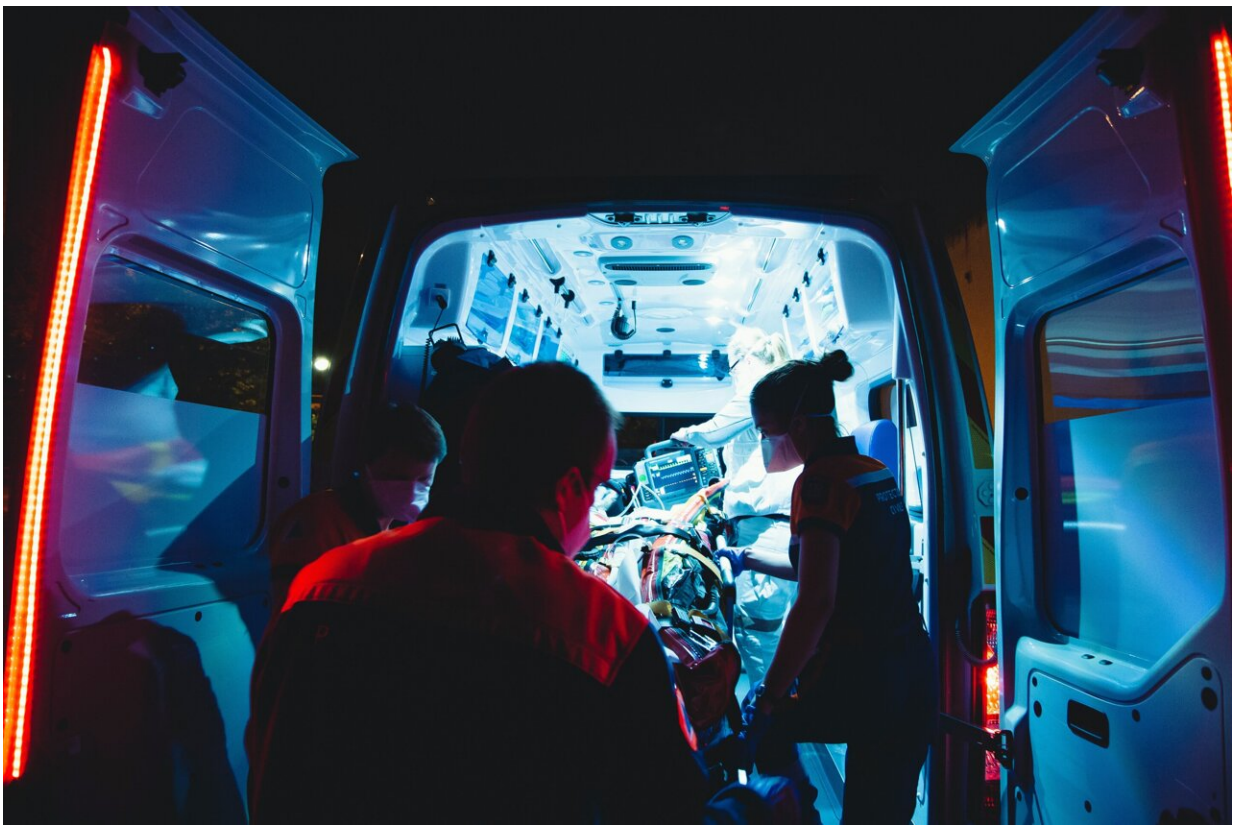

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Long-term survival after a heart attack, or acute myocardial infarction (AMI) in Australia and New Zealand is comparable with the best in the

world, but there is room for improvement, according to research published today by the *Medical Journal of Australia*.

Researchers by Dr. Bora Nadlacki and colleagues analyzed data from all patients admitted with AMI to all public and most private hospitals in Australia and New Zealand during 2009–2015, the first time national data has been linked to assess long-term survival.

They found that of the 239 402 initial admissions with AMI, 7-year survival was 62.3% (STEMI, 70.8%; NSTEMI, 59.2%) and survival exceeded 85% for people under 65 years of age. They also found that 120 155 patients (50.2%) underwent revascularisation (STEMI, 72.2%; NSTEMI, 42.1%), with 7-year survival exceeded 80% for patients in each group who underwent revascularisation.

"Heart attacks are often a life-changing event and patients want to know what their long-term prognosis is," said Dr. Nadlacki.

"We knew short-term survival had improved but we didn't have local data about long-term prognosis. We leveraged the data-linkage capabilities across both countries to address that question. We found that the survival following a heart attack in Australia and New Zealand are comparable to the best reported in the world, which is a testament to all the effort that has gone into improving AMI care in both countries."

The authors wrote that "improved, evidence-based care is likely to explain the higher survival rates in Australia and New Zealand, where the use of secondary preventive therapies (statins, angiotensin-converting enzyme inhibitors/angiotensin II receptor blockers, thienopyridine antiplatelet medications) has increased substantially since 2000."

Despite the positives, the study highlighted several areas for improvement with 7-year survival at only 17.4% for those aged 85 years

or more, and lower than 45% for those patients that did not ultimately undergo revascularisation, many of whom had a NSTEMI.

"Many older patients, including less than a quarter of patients over the age of 85 years, underwent coronary angiography which is a recommended test after an AMI," said the study's senior author Dr. Isuru Ranasinghe, a cardiologist from the University of Queensland and The Prince Charles Hospital.

"These patients often had several non-cardiac conditions and geriatric syndromes that were associated with worse survival. Clinicians are perhaps wary of the risks of harm from invasive AMI treatments. Older patients are also often excluded from clinical trials meaning that we lack clarity about how best to treat these patients.

"With an aging population, we need a more multidisciplinary approach to the care of older patients with AMI. We also need clinical trials with older patients so we know the best approach to treat these patients."

"Survival was poorer among women, a finding consistent with previous reports. We also found regional variation in survival, suggesting disparities in AMI care that require further investigation," said Dr. Ranasinghe.

More information: Bora Nadlacki et al, Long term survival after acute myocardial infarction in Australia and New Zealand, 2009–2015: a population cohort study, *Medical Journal of Australia* (2021). DOI: 10.5694/mja2.51085

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