

# MI-CRE 2023 Annual Research Symposium and Policy Forum

## ***Population Effect of Medicare-Funded Chronic Disease Management Policies on Medication Adherence Trajectories After Stroke: A Sub-Study of the PRECISE Emulated Target Trial***

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### **Abstract**

**Background:** In the PRECISE population-based emulated target trial, using linked healthcare data, it was reported that Medicare-funded chronic disease management plans improved survival and medication adherence after stroke or transient ischaemic attack (TIA).

**Aims:** We aimed to evaluate specific trajectories of medication adherence in long-term survivors of stroke/TIA, by receipt of Medicare-funded chronic disease management plans.

**Methods:** In the PRECISE emulated target trial, person-level data from the Australian Stroke Clinical Registry (42 hospitals; Victoria and Queensland; 2012-2015) were linked with administrative datasets, including the Pharmaceutical Benefits Scheme. People living in the community at 18 months post-stroke/TIA were included. Claim(s) for a Medicare-funded chronic disease management were assessed from 7-18 months post-stroke/TIA. In the subsequent year, medication adherence was measured in 30-day periods using the proportion of days covered method, with censoring at death. Group-based trajectory models were used to identify distinct patterns of medication adherence. Logistic regression models, with inverse probability treatment weighting, were used to compare trajectories by receipt of a chronic disease management claim.

**Results:** Among 12,368 survivors of stroke/TIA (median age: 70 years, 42% female), 45% had a Medicare claim for chronic disease management between 7-18 months post-stroke/TIA. In the subsequent year, four distinct patterns of medication use were identified, illustrating: primary non-adherence, declining adherence, high adherence, and near-perfect adherence. Compared to those without a chronic disease management claim, those with a claim were more likely to have near-perfect or high adherence for antihypertensive (adjusted odds ratio [aOR]: 1.23 [95% CI 1.11-1.36]), antithrombotic (aOR: 1.24 [95% CI 1.12-1.37]), or lipid-lowering (aOR: 1.21 [95% CI 1.10-1.33]) medications. Primary non-adherence was 17-24% less common in those with a chronic disease management claim than those without.

**Conclusions:** Government funded policies for chronic disease management reduce primary non-adherence and increase high to perfect medication adherence after stroke/TIA.