

Using Linked Data to Explore the Association Between Statin Medicine Adherence and Hospitalisation Following A Large Patient Co-Payment Increase

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Introduction

In January 2005, the Australian Government increased the consumer medication co-payment by 21%. Previous research found that this affected population-level utilisation of statins, which fell by 5% following the co-payment increase. The subsequent health impact on individuals reducing or ceasing use of statins is unknown.

Objectives and Approach

To explore the two-year risk of acute coronary syndrome (ACS) or stroke-related hospitalisation among individuals who discontinued, reduced or continued statin medicines after the 2005 PBS co-payments increase. This was achieved through a retrospective cohort study using linked administrative Commonwealth and State datasets for the Western Australian population. Outcomes were assessed using the Fine and Gray competing risks method, with death as the competing risk, adjusting for demographics, comorbidities and medication history

Results

There were 207,066 individuals identified as using statins before the co-payment increase. After the increase, adherence reduced in 12.5% of this cohort, and 3.3% ceased use. There were 4,343 ACS and stroke-related hospitalisations for the cohort in the follow-up period. Multivariate analysis indicated ceasing statins increased the risk of hospitalisation for ACS or stroke-related events by 18% (95%CI=0.1-40%) compared to continuing therapy. The risk was greatest for males <70 years. No differences existed for women or older men who discontinued statins. There was no difference in hospitalisation risk for those who reduced statins compared to those who continued.

Conclusion / Implications

Younger men ceasing statins after the 2005 co-payments increase had a higher risk of ACS and stroke hospitalisations compared to individuals who continued using statins. The findings highlight the importance of continued adherence to prescribed statin medication, and that discontinuing therapy for non-clinical reasons (such as cost) can have negative consequences. Additionally, it demonstrates to policymakers that substantial increases in consumer co-payments can result in adverse health outcomes.

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