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Conference Abstract YI 2.6 Comparison of Cardiovascular Disease Primary Prevention Guidelines between Australia, England and the United States

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ABSTRACT

Objective: Cardiovascular disease (CVD) primary prevention guidelines recommend absolute CVD risk estimation to guide blood pressure and lipid therapy recommendations but are inconsistent despite relying on similar evidence. This study aimed to compare the populations recommended for treatment according to guidelines in Australia, England and the United States.

Methods: Cross-sectional analysis of national health survey data from Australian, English and United States (n = 4,056; n = 2,994; n = 2,943; respectively) adults aged ≥ 40 years. Participants were classified as recommended for therapy based on clinical characteristics denoting high risk and absolute CVD risk stratification according to each country's guidelines [1–6]. Agreement in therapy recommendation assessed by Kappa statistic.

Results: Agreement in therapy recommendation was minimal to weak ($\kappa = 0.35-0.54$). Proportions recommended for either blood pressure or lipid lowering treatment ranged between 26–32%, 47–52% and 43–47% in Australia, England and United States. There was minimal to strong agreement in therapy recommendation according to clinical criteria ($\kappa = 0.38-0.83$) and minimal to moderate agreement according to absolute CVD risk ($\kappa = 0.28-0.64$) across guidelines.

Conclusion: Despite similar evidence apparently underpinning guidance, there is little agreement in the populations targeted for CVD primary prevention with Australia recommending far few people for treatment in comparison to England or the United States. This is due to differences in both clinical characteristics considered high risk and absolute CVD risk stratification. Whilst different countries may adopt different policies on the appropriate level of risk to target, these findings suggest a need to develop international consensus definition for high CVD risk in primary prevention guideline.

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