

## Clinical outcomes and health care costs of transferring rural Western Australians for invasive coronary angiography, and a cost-effective alternative care model

TO THE EDITOR: Alexander and colleagues<sup>1</sup> investigated coronary artery disease management in patients from rural and remote Western Australia who were referred to Perth for invasive coronary angiography in 2019. They found that most patients did not undergo revascularisation after angiography and, therefore, could have been managed without referral to Perth. They propose increasing availability of computed tomography coronary angiography (CTCA) in rural centres to identify patients who would benefit from revascularisation: only these patients need referral to Perth.<sup>1</sup>

Increasing access to CTCA in rural centres and reducing referrals to Perth would be welcome. However, there is a risk that this would entrench variations in intervention rates based on socio-economic and private health insurance (PHI) status. Such bias was identified in a study of coronary procedures in WA hospitals in 2009, which found socio-economic and PHI gradients in angiography, angioplasty, and coronary

artery bypass grafting rates among patients with angina.<sup>2</sup> Geography is an independent determinant of PHI status partly because people outside major centres receive less benefit from PHI,<sup>3</sup> and this could distort decisions about cardiovascular interventions. A national study showed that socio-economic status was associated with coronary artery disease and death, and angiography rates were associated with private hospital admission.<sup>4</sup> Variation in rates of intervention may represent both overuse and underuse relative to likelihood of benefit. Health system reform is needed to optimise equity of access, before introducing new technology based on assumptions that current distribution matches clinical need.

WA is a big state and equity in health care will remain an aspiration because people in Perth can be surrounded by family and friends when in hospital, while those referred from distant places must bear separation. Considering this, the proposal by Alexander and colleagues<sup>1</sup> that CTCA be available in rural centres to avoid referral to Perth is worthwhile.<sup>1</sup> However, patients who will not benefit from surgical intervention should still have equitable access to specialist consultation based on need. Telehealth could provide access, but it will be important to offer choice and monitor equity of both access and outcomes.

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- 1 Alexander M, Lan NSR, Dallo MJ, et al. Clinical outcomes and health care costs of transferring rural Western Australians for invasive coronary angiography, and a cost-effective alternative care model: a retrospective cross-sectional study. *Med J Aust* 2023; 4: 155-161. <https://www.mja.com.au/journal/2023/219/4/clinical-outcomes-and-health-care-costs-transferring-rural-western-australians>
- 2 Korda RJ, Clements MS, Kelman CK. Universal health care no guarantee of equity: Comparison of socioeconomic inequalities in the receipt of coronary procedures in patients with acute myocardial infarction and angina. *BMC Public Health* 2009; 9: 460.
- 3 Private Health Ministerial Advisory Committee. Background paper: improved value for rural consumers [9 Nov 2016]. <https://www.health.gov.au/sites/default/files/documents/2021/12/foi-request-2712-release-documents-agendas-and-attached-documents-meetings-of-phmac-subcommittees-and-working-groups-between-september-2016-december-2018-foi-2712-issues-paper-improved-value-for-rural-consumers.pdf> (viewed Sept 2023).
- 4 Chew DP, MacIsaac AI, Lefkovits J, et al. Variation in coronary angiography rates in Australia: correlations with socio-demographic, health service and disease burden indices. *Med J Aust* 2016; 205: 114-120. <https://www.mja.com.au/journal/2016/205/3/variation-coronary-angiography-rates-australia-correlations-socio-demographic> ■