



# Chapter 4

## Cardiac tests

### At a glance



Cardiac stress tests and imaging are used in people with symptoms suggestive of coronary heart disease for accurate diagnosis, risk assessment and treatment planning. The Atlas examined use of exercise electrocardiogram (ECG), stress echocardiography, myocardial perfusion scans (MPS) and computed tomography of the coronary arteries, as one item. It also examined use of stress echocardiography and MPS as separate items.

Equitable access to cardiac imaging is important for improving cardiac care and outcomes in people at high risk of coronary artery disease in Australia. Appropriate use of these tests is also important for the sustainability of the health system, as they account for a substantial portion of the health budget. Use of cardiac imaging has grown at about twice the rate of treatment with revascularisation, suggesting that some testing is unnecessary and that healthcare resources could be better used.

The Atlas found that the rate of cardiac stress testing and imaging varies up to 10-fold between local areas in Australia. The largest variation is seen in the rates of stress echocardiography (varies up to 47-fold) and MPS (varies up to 57-fold).

The Atlas also mapped use of standard (or transthoracic) echocardiography, which is used to investigate symptoms suggestive of heart failure, structural heart diseases and other heart conditions. The Atlas found that the rate of standard echocardiography varies up to four-fold between local areas.

A lack of access to some cardiac tests for people in regional and remote areas is a key concern. The Atlas found that rates of cardiac stress tests and imaging, and standard echocardiography are higher in major cities than in regional and remote areas. This finding does not follow the pattern of need, as the burden of cardiovascular disease is higher in regional and remote areas. Barriers to access outside major cities include higher out-of-pocket costs for patients.

The Atlas also found that use of MPS is more common in socioeconomically disadvantaged areas in major cities and inner regional areas. This may be because MPS is less likely to have an out-of-pocket cost than stress echocardiography. Stress echocardiography is preferable to MPS in cases where it will give similar clinical information, because it does not expose the patient to radiation.

Regular review of MBS claims for reimbursement against identified criteria could improve the value gained from cardiac tests.

## Recommendation

### Cardiac stress tests and imaging

- 4a. The Commission to develop a clinical care standard on diagnosis, investigation and management of ischaemic heart disease.
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Further recommendations for improving use of these tests are included under 'General recommendations'. See 'Key findings and recommendations', page 25.