This Issue in the Journal

Door to balloon times: streamlining admission for primary percutaneous coronary intervention
Neil Swanson, Christopher Nunn, Steve Holmes, Gerry Devlin

When patients are having a heart attack, one of the main coronary blood vessels has become blocked with blood clot. Currently, the best treatment for this is to unblock the blood vessel using a tiny balloon inside the vessel, which is called coronary angioplasty. It is extremely important to do this treatment as quickly as possible, to limit the damage done by the heart attack and improve the chances of the patient surviving. We have looked at how heart attack patients are admitted to our hospital and made changes to speed up this process, resulting in a much reduced time before angioplasty is performed.

Are at-risk New Zealand women receiving recommended cardiovascular preventive therapy?
Olivia Bupha-Intr, Sally B Rose, Beverley A Lawton, C Raina Elley, Anthony C Dowell

The NZ cardiovascular guidelines recommend treatment with ‘triple therapy’ (low dose aspirin, blood pressure-lowering medication and a lipid-lowering medication) for those with a 5-year CVD risk of ≥15% or with established CVD. Data collected during a previous study involving 1089 40–74 year old women were used to calculate a 5-year cardiovascular (CVD) risk scores and self-reported use of cardiovascular medications. Of the 109 women at high risk (risk score ≥15% or established CVD); only 17% (19/109) were taking triple therapy. These results suggest that women at high-risk are not receiving cardiovascular medications as recommended by the guidelines, but reasons for this ‘treatment gap’ are unclear.

A retrospective review of the use of thromboprophylaxis in patients who subsequently developed a venous thromboembolism after discharge from hospital
Diane N Wiseman, Jeff Harrison

A venous thromboembolism (VTE) is the formation of a blood clot in the veins and includes deep vein thrombosis (DVT) and pulmonary embolism (PE). Venous thromboembolism (VTE) is an important cause of ill health and death in hospitalised patients. The prevention of VTE using mechanical and/or pharmacological methods has been shown to be effective, safe and cost-effective. However, many hospitalised patients at-risk of VTE do not receive prophylaxis, and guideline recommendations continue to be overlooked.
Performance of Framingham cardiovascular risk scores by ethnic groups in New Zealand: PREDICT CVD–10
Tania Riddell, Sue Wells, Rod Jackson, Ai-Wei Lee, Sue Crengle, Dale Bramley, Shanthi Ameratunga, Romana Pylypchuk, Joanna Broad, Roger Marshall, Andrew Kerr

Estimating a patient’s cardiovascular risk is important to help target whether they require treatment or not. The Framingham risk score is based on a medical research done over 30 years ago on about 5000 mainly white, middle-class North Americans from Framingham, Massachusetts. This original score was modified by the New Zealand Guidelines Group to compensate for those ethnic groups collectively considered to be at higher risk (Māori, Pacific and Indian). The adjustment was successful in making up for the underestimation of risk for people in these ethnic groups. However, it was crude and the adjustment made was too large across all the groups. We require further time and research to refine cardiovascular risk prediction scores that are more accurate for Māori, Pacific and Indian peoples.

A comparative analysis of the cardiovascular disease risk factor profiles of Pacific peoples and Europeans living in New Zealand assessed in routine primary care: PREDICT CVD–11
Corina Grey, Sue Wells, Tania Riddell, Andrew Kerr, Dudley Gentles, Romana Pylypchuk, Roger Marshall, Shanthi Ameratunga, Paul Drury, C Raina Elley, Cambell Kyle, Rod Jackson

This paper reports on differences in cardiovascular disease risk profiles between Europeans and Pacific peoples assessed in routine primary care practice using a web-based clinical decision support programme known as PREDICT. Pacific men were one and a half times more likely to be current smokers than European men. Diabetes rates were three times higher for Pacific peoples compared to Europeans. Overall cardiovascular risk scores (which predict the risk of experiencing a cardiovascular event, such as a heart attack or stroke, in the next 5 years) were significantly higher in Pacific men and women compared to European men and women. These differences in cardiovascular risk factors help explain the higher rates of cardiovascular deaths among Pacific peoples compared to Europeans in New Zealand and should be used to plan appropriate interventions.

Use of implantable cardioverter defibrillators in the New Zealand context from 2000 to 2007
Peter D Larsen, Praveen De Silva, Scott A Harding, Ellen Woodcock, Nigel A Lever

In patients who are at high risk of sudden cardiac death, the best treatment option is implantation of an implantable cardioverter defibrillator (ICD). This study examine the patient population at two tertiary referral hospitals receiving these devices between 2000 and 2007. The implant rate has increased across the study period, but remains about a third of the implant rate seen in Australia, suggesting that we are not
implanting sufficient ICDs. The patients who are receiving the ICDs have a high
therapy rate (suggesting that the devices are saving lives) and a low mortality rate by
international standards.