The Illawarra Health and Medical Research Institute at the University of Wollongong is developing a longitudinal population health survey of residents aged 25-54 in the Illawarra and Shoalhaven region. The survey aims to provide a profile of the weight management and trends in weight-related risk factors and associated biomarkers. In developing the design of the sample two important objectives have been considered that lead to an innovative sample design. One objective is to have the ability to able to test for the presence of the effect of various community activities and more generally area effects. A further major objective is to use a population sample to recruit a subsample of people into a randomised controlled trial of a weight management protocol for overweight and obese adults. The proposed study offers three challenges for the sample design: (a) the Illawarra and Shoalhaven region is quite diverse; (b) biomarkers (e.g. blood samples) will be collected, which has implications for costs and cooperation rates; and (c) meeting the sample requirements for the randomised controlled trial (RCT).

This project involves designing population samples for nested experiments, detecting area effects and how to merge survey methodology with RCT protocols. Walt Davis and David Steel are developing the statistical aspects of the study design and the complex analysis that will be undertaken once data has been obtained.

For further information, contact Professor Ray Chambers.