MONASH University
Business and Economics

Centre for Health Economics

Seminar Series 2008

Cardiovascular Disease, Diabetes and Labour Force Participation: An econometric analysis of clinical prevalence data

Presented by

Associate Professor Anthony Harris

Date: Wednesday 9th April 2008
Time: 1:00-2:00pm
Venue: RB Scotton Room
2nd Floor, Building 75
Monash University, Clayton

The aim of the study is to determine the influence of diabetes and cardiovascular disease on labour supply in people aged over 25. We estimate an endogenous multivariate probit model with a recursive simultaneous structure using unit record data from a stratified random national survey with a physical examination of 11,247 individuals in Australia. We estimate the average treatment effect on labour force participation of each chronic illness taking account of both the structural coefficients and cross equation correlations in errors. The prevalence of the two chronic diseases and the probability of labour force participation are potentially endogenous due to common unobserved risk factors, and diabetes is itself an independent risk factor for cardiovascular disease. The results confirm that both diabetes and cardiovascular disease have a strong influence on labour market outcomes particularly for males, and that risk factors such as obesity, insufficient exercise, hypertension, lipid abnormality, smoking and parental diabetes all have a significant indirect effect on labour force participation. Chronic disease reduces the probability of being in the labour force by 0.06 for males and 0.12 for females with diabetes and by 0.11 for males with cardiovascular disease. Males with both diseases have a reduced probability of being in the labour force of 0.22. The results also suggest that the pervasive single equation regression model considerably overestimates the treatment effect of chronic disease on labour market outcomes.

Presenter
Associate Professor Anthony Harris is Deputy Director of the Centre for Health Economics. Anthony has held teaching and research positions at the University of Aberdeen, University of Western Australia and Murdoch University and has over 60 refereed articles and book chapters, with 40 in health economics, and the rest in other quantitative areas of economics.

He has been closely involved in the application of health economics to health technology assessment and currently leads a multidisciplinary health technology research team at Monash University. He has been closely involved in health services decision making as member of the Economics Sub-committee of the PBAC, and member of government review committees in the areas of diagnostic radiology and radiation oncology. He is currently team leader on 5 year program modelling the economics of the Australian health care system.

VISITORS ARE MOST WELCOME. The Seminar Series is free of charge. For confirmation of your attendance and further information please telephone 9905 0733 or email che@buseco.monash.edu.au