



# ACERH

AUSTRALIAN CENTRE FOR ECONOMIC RESEARCH ON HEALTH

## SEMINAR

**Tuesday, 8th December 2009, 10:15am**

ES Meyers Lecture Theatre  
1st floor, Mayne Medical School Building  
University of Queensland  
Herston Road, Herston

### **Horizontal inequity in regional health insurance and medical levies in Japan**

**Dr Narimasa Kumagai**

**School of Economics, Kinki University, and Visiting Scholar, ACERH UQ**

#### **The Speaker**

Narimasa Kumagai is Associate Professor in Economics at Kinki University in Japan. He is a Visiting Scholar at ACERH UQ for 12 months: from 1 September 2009 to 31 August 2010. Narimasa has a Doctor of Economics from Hiroshima University and 10 years of research and teaching experience in economics. He undertakes research and teaches in the fields of econometrics, public economics, public finance, social security, etc. His recent research interests include equity in health, health insurance and the influence of lifestyle on health outcomes.

#### **Abstract**

In Japan, economic stagnation has hit the regional health insurance system and this affects most retired pensioners. The fiscal state of insurers in rural areas deteriorated. By contrast, urban areas tend to attract a favourable selection of risks.

This paper aims to investigate whether the distributions of medical levies that are paid to health insurers conform with the concept of horizontal equity (i.e., the equal treatment of equals) across different areas within the Kansai region of Japan. The paper examines prefectural-level variations in income-related inequality in health care financing. Data of Kansai region of the Japanese National Health Insurance in 2005 were extracted. Retired employees and self-employed individuals are covered by this insurance system. Horizontal inequity in health and inequality in medical levies were measured using the Concentration Index and Theil's second measure, respectively. We found significant variations across prefectures regarding the distribution of medical levies to health insurers per household. Kyoto and Nara were subject to a pro-poor distribution of health care financing. We can consider that such proportionality was not built into NHI system through the near constant contribution rates across the distribution of living standards. Using plutocratic weights, the different degree in the inequality in medical levies among prefectures was revealed. The inequality in the multiplier of income levies in Nara was the largest. The regional differences in medical levies to health insurers were mainly derived from income-related inequality per household. To reduce inequality in income levies, local government should lower the proportion of households whose payment of premium of health insurance was reduced.

#### **Enquiries**

For enquiries about this seminar contact Ms Katherine Green ([k.green2@uq.edu.au](mailto:k.green2@uq.edu.au); 07 3365 5560) or Professor Luke Connelly ([l.connolly@uq.edu.au](mailto:l.connolly@uq.edu.au); 07 3346 4838)