

Seminar Notice

“Old-age care provision in Spain: Current practices and future considerations based on results from a mixed microsimulation-agent-based model”

Wednesday July 3, 2019, 9:30am – 10:30am

Manawatū Campus Room 2.22

Dr Jeroen Spijker, Centre for Demographic Studies, Autonomous University of Barcelona Campus, Spain

All developed countries have seen life expectancy improve at old ages, accelerating the process of population ageing associated with low fertility. In Spain this process has been especially fast, to the extent that in the last 30 years the number of people aged over 65 has doubled. This change in demographic structure is increasing the demand for health and social care for old-age persons, which today is still largely provided by family, typically by spouses and adult children. Concurrently, family structures are also rapidly changing due to reductions in fertility, the delay in family formation and rising divorce rates. Moreover, an increasing proportion of women have entered the labour force. Together, these factors affect the availability of family, i.e. informal, care for people of old age.

To study the supply and demand balance of informal care and quantify the needs for formal care when there is a deficit we have developed a mixed model that uses two different simulation techniques: microsimulation and agent-based-modelling (ABM). Based on current nuptiality, fertility and mortality levels, the model starts with a micro-simulation of the lifecycle of a cohort of individuals and their close relatives until death. The ABM then determines the amount of time available or needed, for caring for family members over their lifecycle, starting at age 50.

The talk will first provide an overview of changing patterns in old-age care provision in Spain before presenting the model and providing some interesting results.

Bio: Jeroen Spijker is a "Ramon y Cajal" Research Fellow at the Center for Demographic Studies, a research institute situated on the outskirts of Barcelona, Spain. He obtained a BA (1994) with majors in Sociology and Human Geography as well as a Diploma in Applied Statistics from Massey University and a Master (1997) and PhD (2004) in Spatial Sciences (specialisation Demography) from Groningen University (The Netherlands). He has published on a wide range of research topics, including the epidemiological and health transitions, population ageing, the effect of education on marriage timing, family formation after widowhood and child custody arrangements. He is currently co-leads an R&D project that studies the changing balance between formal and informal old-age care in Spain.