

Demographic Change in the EU, the Oldest-old and the Need for Innovative Models of More Efficient Elderly Care

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Leibniz Institute for
Economic Research

Martin Karlsson, CINCH – University of Duisburg-Essen

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- ▶ Demographic ageing in Europe
 - ▶ Low birth rates
 - ▶ Increasing life expectancy

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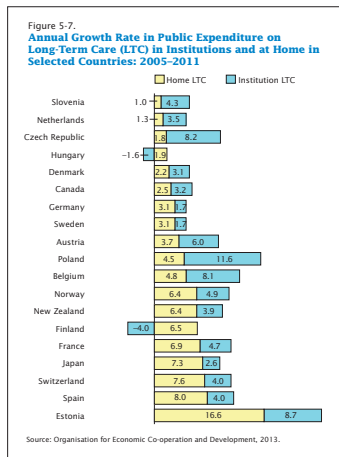
Research focus

- ▶ Demographic ageing in Europe
 - ▶ Low birth rates
 - ▶ Increasing life expectancy

- ▶ What are the trends regarding the need for, the financing of, and the delivery of long-term care (LTC)?

- ▶ How can the challenges of a rising demand for LTC and the associated cost increase be mastered?

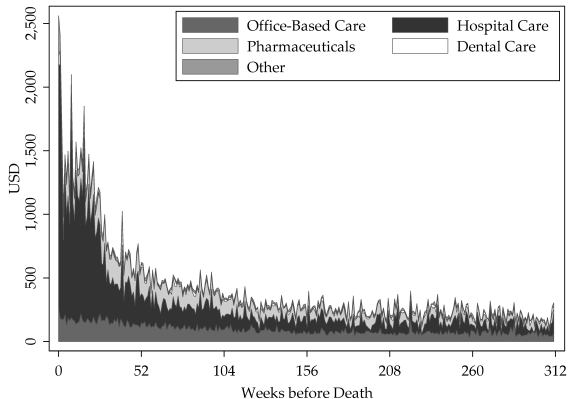
The Issue



Increase in LTC Spending 2005–11.

Source: OECD (2013).

Analysis of Medical Spending



Aggregate Care Costs

Care Expenditure in the Last 12 Months

Service Type	Mean (Deceased)	Share of Total (%)	Mean (All)
Hospital	37.057	10.65	1.223
Doctor/dentist/professional	7.019	0.80	3.095
Pharmaceutical	11.062	3.39	1.147
LTC	12.526	20.40	216
Total	69.633	4.05	6.043

Source: Karlsson et al (forthcoming), *Health Affairs*.

Structure

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- ▶ Projections of the future demand for LTC and associated costs

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2. Evaluating Policy Reforms in the LTC Sector
 - ▶ Norwegian Care Plan 2015
 - ▶ Preventive Home Visits in Norway
 - ▶ Personalised Autonomy Allowance in France

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 - ▶ Personalised Autonomy Allowance in France
3. Care Provision in a Changing Society
 - ▶ Decomposition of Changes in Disability
 - ▶ Formal and Informal Care Use in Different LTC Systems
 - ▶ The Effects of Caregiving on Work

WP1: Assessment of future LTC needs

Aim

Projections of the future demand for LTC and associated costs

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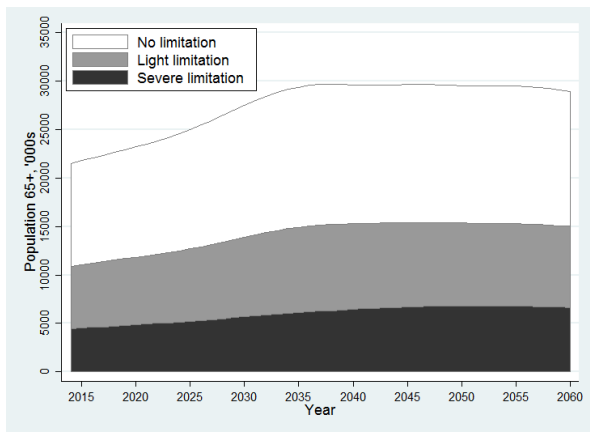
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Outputs

- ▶ Descriptive statistics and streamlined database
- ▶ Research papers on care costs
- ▶ Research papers based on projection results
- ▶ Online database of projections

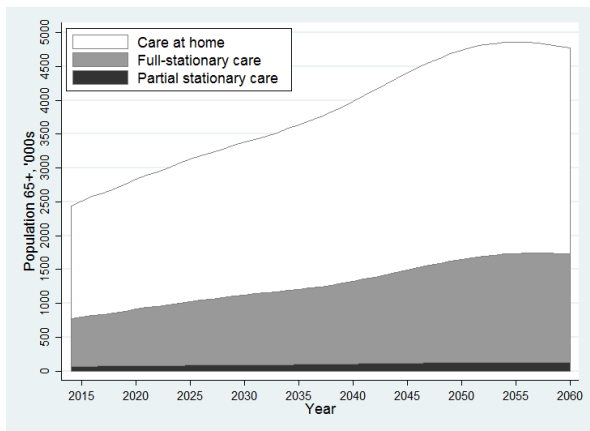
Projecting future numbers of disabled people



Projected Number of Older People with Limitations, Germany, 2014–2060

Note: Projected number of people aged 65 or older by severity of health-related limitation in everyday activities. Own calculations based on SHARE data and population projections from the German Federal Statistical Office. Weights provided by SHARE are used.

Mapping from disability to care setting



Projected population by type of care setting, Germany, 2014–2060

Note: Projected number of people aged 65 or older by type of care setting. Own calculations based on care statistics and population projections from the German Federal Statistical Office.

Inferring future LTC costs

Formal care

How much will tax payers be burdened?

Informal care

Will there be a shortage of carers?

How high will opportunity cost be?

WP2: Evaluating policy reforms in the LTC sector

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Evaluations of past policy reforms in the LTC sector regarding their success in meeting the growing demand for LTC and the associated financial needs

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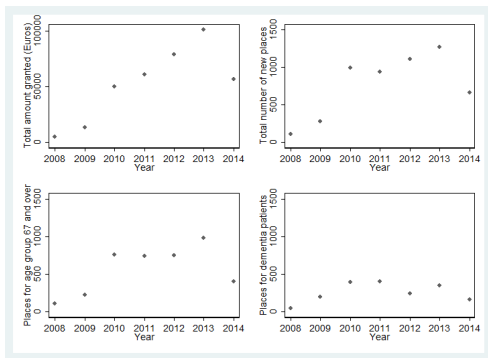
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Outputs

- ▶ Research papers based on empirical evaluation results
- ▶ Policy paper giving advice to policy makers

Reform 1: Norwegian Care Plan 2015

- ▶ Provision of investment grants for 12,000 nursing homes and assisted living facilities
- ▶ Did the reform affect formal care utilisation and health prevention?

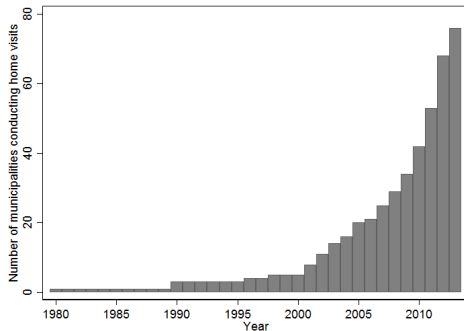


Investment grants and supply of new places

Note: Total amount of investment grants paid out to the municipalities and number of newly created places in sheltered housing and nursing homes under Norwegian Care Plan 2015 during period 2008–2014. Own calculation.

Reform 2: Preventive home visits to elderly in Norway

- ▶ By 2013, 25% of Norwegian municipalities had introduced preventive home visits to the elderly
- ▶ Did these visits improve older people's health?



Number of municipalities with preventive home visits by year

Note: Own calculation.

Reform 3: Personalised Autonomy Allowance (APA) in France

- ▶ In 1997, France introduced a system of LTC allowances to elderly
- ▶ In 2002, the APA reform moved this system from a comparably low coverage to universal coverage of elderly 60+
 - ▶ Need-based benefits and means-tested coverage
 - ▶ Coverage was enlarged to an additional AGGIR level

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 - ▶ In 2002, the APA reform moved this system from a comparably low coverage to universal coverage of elderly 60+
 - ▶ Need-based benefits and means-tested coverage
 - ▶ Coverage was enlarged to an additional AGGIR level
 - ▶ In 2001, only 175,000 frail elderly benefited from the allowance
 - ▶ By 2003, the number of beneficiaries approached 800,000, increasing to 1 million in 2006 and 1.2 million in 2012
- ⇒ Did the allowance have beneficial effects on health?

WP3: Care provision in a changing society

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Analyses of the consequences of population ageing for morbidity, labour market participation and the tradeoff between formal and informal care

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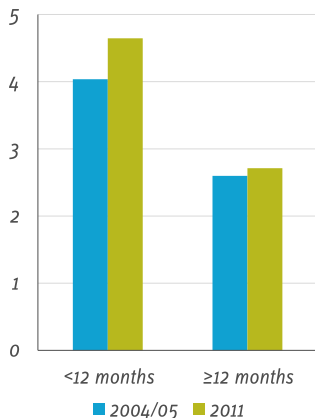
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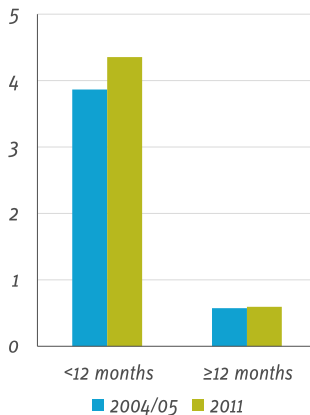
- ▶ Calculation of morbidity and LTC needs
- ▶ Development of an efficient LTC mix model
- ▶ Analysis of the economic burden of informal caregiving

Q1: Increase in morbidity and disability by proximity to death

a) Number of chronic conditions



b) Number of activity limitations



Note: Mean values. Own calculations based on SHARE. N=200 / 18,116 for < 12/≥ 12 months in 2004/05; N=355 / 26,095 in 2011. Missing category: time to death unknown.

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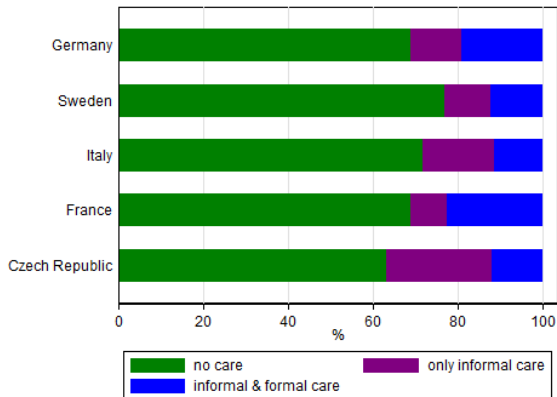
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- Disability levels close to death increase in size that is comparably large.
- A rise in life expectancy for older age groups is accompanied by increasing limitations with everyday activities
 - ▶ Disability levels increased due to population ageing and an increase in the prevalence of diseases.
 - ▶ The disabling effect of health conditions remained constant over time.

Q2: Formal and informal care utilisation rates differ by country (older people 65+)



Note: Individual weights are used for calculation. Own calculations based on SHARE W5.

Q2: Determinants of care choices in Europe

Differences in care choices are caused by population composition and differences in the impacts of certain characteristics.

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- More generous in-kind benefits tend to increase the demand for professional formal care services (e.g. Czech Republic vs. Germany/France).
- An increase in formal care use can only occur if such care options are available (e.g. Germany vs. Spain).
- Since different forms of long term care are associated with different costs, our results can inform policymakers aiming to reduce or promote certain care options.

Q3: Does the negative effect of caregiving on work persist over time? (Preliminary)

Negative labour market effects exist for men and women.

- Persistence of negative labour market effects from informal caregiving seems to be stronger for men than for women.
- Men are more likely to quit a full-time job and not return to the labour market after the care spell has ended.

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 - ▶ Do men have less flexible jobs?
 - ▶ Is it more "acceptable" for women to care?
- Opportunity costs could be higher than suggested so far.

Lecture series on LTC

May 2016:

Jonathan Kolstad

University of California, Berkeley

March 2017:

Pieter Bakx

Erasmus University Rotterdam

Thank you

`cinch.uni-due.de/research/projects/eib`