

INTERNATIONAL ACTUARIAL ASSOCIATION**Mortality Working Group****Friday, October 11, 2013****ITEM 3****Attached - ITEM 3 - UK Report****IAA UK Mortality Update Oct 2013 Brian Ridsdale**

I am pleased to offer a summary of mortality and longevity-related news from the past 6 months for the UK. With thanks to many contributors¹, please note that any errors or misinterpretations are solely my responsibility.

Contents

1. CMI publishes 2013 mortality projections, model and user guide, and other issues
2. Office of National Statistics
 - What's to happen with the Census?
 - New projections
 - Reports
 - Eurostat
3. Internationally
 - Social Inequalities and Mortality in Europe
 - Mortality Improvement
 - Will mortality improvements go on forever?
 - Does Retirement affect mortality?
4. Articles
5. For reference

1. CMI publishes 2013 mortality projections, model and user guide, and other issues

CMI has published the following:

- [Working paper 65](#), in April 2013, presents an analysis of the mortality experience of SAPS data received by 30 June 2012, covering the period 2004 to 2011.
- [Working paper 66](#), also in April 2013, consulting on proposed "S2" graduations of the data underlying Working paper 65. The Committee is currently considering the responses and expects to finalise the tables in autumn 2013.

¹ Contributors include: Madhavi Bajekal, Peter Banthorpe, Philip Booth, Steve Brown, Adrian Gallop, Myer Glickman, Dave Grimshaw, Carol Jagger, Stephen Richards, Richard Willets ... apologies to those I've missed.

- [Working paper 68](#), in July 2013, containing two notes on statistical modelling of mortality and morbidity experience data.
- [CMI Working paper 69](#), in September 2013. This paper accompanies the issue of the updated version of the CMI Mortality Projections Model, CMI_2013 and illustrates the impact of incorporating data for 2012. It also responds to the consultation on the future of the Model and the Library earlier in the year in Working Paper 64. Issued alongside the paper are the revised and updated versions of the Model and the User Guide.

Note: All of these papers are available to [Authorised Users](#) only.

Tim Gordon has taken over as Chairman of the CMI.

2. Office of National Statistics

What's to happen with the Census?

The Office for National Statistics (ONS) is conducting a three month public consultation on the Census and future provision of population statistics in England and Wales. You can read the consultation document and take part in the consultation here:

<http://www.ons.gov.uk/ons/media-centre/statements/census-consultation/index.html>

Closing date 13 December 2013

It is also proposing reductions in statistical outputs, including cutting health statistics and analyses, life events and health inequalities analysis. You can read the consultation document and take part in the consultation here

<http://www.ons.gov.uk/ons/about-ons/get-involved/consultations/consultations/statistical-products-2013/index.html>

Last chance to preserve important government statistics? Closing date 31 October 2013

New projections

National population projections for the UK and constituent countries are due to be published by ONS on 6 November.

Reports

Prostate cancer: the most common cancer among men in England - 2010

<http://www.ons.gov.uk/ons/rel/cancer-unit/prostate-cancer--the-most-common-cancer-in-men-in-england/2010/sum-prostate-cancer--the-most-common-cancer-among-men-in-england---2010.html>

Summary of prostate cancer incidence, mortality and survival in England, 2010

Geographic patterns of Cancer survival in England, Patients followed up to 2011

<http://www.ons.gov.uk/ons/rel/cancer-unit/cancer-survival-by-gor--sha-and-cancer-network/patients-followed-up-to-2011/index.html>

Estimates of age-standardised one- and five-year net survival for adults diagnosed with one of eight

cancers in England during 2004–2006 and followed up to 2011

Avoidable Mortality in England and Wales - 2011

<http://www.ons.gov.uk/ons/rel/subnational-health4/avoidable-mortality-in-england-and-wales/2011/stb-avoidable-mortality--2011.html>

Mortality figures for causes of death that are considered avoidable in the presence of timely and effective healthcare or public health interventions (avoidable mortality). Trends in mortality by causes considered preventable or amenable to healthcare are also presented.

Trends in all-cause mortality by NS-SEC for English regions and Wales, 2001-03 to 2008-10

<http://www.ons.gov.uk/ons/rel/health-ineq/health-inequalities/trends-in-all-cause-mortality-by-ns-sec-for-english-regions-and-wales--2001-03-to-2008-10/index.html>

Estimates of directly age-standardised all-cause mortality rates for males and females of working age in English regions and Wales for three-year aggregated periods from 2001–03 to 2008–10, using the seven-class reduced National Statistics Socio-economic Classification (NS-SEC).

Life expectancy at birth and at age 65 for local areas in England and Wales, 2009-11

<http://www.ons.gov.uk/ons/rel/subnational-health4/life-expectancy-at-birth-and-at-age-65-by-local-areas-in-england-and-wales/2009-11/stb.html>

Male and female period life expectancy at birth and at age 65 for England and Wales and local areas within both countries. Figures are presented for the period 2009–11.

Eurostat have published a new European Standard Population (ESP) for use in calculating age-standardised mortality and incidence rates.

<http://www.ons.gov.uk/ons/about-ons/get-involved/consultations/consultations/implementation-of-the-2013-european-standard-population/index.html>

3. Internationally

Social Inequalities and Mortality in Europe

Social Inequalities and Mortality in Europe – Results from a Large Multi-National Cohort

Gallo V, et al

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0039013>

The purpose of this work is to investigate the contribution of specific risk factors to social inequalities in cause-specific mortality using a large multi-country cohort of Europeans

The unequal health of Europeans: successes and failures of policies: Health in Europe 1. Johan P Mackenbach et al

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(12\)62082-0/fulltext?_eventId=login](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)62082-0/fulltext?_eventId=login)

Reviews developments in population health in Europe, with a focus on trends in mortality, and draws attention to the main successes and failures of health policy in the past four decades

Needs login, but access is free

Mortality Improvement

Literature Review and Assessment of Mortality Improvement Rates in the U.S. Population: Past Experience and Future Long-Term Trends SoA

<http://www.soa.org/Research/Experience-Study/Pension/research-2013-lit-review.aspx>

Explores existing literature with information on mortality improvement projection models, long-term estimates of mortality improvement and the existence of cohort effects or other factors that may impact U.S. mortality improvement.

UK longevity in an international context

<http://www.actuarialpost.co.uk/article/uk-longevity-in-an-international-context-5073.htm>

Will mortality improvements go on forever?

“The Dangers of Hubris on Human Health”: WEF risk report

<http://reports.weforum.org/global-risks-2013/risk-case-1/the-dangers-of-hubris-on-human-health/>

A report from the government on the UK 5 Year Antimicrobial Resistance Strategy 2013 to 2018

<https://www.gov.uk/government/publications/uk-5-year-antimicrobial-resistance-strategy-2013-to-2018>

Sets out actions to slow the development and spread of antimicrobial resistance with a focus on antibiotics

Gavin Ritchie reviews a longevity debate between Aubrey de Grey and Richard Faragher:

<http://www.longevity.co.uk/site/informationmatrix/herdingexperts.html>

Does Retirement affect mortality?

This paper from the Netherlands says early retirement improves mortality:

The Causal Effect of Retirement on Mortality: Evidence from Targeted Incentives to Retire Early:

Bloemen et al. [Netspar Discussion Paper No. 08/2013-024](#) HEALTH & THE ECONOMY eJOURNAL

http://hq.ssrn.com/Journals/RedirectClick.cfm?url=http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2312379&partid=424335&did=184205&eid=198448195

The analysis focuses on a group of civil servants who became eligible for retirement earlier than expected during a short time window. “We find for men that early retirement, induced by the temporary decrease in the age of eligibility for retirement benefits, decreased the probability to die within five years by 2.5 percentage points”

This paper from Norway says that early retirement has no effect

Does retirement age impact mortality?_ Erik Hernaesa et al, Journal of Health Economics

<http://www.sciencedirect.com/science/article/pii/S0167629613000313>

A series of retirement policy changes in Norway reduced the retirement age for a group of workers but not for others... Instrumental variables estimation results show no effect on mortality of retirement age.

This paper from the Institute of Economic Affairs says that later retirement should lead to better average health in retirement

Work Longer, Live Healthier: The relationship between economic activity, health and government policy, Gabriel Sahlgren IEA

http://www.iea.org.uk/sites/default/files/publications/files/Work%20Longer,%20Live_Healthier.pdf

New research finds retirement has a detrimental impact on both mental and physical health over time

Longevity 9 - the Ninth International Longevity Risk and Capital Markets Solutions Conference was held in Beijing on 6-7 September 2013

The conference website is here: <http://www.cass.city.ac.uk/longevity-9>

The programme is here: <http://www.cass.city.ac.uk/longevity-9/programme>

4. Articles

Some implications for longevity derivatives of the ONS's restated population estimates:

<http://www.longevity.co.uk/site/informationmatrix/haircutorhedgetrim.html>

Kai Kaufhold explores the possibility of a benchmark for reinsurance prices for longevity swaps:

<http://www.longevity.co.uk/site/informationmatrix/abenchmarkforlongevityswaps.html>

What might Scottish devolution mean for mortality improvements?

<http://www.longevity.co.uk/site/informationmatrix/healthexperiments.html>

Version 2.7 of Longevity and the Projections Toolkit were release in June 2013:

<http://www.longevity.co.uk/site/news/version2.7oflongevity.html>

<http://www.longevity.co.uk/site/news/version2.7oftheprojectionstoolkit.html>

Stephen Richards explains why survival models are particularly suitable for insurers who write buy-ins as well as buy-outs:

<http://www.longevity.co.uk/site/informationmatrix/theinsandoutsofbulkannuities.html>

Sticking with the theme of survival models, Stephen also demonstrates why they offer a "virtuous circle" for modelling pensioner mortality:

<http://www.longevity.co.uk/site/informationmatrix/enhancement.html>

Some developments in the behaviour of smokers, and the possible implications for mortality improvements:

<http://www.longevity.co.uk/site/informationmatrix/nosmokingwithoutfire.html>

Joseph Lu on Longevity's top 3 challenges

<http://europe.nextbook.com/nxteu/posthaste/actuarialpost25/index.php>

Postcode divide in pensions to grow to £67,000 by 2028

<http://www.actuarialpost.co.uk/article/postcode-divide-in-pensions-to-grow-to-%C2%A367000-by-2028-5309.htm>

An article on the challenges facing actuaries when relying on ONS population data for mortality projections: <http://www.hymans.co.uk/blog/2013/03/the-mystery-of-the-vanishing-nonagenarians.aspx>

5. For reference

Demographic Research - a peer-reviewed open access journal of population sciences

<http://www.demographic-research.org/>

The Handbook of Adult Mortality - published some time ago, but I hadn't seen it before

<http://www.springer.com/social+sciences/population+studies/book/978-90-481-9995-2>

International Longevity Centre-UK - Research and articles featuring longevity

<http://www.ilcuk.org.uk/>

IAA Mortality Working Group Information Base

We'd welcome anyone's comments on how to make this more useful

www.actuaries.org/mortalityinfo

A reminder: to get the full information from the IAA website, you need to log in; all members of the IAA, including all members of the UK profession are entitled to do that.

This is a note **for** the UK Actuarial profession and others, and **for** the International Actuarial Association. For the UK version of the report **from** the IAAMWG, see:

<http://www.actuaries.org.uk/news/articles/international-actuarial-association-mortality-working-group-iaamwg-first-report>

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