



International Actuarial Association (IAA) Mortality Working Group Update #8 — Cape Town, South Africa November 2016

The Mortality Working Group (MWG) met in November. 21 members attended from 17 countries, and there were 9 observers. This Update summarises the discussions. All papers and presentations are hyperlinked at the bottom of this paper. Please give us feedback by clicking here: [QUESTIONNAIRE](#)

The MWG exists to research, study and disseminate information and data on mortality and longevity. Some of this comes from work completed by the MWG and some from work completed by other organizations. Our goal is to make this information available to actuaries and others worldwide through our meetings and webpage, and to organize other opportunities (e.g., seminars) to further communicate this information.

At the meeting the country reports were provided: *further details can be found in the attachments below*

- Ayse Arik highlighted the methodology and results of research done on the Turkish population.
- Hans de Mik presented on the Actuarial Society of Netherlands' new model for Dutch mortality. The report is updated every two years. The model uses data from countries in Europe with above average GDP to inform the Dutch mortality basis.
- Al Klein gave an overview of recent industry mortality research and meetings in the USA.
- Brian Ridsdale gave feedback on mortality research in the UK. There are three ongoing multi-disciplinary research projects in mortality, and the SOA and CIA are participating in one. The Institute and Faculty of Actuaries wants to take a global view of the main issues in actuarial science and related disciplines and is keen to collaborate with other actuarial associations on any research projects.
- Hans Michael Overgaard: Life table K2013 has been developed by Finance Norway written by life insurers and pension funds. This table is currently being monitored against observed mortality.
- Ermanno Pitacco: in 2012 Italy shifted from a 10-year census system to a continuous process. Pension mortality investigations are analysed by an Italian Actuarial working group to construct mortality tables grouped by private, public and self-employment. Pension mortality projections to 2040 have been published. Italy also has Annuity mortality tables – Tables A1900-2020 and Tables A62.
- Hiroshi Yamazaki: In Japan all insurance companies must accumulate Standard Liability Reserves. Standard Mortality Table 2007 adopted in 2006 is used as basis for calculating standard valuation since April 2007 and the Mortality Subcommittee annually reviews its adequacy and reports to the FSA.

Updates were provided on the four current MWG projects.

- Insured / population / annuity mortality rate comparisons: no progress
- Old Age mortality: Al Klein. This work will be presented in 2017 as a research paper and will describe the calculation methodology for old age mortality as well as older age mortality rates for several countries.
- Mortality improvements at older ages: Sam Gutterman. The project is particularly challenging, in part due to the lack of credible data at older ages. The team had analysed mortality improvements for army veterans from the US. Initial findings note a big differential between male and female improvements, and the rate of improvement seems to be slowing down for very old ages. Sam illustrated some mortality improvement results for Japan, Sweden and Canada.
- Long term drivers of mortality: Al Klein. The work focuses on describing 11 key drivers of mortality. There is no plan to model them. The project is expected to conclude in 2017.

Website overview and feedback from the Editorial Committee

Brian Ridsdale reported that the website and Information Base are now in a good position and should be marketed to potential users.

MWG Marketing

Ksenia Novikova provided an overview of the current resources that the MWG has, why the group exists and how to use the resources from a marketing perspective. The working group Updates are translated into several languages. All language translations were accessed in pdf and doc form, but the largest number of visits were from English speaking countries. The following proposals were agreed:

- Wider distribution of material to other IAA actuarial associations
- Promote MWG activities within IAA
- Embed the next survey on the fields of interest into the summary so it can more easily be completed

Issues advisory group

It was agreed to work on an E-cigarette paper publication. The primary goal would be the considerations, regulations, etc regarding e-cigarettes in multiple countries. One thing to consider in this research is what actuaries can add to the currently available science. It was agreed to expand the research to how specific countries are addressing marijuana.

Other matters

- Sam Gutterman gave some feedback from the Resources and Environment Working Group's report on the impact of climate change on mortality
- Brian Ridsdale and Al Klein gave feedback on the Human Mortality Database.
- New member applications were agreed from: Algeria, Lebanon, Russia, Australia and South Africa

- Paul Lewis introduced the new Chair, Brian Ridsdale. Brian thanked Paul on behalf of the MWG members for the work he had put in to building up the MWG and in making the work enjoyable.

There were three guest speakers at the meeting in Cape Town:

- Emile Stipp from Discovery Insurance Co in South Africa presented on the impact of wellness programmes on mortality and morbidity. The company incentivises its members to be healthy by offering them meaningful rewards. Using Big Data analysis, Discovery concluded that incentives lead to positive behavioural changes in members and decrease mortality and morbidity rates especially if there is a high level of engagement and lengthy duration in the program.
- John O'Brien, CMO of Gen. Re. presented on e-cigarettes and their potential impacts on mortality. The e-cigarettes market is rapidly expanding and estimated to be \$10 billion by 2017. Dr O'Brien concluded that E-cigarettes are less harmful than traditional smoking but do pose extra risks like mechanical malfunctions and numerous toxic chemical compounds.
- Ronald Richman presented on old age mortality in South Africa and how to get meaningful results from the limited and poor population data available at these ages by reconstructing population data from death data and correcting for births and deaths lumped by date.

This is a summary of the MWG's discussions. The full minutes, presentations and papers from this meeting (and previous meetings) and Update translations are available (without the need to register) at: www.actuaries.org/mortalityupdates.

Please tell us what you think about this Update. [Please click here to respond to the brief survey.](#)

The questions are:

1. Please indicate the most useful and/or interesting topics in the Update/Minutes/papers for you.
2. What language did you read the Update in?
3. What topics do you propose for the Mortality Working Group to work on in the future?
4. Do you have interest to personally participate in (contribute to) one of the MWG projects/activities? If so, please specify project/activity and provide your contact details (Full Name, Organization, Country, Email address).

References

Mortality Working Group Information Base:

<http://www.actuaries.org/mortalityinfo>

IAA Mortality Working Group Updates:

www.actuaries.org/mortalityupdates

Papers

Hyperlinks to papers and presentations from the meeting are as follows:

- [MWG Long Term Drivers](#)
- [Mortality Improvement at Older Ages](#)
- [Mortality Report in Turkey](#)
- [New Mortality Forecast Netherlands](#)
- [The 2016 Dark Side](#)
- [MWG US Research](#)
- [UK Mortality and Longevity Update Paper](#)
- [Revised – MWG UK Update Presentation](#)
- [Country Report for Italy](#)
- [Country Report for Japan](#)
- [Country Report for Norway](#)
- [ASSA REWG Mortality and Climate Change](#)
- [Engagement Impact on Health and Mortality](#)
- [E-Cigarette Report](#)
- [South African Old Age Mortality](#)

Note on the forthcoming seminar:

Please plan to attend a joint seminar put on by the Populations Issues Working Group and the Mortality Working Group on the 18th of April, 2017 in Budapest, Hungary, the day before the IAA Council and Committee meetings start. The seminar will cover population, mortality and longevity issues. This seminar will be open to all. Registration will be required. The agenda, information on registration and further details on the seminar will follow and will be available on the IAA website. Expressions of interest to iaamwg@actuaries.org

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