



International Actuarial Association (IAA) Mortality Working Group Update #9 — Budapest, Hungary April 2017

The Mortality Working Group (MWG) met in April, 2017. 28 members attended from 21 countries, there were 24 observers and 3 guest speakers/invited guests: Andrew Cairns (Actuarial Research Center, UK), Gyula Horvath (Hungarian Actuarial Association), Simon Brimblecombe (ISSA). This Update summarises the discussions. All papers and presentations are hyperlinked at the bottom of this paper.

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 current projects were discussed:

- Annuitant/pension/life/population mortality: Marc Tardif gave a [presentation](#) from the Mortality Comparison Task Force where population mortality is compared with mortality among insured groups in a few countries. Contributions to the task force from more countries are welcome. The project needs mortality from general population, pensioner, annuitant, insured ultimate and insured select. There was an idea suggested to create a template where different countries can collect and send mortality data to the task force in a uniform way.
- Older age mortality: Al Klein. The work is under way and plan is to have a report that is approved by IAA.
- Long term drivers of future mortality: Al Klein. The plan is to have a report that is approved by IAA and presented at ICA in 2018 in Berlin.
- Older age mortality improvement: Sam Gutterman gave a brief [presentation](#). The improvement data fluctuates a lot over the years and it is difficult to find patterns. The World Health Organisation (WHO) has a lot of information about the causes of deaths, but there can be a lot of uncertainty in determining the cause of deaths in old ages. The plan is to write a paper for ICA 2018 in Berlin.
- E-cigarettes: Sam Gutterman gave a [presentation](#) on his [draft paper](#). There is a debate on whether e-cigarettes should be promoted or discouraged. The question is what value can we as the actuarial community add to the existing medical work on this topic. The draft has been sent for commentary to a task force of the Institute & Faculty of Actuaries in the UK who are also studying this topic.

The following country reports and presentations were provided:

- Mika Mäkinen presented the highlights from the updated [Finland Country Report](#).
- Marc Tardif presented the highlights from the updated [Canada Country Report](#).
- Farid Flici gave a presentation [Mortality Evolution in Algeria](#).
- Leza Wells presented [South African Pensioner Mortality Investigation](#).
- Gyula Horvath spoke through the presentation [Mortality trends in Hungary](#).
- Brian Ridsdale presented an update from the UK: [UK Update](#).
- Dov Raphael presented a draft Israel Country Report: [Country Report – Israel](#).

There were other topics covered:

- Brian Ridsdale spoke through the presentation [Is longevity still improving?](#) There has been a reduction in mortality improvements in UK, Europe and US although 2015 and 2017 were noted as particularly poor years of mortality experience and the question of whether this is a blip or overall trend is posed. There was general consensus that MWG should be educating others on this observed change however MWG cannot at this stage conclude anything about future improvements. Simon Brimblecombe from ISSA agreed it was an important matter to raise to Supranational organisations.
- Andrew Cairns gave a presentation [IFoA International research in mortality](#). One interesting question is whether blood pressure medicine decreases or increases mortality and the results of the ARC research is being discussed with US medical researchers. He described the three major projects being funded by the Institute and Faculty of Actuaries (IFoA). Work is being done internationally, and two of the projects focus entirely on mortality. The intention is to produce results that are useful to practitioners. Andrew mentioned that the IFoA is keen to develop international projects in cooperation with other associations and research organisations.
- Dale Hall gave a presentation on the mortality research sponsored by the Society of Actuaries (SoA): [SOA research in mortality](#). It included an update on recent mortality table and experience analysis releases for US Individual life policies, US annuities and pension mortality studies providing a summary of how individual payout annuity experience reports and group pension experience compares to standard tables. Dale highlighted some of the practice research projects they are involved including the Human Mortality Database (HMD) on mortality by cause for 8 countries, reports with focus on CDC data, looking at components of Historical Mortality Improvement and co-sponsorship of IFoA Mortality Modeling Project.
- **Obesity and Smoking:** Sam Gutterman [presented](#) research he did using HMD data by cause of death on two human behaviours that impact mortality. This quantified the positive impact of smoking reduction and the negative impact on life expectancy of obesity trends.
- Séverine Arnold provided a presentation [Cause-specific mortality differences by socio-economic class](#) considering causes of mortality contributing to the gap in mortality between socio-economic classes and scenario testing the potential cures to those causes showing the impact this might have on the mortality gap and the overall life expectancy. Targeting interventions on maximising life expectancy will in fact increase the mortality gap. Finding the optimal solution is an issue for public policy. The next step is to introduce restraints on the budget to be spent on health to assist with public policy advice.

Other matters:

- Dimitri Pomazkin presented the results of his work posing the questions around whether a limit of life expectancy exists and how long can mortality improvements be continued: [Forecasting Mortality Using Logistic Equations](#).
- Sam Gutterman provided an update on Living to 100 Seminar which was held in the US in January 2017. The seminar consisted of 3 areas on longevity – Quantitative (modelling), Applications and the Impacts of Aging.
- Michael Sherris presented an [update on the Longevity Risk Research Workshop](#) held in Australia on 15 February 2017 focusing on Older Age mortality, a Longevity Research Forum held on 16 February 2017 as well as an update on related research.
- Ksenia Novikova made a presentation on MWG [Marketing Committee Update](#). Marketing activities and plans for future were discussed.
- Ermanno Pitacco provided an update on MWG website and editorial issues
- New members joining the committee include Dale Hall (US SOA), Onofre Simoes (Portugal), Marine Habart (France).
- Leza Wells has agreed to chair the Support Team with assistance from two other members.

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. What language did you read the Update in?
2. What information or item did you find most useful?
3. Is there anything else that you would like to see in the Update?
4. Do you have any interest in helping to organize a seminar on mortality in your country? If so, please provide your name, email address and country.

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:

- [Mortality Comparison Task Force](#) (Marc Tardif)
- [E-cigarettes paper](#) (Sam Gutterman)

- [E-cigarettes presentation](#) (Sam Gutterman)
- [Older age mortality improvement](#) (Sam Gutterman)
- [IFoA International research in mortality](#) (Andrew Cairns)
- [SOA research in mortality](#) (Dale Hall)
- [Finland country report](#) (Mika Mäkinen)
- [Canada country report](#) (Marc Tardif)
- [Mortality Evolution in Algeria](#) (Farid Flici)
- [South African Pensioner Mortality Investigation](#) (Leza Wells)
- [Mortality Trends in Hungary presentation](#) (Gyula Horvath)
- [UK Update](#) (Brian Ridsdale)
- [Israel Country Report](#) (Dov Raphael)
- [Is longevity still improving? Presentation](#) (Brian Ridsdale)
- [Marketing Update](#) (Ksenia Novikova)
- [Forecasting Mortality Using Logistic Equations](#) (Dimitri Pomazkin)
- [Longevity Risk Research Workshop and Forum in Sydney – Update on related research](#) (Michael Sherris)
- [Cause specific mortality differences across socio-economic categories](#) (Séverine Arnold)
- [Obesity and Smoking](#) (Sam Gutterman)

SEMINARS:

On the 18th of April, 2017 the Mortality Working Group (MWG) together with the Population Issues Working Group (PIWG) of the IAA held a one-day seminar in Budapest on Current Developments in Aging and Mortality. The seminar attracted more than 80 participants from a wide variety of countries. The seminar topics covered important current issues, including whether current levels of mortality improvements are tapering off, whether actuaries are using appropriate assumptions regarding mortality at high ages, how mortality is likely to change in the future and what might drive these changes. The presenters discussed how actuaries can influence solutions that can mitigate the significant financial stresses that the aging of the population will place on retirement, long-term care and healthcare systems, as well as how these future demographic developments will impact our work. The program and the presentations made at the seminar are available on the IAA website at: http://www.actuaries.org/CTTEES_TFM/presentations.pdf

Note on the forthcoming seminar:

The PIWG and MWG are planning a seminar covering mortality, other life cycle contingencies and population issues **on 3 October 2017** in conjunction with the IAA Council and Committee meetings **in Chicago**. 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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