



International Actuarial Association
Association Actuarielle Internationale

**Mortality Working Group Meetings
Monday 18 November 2019
The Westin, Tokyo, Japan**

Minutes

The attendance list is at the end of these minutes

Relevant documentation are linked in blue and underlined. Click on these links to access these documents.

The meeting began at 10h30 in the Kaede B room of The Westin Tokyo

1. [Introduction and Welcome](#)

- Brian Ridsdale welcomed the group to the meeting and the group gave introductions.
- Brian noted a successful seminar from the day prior, with 97 attendees.
- [Minutes from the Washington, DC](#) meeting were accepted.

2. [Research in Mortality – US](#)

- Dale Hall gave an overview of recent US and SOA mortality research.
- SOA recently launched their Mortality and Longevity Strategic Program.
- Key launch project centered on opioid mortality, and the economic cost of opioid use disorders on various parts of the US economy.
- Mortality is a key component due to premature deaths leading to opportunity cost to the economy in the form on unrealized wages.
- The tri-annual Living to 100 Symposium is being held in January 2020 in Orlando, FL.

3. [Research in Mortality – UK](#)

- Brian Ridsdale gave an overview on population mortality and improvement experience across countries and the UK and referred to the [UK Mortality and Longevity Update #16](#).
- Improvements in US and UK continue to be recently low; Japan is a country bucking the trend with large improvements. Some of this may be related a little to higher mortality due to the Japan tsunami in 2011.
- 2018 to 2019, however, have seen some trends towards improvement in the US and UK as well.
- Socioeconomics have influence on the improvements; bigger than by the regional geography.

4. [Overview of IAA Reform Task Force](#)

- The group covered the potential impact of the operating structure being considered in a [paper](#) and [presentation](#) from Brian Ridsdale.
- IAA Operations Structure Proposal [message](#) by Charles Cowling and [presentation](#) were shared in the agenda.
- The current structure being discussed would transform the MWG into a Mortality Forum:

- Opportunities for Forums to share knowledge
- Forums would not produce bottom up work products, but could propose ideas
- Forums would meet face to face once during a large meeting annually
- Most Forum connections would be done as sharing or connections virtually
- Implications included:
 - More drive to work from the Full Member Associations (FMAs)
 - One face to face meeting per year
 - Video conferences as a method; though some recent experiences have not been encouraging
 - Existing members of the MWG would need to be formally appointed by FMAs
- Opportunities with a Forum structure included:
 - Being able to do more horizons scans in order to suggest new research
 - Support emerging areas of practice for the actuarial profession
- Gabor Hanak, President of the IAA, participated in the discussion and added the following information:
 - Research projects that the IAA does have costs and resource needs, so looking to be more focused on what projects are taken on
 - Projects approved would have a Task Force assigned to manage the project as assigned by the Advance Committee
 - Some Advance Committee declined projects might be able to be taken up by Sections (which are made up of individual members instead of FMAs)
 - No decisions will be made here in Tokyo; they will look to discuss and then gain approval across the IAA in the 2020 Brussels meeting
- The group made the following comments in discussion:
 - Appropriate to have FMAs agree on selecting projects, but discussed why a Task Force would be needed to run with a Forum-proposed idea.
 - Gabor noted that there is a desire for assigned oversight and control; and the possibility that in some areas of the IAA some projects might not be fully aligned with IAA mission.
 - Often hard for Working Groups to say “no” to ideas, and often activity justifies existence.
 - It was noted, though unlikely, that a Forum could have an idea generator potentially not assigned to a Task Force; it was noted that it would be highly anticipated that the Advance Committee would want to include the idea generator in the Task Force that is created.
 - It was noted that we’d want to make sure the timeline for project approvals would want to be quick – how can we ensure that acceptance does not take a 6 month cycle to get approved.
 - It was noted that the MWG was a source of some IAA best practices, such as quick dissemination of materials and across many languages – this has been very helpful in recent years.
 - Mortality is a prominent topic around the world and a great need for some help in countries for IAA to inspire and develop information. MWG has been helpful to advise and discuss on mortality topics.
 - There could be some projects that are very beneficial to supranationals, who are a key target of the IAA, BUT possibly not something that would be beneficial to FMAs – so IAA would need to weigh what was of highest importance
 - Roles of the Sections were clarified – they are made up of individual actuaries and can drive activity as individuals; FMAs don’t have direct influence on Sections.
 - Gabor noted the comments and clarifications were helpful; there are also opportunities in the future to create new forums that would be appropriate for new areas of the actuarial profession.

5. Country Reports

5.1 Portugal

- Onofre Simões gave an [overview](#) of current mortality projects and current demographics in Portugal, and the types of tables developed and used by actuaries in industry.
- A report was noted highlighting the relative mortality of international Portuguese football players.
- An overview was given on how the Normal Retirement Age for social pensions is adjusted given mortality analysis.

5.2 Italy

- Ermanno Pitacco highlighted various data and statistics from Italy.
- Key differences in mortality were noted by geographic regions within the country.
- Higher mortality rates, relative to trend, were noted due to hot summers in 2003 and 2015 in Italy.
- Sardinia often is noted as an example of longevity, which is true in some cases. May not always be survival past 65; mortality rates 65 – 80 might be similar to other comparisons; but survival to age 90 once reaching age 80 is notable in the area.

5.3 Further Country Reports

Ermanno highlighted the current status of the country reports; Portugal, Italy and Azerbaijan were presented at this meeting. Ermanno would remind members that many country reports need updating and ask them for early action where reports have not been updated recently.

5.4 Azerbaijan Country Report

- Although not on the agenda Dilara Asadova was able to attend and gave an overview of the country report.
- The country has recently reached 10 Million people in population.
- Average median age is in the early 30's; one of the youngest countries in the world.

9. [Mortality of long-term care recipients](#)

Dr. Tsukasa Nagaoka, Chief Medical Officer at RGA Reinsurance Japan, gave an overview of the mortality of long-term care recipients in Japan.

- Strong increase in population ageing in Japan has caused a need for larger amounts of nursing care.
- Using information from the public long-term care program in Japan, different causes of morbidity were identified across 2 "support needed" categories and 5 "in LTC" categories.
- Trends in treatments and pharmaceuticals were reviewed, noting the number of Alzheimer's drugs at various stages of development. Aducanumab was highlighted as an Alzheimer's drug that could seek approval from the Food and Drug Administration to treat the disease early.

10. [Bayesian Mortality Forecasts for Long-Term Care Subpopulations from Limited Data](#)

Dr. Atsuyuki Kogure from Tokyo Keizai University gave a presentation on Bayesian Mortality Forecasts for Long-Term Care Subpopulations from Limited Data.

- Dr. Kogure highlighted ways that deaths and exposures can be estimated with less than full data.
- Examples were given using the public long-term care insurance system of Japan across various stages within the system.

- These results can then also help model future mortality rates within the system by LTC stage.

11. Updates on Mortality Working Group Projects

- 11.1 E-cigarettes: has been accepted by the NAAJ for publication in an upcoming edition.
- 11.2 Older Age Mortality: on pause waiting for input from Cause of Death study
- 11.3 [Long Term Drivers of Future Mortality](#): Group is looking to make the project more future looking; authors looking to do edits by end of 2019; goal is to get the project done by May meeting in Brussels.
- 11.4 [Underwriting Around the World](#): There are approximately 16 -18 countries in the report already, and have information on some other 6-8 countries that can be added. May want to get update from "original contributors" to synchronize information gathered from all countries when new ones are added.
- 11.5 [Cause of Death](#): Moving slowly; unsure where this might be by the Brussels meeting.
- 11.6 [Better Mortality Models](#): Project has not been started, but is on the large side currently; May be a goal of reducing the size of the project in order to provide something by the Brussels meeting. Subsequent to the meeting, it was decided not to further pursue this project at this time.
- 11.7 Epidemics: 5 of 7 reviews of the project have been received, and looking to get the last 2 completed. Looking to get this done by the Brussels meeting and forward on to the Scientific Committee.
- 11.8 We will hold on to creating any new ideas until there is clearer focus on the transition to a Forum.

12. Information Base

The Information Base is suffering from neglect: some of the subject authors have not submitted new papers for a considerable time, and some are not now with the MWG. Ermanno would review and chase.

13. [IAA – ILO – ISSA Social Security Forum 2019](#)

- Brian Ridsdale gave an update on this Forum that was held on October 21, 2019 in Geneva.
- Mortality and Longevity developments were presented by Lars Pralle on the work of the IAA MWG.
- Brian Ridsdale covered Recent Developments in Mortality and Longevity.
- An update on IAA Life Section/ILO Joint Project was given by Severine Arnold.
- An update from the World Health Organization was given by Bochen Cao.
- Sam Gutterman noted that there was a good overview for methods on calculating Health Life Expectancies.

14. [Mortality Patterns with Saturation](#)

- Dmitri Pomazkin gave a presentation on this topic.
- How mortality improvement assumptions play out will be a large determinant of the age 60+ population in Russia in the coming years.
- There can be larger errors if processes are linearly extrapolated.
- Saturation models can be used to estimate how large future population differences might be.

15. [Trends and Differences in UK Cancer Mortality \(Updated Version\)](#)

- Ayse Arik gave a presentation on this project which goal was to identify cancer trends in ages and UK regions and to identify inequalities between regions and deprivation levels.

- The research noted that deprivation and regional inequalities for all-cancer and lung cancer are widening.
- Remarkable deprivation and regional differences in lung cancer rates exist for both genders.
- Deprivation inequality for prostate cancer morbidity rates declined apart from London.
- Deprivation inequality for breast cancer morbidity rates remained unchanged.

17. [AAE Social Security Committee - Mortality Task Force](#)

- David Bogataj gave a presentation on behalf of the Actuarial Association of Europe on work being done by the AAE Social Security Committee on their Mortality Task Force.
- This group is looking to propose better ways to determine and identify factors influencing mortality, morbidity, disability and functional capacities.
- He asked the MWG that if this type of work would also be helpful at the global level.
- European specific funding for the project would likely come from Eurostat.
- David agreed to get additional information and provide a brief that could be considered as a project that might be submitted to the IAA Scientific Committee.

16&18. Brussels Planning and Closing

- The group closed the meeting with a look ahead to the Brussels meeting in May 2020.
- Brian gave some overviews in planning for the meeting, and we are anticipating Marc Tardif to be elected as chair of the MWG.
- We noted the various project completion points we would be looking for in Brussels.
- Marc gave thanks to Brian in his role as Chair and to Al in his role as Vice Chair.
- Leza Wells has been nominated as a Co-Vice Chair and Ermanno will continue on as a Co-Vice Chair.
- Brian thanked the group for their work and friendship over the years.
- Al thanked Brian for his work and presented him with a book of thoughts and appreciation from the MWG members.

The meeting adjourned at 16h00.

Attendance List

Brian Ridsdale, Chair
 Al Klein, Vice-Chair
 Ermanno Pitacco, Vice-Chair

Members:

Dilara Asadova
 David Bogataj
 Michael Eves
 Sam Gutterman
 Dale Hall
 Bill Horbatt
 Gyula Horvath

Mika Makinen
Dmitri Pomazkin
Lars Pralle
Adam Reese
Onofre Simões
Hiroshi Yamazaki

Ex Officio: Kurt Wolfsdorf

Observers:

Yosuke Fujisawa
Harri Kuosmanen
Rafe Moreno Ruiz
Jari Niittuinpera
Nobu Shmizu
Martin Stevenson
Odd Svendson
Neil Tagoe
Yoshihiro Takahashi
Marc Tardif
Lan Wu
Helge-Ivar Magnussen
Alduna Skucaite
Yuko Oshima
Keiji Yamaguchi