



# Mortality Working Group

**Wednesday and Friday, October 4th and 6th, 2017  
Chicago Westin River North, Chicago, United States  
Minutes**

*The attendance list can be found at the end of these minutes.*

*Links to presentations or content are underlined and in blue text. Click on the links to access these documents.*

## **Part 1 – Wednesday, October 4<sup>th</sup>, 2017 – 14:00 to 18:30**

### **1. Welcome, apologies, minutes, new members, retiring members**

Brian welcomed all members and observers to the meeting with a particular welcome to new members. Brief introductions were made by everyone around the room. Brian introduced Carl Friedrich (Milliman) who was a special guest.

During the meeting, Marc Tardif also informed everyone that he would be leaving the MWG following this meeting.

Brian referred to [his presentation](#) that provided an overview of the working group and its responsibilities. He extended special thanks to Martin Stevenson for all his work and contributions made to the working group over the years especially being the first Chair since the Working Group's inception in 2008.

The minutes from the previous meeting were approved as presented.

### **2. Discussion on [Workplan and Budget](#), structure, member data base and member contributions**

Brian reviewed the revised workplan and budget and briefly discussed the working group's objectives. He noted that the HMD has received organisational sponsorship. In addition, a new objective to provide advice & assistance to newer/smaller country organisations was added with a request for resources to assist. He also informed that he found a UK actuary willing to assist countries that needed assistance with setting mortality tables.

Brian informed the group that the budget has been cut to 2,400 CAD since the draft had been submitted.

#### **Actions:**

- The updated budget will be attached to the minutes and/or sent out separately once available for members to review.
- Members are requested to please confirm or update their details on the member database.

### **3. [Long Term Care](#)**

Al Klein introduced Carl Friedrich, a leader in the industry, who gave a detailed presentation on Long Term Care in the US. He covered the characteristics, regulations, combination products and highlighted pricing challenges facing them today. Brian thanked Carl for his attendance and informative presentation.

### **4. Feedback on Projects**

#### **a. Mortality Comparison Task Force (Marc Tardif)**

Marc confirmed there was not much to report due to individuals dropping their involvement and participation. It was agreed that the project would be closed however, should there be a future interest, the project could then be revived as a new project.

Marc Tardif expressed his interest in creating a template/calculator that included accessible information where countries could enter their respective mortality data. He agreed to work on this project and will pass on to Al Klein.

#### **b. Older age mortality (Al Klein)**

Al provided a brief update on the project. He informed that a draft report has been produced which needs to be reviewed but there is unlikely to be any progress while Séverine is on maternity leave.

#### **c. Older age mortality improvement (Sam Gutterman)**

Sam referred to the [presentation](#) he gave at the seminar on Tuesday, 3 October. This work currently included three areas – graphs comparing country data for older ages (by Dov Raphael); some original research on the mortality experience through the US military (by Adam Reese) and other work that was not presented. He stated that the next steps were to draft a report (abstract has been submitted to the ICA2018) and consider conclusions of the work with assistance from the MWG to review conclusions. Assia Billig suggested social security data for Canada could be considered for inclusion. Al Klein suggested using the SOA data for birth cohorts.

#### **d. [Long term drivers of future mortality](#) (Al Klein)**

Al Klein referred to his brief update provided and discussed the work in progress. He reviewed the proposed timeframes stating that the plan is to have a report approved by the IAA and presented at the ICA in Berlin 2018. They are now waiting to hear if the submission has been accepted.

Luis, Dilara, Martin and Adam volunteered to peer review the paper once ready which is expected around early to mid-March. The MWG will review and then on to the Scientific Committee. It will then be released to the ICA.

#### **e. E-cigarettes**

Sam Gutterman provided a draft copy of his paper ([Markup copy](#) and [Clean copy](#)) for everyone's review. Given there are differing views between US and UK on this topic, a survey of countries was conducted and included. Sam requested that

additional responses to his survey be sought and Assia and Leza offered to assist by sending out to international colleagues.

This topic has been submitted for ICA2018 and Sam is currently waiting to hear if selected.

**Actions:** The next steps include a review of the paper - Michael Eves, Leza Wells and Luis Muñoz all volunteered to provide a peer review within the next 3-4 weeks. If the paper is not selected by ICA, consideration will be given to publishing by the IAA.

#### **4.2 Underwriting around the world (Phase II)**

Al proposed this topic as a new project (a follow on from a previous MWG project).

**Actions:** Dilara Asadova and Luis Muñoz both volunteered to assist with this project. Should there be any others who wish to participate, they are asked to contact Al Klein directly.

#### **5. Buffer**

#### **6. Break**

#### **7. MWG projects**

Al Klein presented a proposed new process for scoping and agreeing on MWG projects.

It was suggested and agreed that project scope would be better defined upfront (to include the general objective, the target audience, and the value to the actuarial profession) and periodic progress reports would be provided to make sure each of the projects stayed on track.

**Actions:** Volunteers wishing to participate on the Project Committee were requested to contact Al Klein/Brian Ridsdale. Subsequent to the meeting, Michael Sherris agreed to join the Committee, but 1-2 more members are welcome to join. It was suggested that the Marketing Committee should collate options of disseminating MWG research and find out what happens in the IAA each year.

#### **8. ICA 2018 papers**

Seven MWG members had proposed and submitted 11 topics for ICA 2018 – one submitted paper has been accepted and others are awaiting an ICA decision.

#### **9. Editorial Committee update**

Ermanno presented slides showing the work and changes that have been made to the MWG website including Country Reports and Information Base.

**Action:** Members are requested to forward/copy Ermanno when sending information to the secretariat for posting.

## **10. [Japan country report](#) and [mortality table](#)**

Hiroshi referred to the documents he submitted for information. He highlighted changes to the Japan Country Report and provided a comprehensive presentation on the SMT2018 mortality tables.

## **11. [Thailand mortality table](#)**

Al Klein referred to the tables submitted for information. He indicated the Thailand new valuation mortality tables show materially lower mortality at most ages and discussed the implications. Should anyone have questions, Al can direct queries to his colleagues as required.

## **12. [UK update](#)**

Brian Ridsdale referred to the document submitted for information. He presented an update from the UK market that included the [Longevity Bulletin "Is the tide turning?"](#).

## **13. [SOA research in mortality](#)**

Dale Hall presented a summary of SOA research which included CDC studies on the impact of various annual flu strains on mortality, the annual update of population mortality showing a 2015 decline, and US trends on public pension plans and highlighted weekly podcasts as a marketing effort.

## **14. Targeting supranational organizations**

Lars Pralle discussed efforts that have been made to date. He informed that Longevity and Mortality topics were being reviewed and originally they were going to hold a mini-seminar for the end of November in Geneva however those efforts fell through due to time constraints but would be considered for future meetings. These organizations may prefer to utilize more practical information from IAA retirement and population working groups with an idea to work on a common project.

**Actions:** Assia agreed to share a document that included Canadian information. Lars will seek input from both the PIWG and MWG to propose some ideas of common interest.

## **15. Scientific committee**

Martin provided a brief update from the Scientific Committee. He explained that the purpose of this committee was to monitor working groups and to ensure their compliance with IAA standards and processes. Relevant matters to be updated include workplans and budgets, publication procedures, approval processes and marketing of the work produced by working groups. Martin added that more coordination was needed within the Sections which included top-down usage and research.

## **16. Additional items before end of Part 1**

### **a. The EU General Data Protection Regulation (GDPR)**

Brian pointed out that these regulations will affect all organisations that collect data on European subjects (including one based in Canada). He had asked that Tishan Clarke, IT Administrator at the IAA, to review the situation.

**Action:** Brian asked for a European volunteer to look into EU data regulations to assess whether the website complies. Jari Niittuiperä, who has a legal background, volunteered to review by end of November.

**b. Advice and Assistance**

Brian informed that he had a UK volunteer with experience in developing life tables. Should any of the smaller or newer organisations require assistance in this regard, he would be happy to share the volunteer's contact information.

**c. Roundtable: Research (held at 10:30 a.m.)**

**Action:** Malcolm Kemp's presentation to be shared with the group once available.

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**Mortality Working Group meeting**

**Part 2 – Friday, October 6<sup>th</sup>, 2017 – 13:30 to 15:30**

**17. Additional items**

**a. Seminar Review**

The Seminar held on Tuesday, October 3rd was discussed. By all accounts it was well received by all those who attended. There will be an additional Seminar planned for the meetings to be held in Mexico City for the Fall timeframe of 2018. Jorge Campa, President of the Asociación Mexicana de Actuarios, associate IAA member from Mexico attended the meeting to discuss plans. A Latin American influence could be considered but it was accepted that it was likely that few South American societies would be able to attend so we should focus on encouraging participation from the local (Mexican) audience. Dale Hall volunteered to chair the planning committee for the seminar.

**b. Marketing Committee Update**

Michael Eves provided a brief update/presentation on behalf of the marketing committee. Stats showed the website as having approximately 740 hits per month. Discussion both highlighted and encouraged anyone having any proposals to contact the group to contribute.

**Ongoing action:** Brian requested that everyone be cognisant to promoting the work of the working group that will in turn encourage hits to the website Information Base.

**18. Accelerated underwriting and predictive analytics**

Al Klein presented the results of the SOA 2016 survey. A follow up survey has been conducted but not presented as of yet. He informed that marketing uses of predictive analytics were most prevalent, but that underwriting and post-issue management uses are becoming more prevalent. Accelerated underwriting is typically offered up to age 60 and up to \$1m insurance. Because these programs are so new, there was insufficient experience to determine the actual impact on mortality yet.

## **19. Life annuities**

Ermanno Pittaco referred to his brief presentation on Life Annuities which focussed on significant problems of post-retirement product choices and design. He suggested that a reasonable choice would be to delay annuitisation or purchase an old-age deferred life annuity prior to retirement if available from insurers.

## **20. Report for Scientific Committee**

Brian Ridsdale reviewed the report of MWG activities and strategic objectives that will be presented to Scientific Committee.

## **21. Update from Population Issues Working Group (PIWG)**

Assia Billig provided a brief update on behalf of the working group. She highlighted two projects of interest for the MWG which include Actuarial Perspectives and Inequality Impacts on Retirement Outcomes. The final papers are planned to be completed and published sometime in the next year (2018-2019). She stated that UN sustainable goals include many population issues to which they have identified 10 priorities. She is pleased with the work they have achieved which included the work with the MWG this year.

## **22. Facial Analytics**

Al Klein introduced Jay Olshansky, guest speaker who gave an excellent presentation covering facial analytics. He explained the algorithms are built off data from 'SMILE'; its accuracy is information-based and is continually being expanded through the universities. 'Janus' measures BMI and this is not in the field in operation. A modified version of his presentation is included in the link.

## **23. Planning for Berlin and Mexico meetings**

Brian requested that those papers that do not get accepted for ICA, should be presented at the MWG in Berlin.

Brian also noted Country Reports that have not been updated for a while including Australia, Belgium, Finland, France, Spain and Russia. Spain and Australia will be updated and presented in Berlin ICA.

Encouraging MWG representatives from China and India was discussed. Although someone from China may not be able to attend the meetings due to travel constraints, Brian would still like to see a member join the group.

**Actions:** Dale has contact with an actuary on staff otherwise Leza will try to establish contact through reinsurer offices. Brian to follow up on a possible representative from India.

We are still looking for two more volunteers to do a country report in Berlin. Please let Brian know if you are able to do one.

Due to the ICA being held in Berlin, an additional Seminar will not be held. However, it will be planned for the Mexico meetings in the Fall 2018. A possible topic on Health and Mortality will be scoped out by Adam Reese.

## **24. New Project Ideas**

Some examples of projects were presented briefly however, Brian suggested a brainstorm of ideas at the next meeting in Berlin. One suggested Topic by Luis Muñoz included Medical Advancements and the Impact on Mortality in the Future.

## **25. Closing**

Brian thanked everyone for their attendance and contributions made during the meetings. He thanked Al Klein for inviting Jay Olshansky, the special guest speaker who made an informative presentation. Brian also presented Nancy Kelly with a plaque as a thank you for all her support during the year.

The meeting was adjourned at approximately 15:25 p.m.

### **List of Action Items:**

#### Agenda item 2:

The updated Workplan and Budget will be attached to the minutes for members to review.

Members are requested to please confirm or update their details on the member database.

#### Agenda item 4:

The next steps include a review of the paper - Michael Eves, Leza Wells and Luis Muñoz all volunteered to provide a peer review within the next 3-4 weeks. If the paper is not selected by ICA, consideration will be given to publishing by the IAA.

#### Agenda item 4.2:

Dilara Asadova and Luis Muñoz both volunteered to assist with this project.

Should there be any others who wish to participate, they are asked to contact Al Klein directly.

#### Agenda item 7:

Volunteers wishing to participate (only 1-2 additional participants needed) on the Project Committee were requested to contact Al Klein/Brian Ridsdale. It was suggested that the Marketing Committee should collate options of disseminating MWG research and find out what happens in the IAA each year.

#### Agenda item 9:

Members are requested to forward/copy Ermanno when sending information to the secretariat for posting.

#### Agenda item 14:

Assia agreed to share a document that included Canadian information. Lars will seek input from both the PIWG and MWG to propose some ideas of common interest.

#### Agenda item 16a:

Brian asked for a European volunteer to look into EU data regulations to assess whether the website complies. Jari, who has a legal background, volunteered to review by end of November.

#### Agenda item 16c:

Malcolm Kemp's presentation to be shared with the group once available.

Agenda item 17b:

Brian requested that everyone be cognisant to promoting the work of the working group that will in turn encourage hits to the website information database.

Agenda item 23:

Dale has contact with an actuary on staff otherwise Leza will try to establish contact through reinsurer offices. Brian to follow up on a possible representative from India. 2 more volunteers are needed to present a country report in Berlin. Potential volunteers to contact Brian should they wish to do one.

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**Presentations and attachments all listed here:**

- Item 1: [Brian's introductory presentation](#)
- Item 2: [Workplan and Budget](#) and member data base
- Item 3: [Long Term Care](#)
- Item 4c: [Older age mortality improvement](#)
- Item 4d: [Long term drivers of future mortality](#)
- Item 4e: E-cigarettes ([Markup copy](#) and [Clean copy](#))
- Item 7: [MWG projects](#)
- Item 8: [ICA 2018 papers](#)
- Item 9: [Editorial Committee update](#)
- Item 10: [Japan country report](#) and [mortality table](#)
- Item 11: [Thailand mortality table](#)
- Item 12: [UK update](#) and [Longevity Bulletin 10](#)
- Item 13: [SOA research in mortality](#)
- Item 17b: [Marketing Committee Update](#)
- Item 18: [Accelerated underwriting and predictive analytics](#)
- Item 19: [Life annuities](#)
- Item 20: [Report for Scientific Committee](#)
- Item 22: [Facial Analytics Presentation](#)
- Item 24: [New Project Ideas](#)



## List of Attendees:

Brian Ridsdale – Chairperson	United Kingdom	Part 1 and 2
Al Klein – Co Vice Chair	United States	Part 1 and 2
Ermanno Pitacco – Co Vice Chair	Italy	Part 1 and 2
Nancy Kelly – IAA Staff, Technical Activities	Ottawa, Canada	Part 1 and 2

## Members:

Dilara Asadova	Azerbaijan	Part 1 and 2
Yair Babad	Israel	Part 1 and 2
Assia Billig	Canada	Part 1 and 2
Michael Eves	Switzerland	Part 1 and 2
Farid Flici	Algeria	Part 1
Sam Gutterman	United States	Part 1
R. Dale Hall	United States	Part 1 and 2
William Horbatt	United States	Part 1 and 2
Mika Mäkinen	Finland	Part 1 and 2
Lars Pralle	Germany	Part 1 and 2
Adam Reese	United States	Part 1 and 2
Michael Sherris	Australia	Part 1 and 2
Marc Tardif	Canada	Part 1 and 2
Leza Wells	South Africa	Part 1 and 2
Hiroshi Yamazaki	Japan	Part 1 and 2

## Guest speaker and Invited Guest:

Jay Olshansky	United States
Carl Friedrich	United States

## Observers:

Janet Barr	United States	Part 1
Charles Cowling	United Kingdom	Part 2
Michael Fuchs	South Africa	Part 1
Tim Furlan	Australia	Part 2
Ted Goldman	United States	Part 1
Andrea Gluyas	New Zealand	Part 1 and 2
Craig Hanna	United States	Part 1
Toshiyuki Kinugasa	Japan	Part 1
Anne Magnussen	Norway	Part 1
Luis Alfonso Jimenez Muñoz	Spain	Part 1 and 2
Jari Niittuinperä	Finland	Part 1 and 2
Norma Alicia Rosas Rodriguez	Mexico	Part 1 and 2
Phil Simpson	United States	Part 1
Martin Stevensen	Co-Vice-Chairperson, PIWG	Part 1
Odd Svendsen	Norway	Part 1 and 2
Thierry Poincelin	France	Part 1
Andrew Vaughan	United Kingdom	Part 2

**Members' Regrets:**

Morteza Aalabaf-Sabaghi	Iran
Onofre Alves Simões	Portugal
Ayse Arik	Turkey
Séverine Arnold	Switzerland
Rikard Bergström	Sweden
Hans de Mik	Netherlands
Ewa Dylewska	Poland
Farid Flici	Algeria
Marine Habart	France
Gyula Horváth	Hungary
Aline Lamoureux	Belgium
Darko Medved	Slovenia
Ibrahim E. Muhanna	Lebanon
Ksenia Novikova	Russia
Hans Michael Øvergaard	Norway
Dmitri Vladimirovich Pomazkin	Russia
Dov Raphael	Israel
Eduardo Trigo Martinez	Spain
Henk Van Broekhoven	Netherlands
Peter Ying	Chinese Taipei