

# International Actuarial Association (IAA) Mortality Working Group Website: <a href="https://www.actuaries.org/mortality">www.actuaries.org/mortality</a> International Mortality and Longevity Update #14

This is an International Update from the IAA Mortality Working Group (MWG) covering research in the areas of Mortality and Longevity reviewed by the MWG at its meeting in Tokyo November 2019.

Note: click underlined phrases to access the papers/presentations

#### 1. Seminar on Longevity inside and outside Japan

The seminar jointly hosted by the IAA Population Issues and Mortality Working Groups and the Institute of Actuaries of Japan was deemed very successful, with 96 attendees from Japan and internationally.

Full presentations are available here.

#### 2. Research reports

Dale Hall: 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. More here

Brian Ridsdale: UK Update Research summary here, Presentation

- Overview on population mortality and improvement experience across countries and the UK. Recent trends, research on impact of socioeconomics.
- Resources for research

#### Onofre Simoes: Country Report for Portugal

- Overview of current mortality projects and current demographics in Portugal, and the types of tables developed and used by actuaries in industry
- A report highlighting the relative mortality of international Portuguese football players
- An overview on how the Normal Retirement Age for social pensions is adjusted given mortality analysis

#### Ermanno Pitacco: Data and statistics from Italy

- Key differences in mortality were noted by geographic regions
- Higher mortality rates, relative to trend, were noted due to hot summers in 2003 and 2015 in Italy
- Sardinia is often noted as an example of longevity, which is true in some cases. However, mortality rates 65 80 might be similar to other comparisons; but survival from age 80 to age 90 is notable in the area

#### Dilara Asadova: overview of the Azerbaijan 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

### Dmitri Pomazkin: Mortality Patterns with Saturation

- 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

Ayse Arik: Trends and Differences in UK Cancer Mortality

- The goal of the project 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

#### 3. External Speakers

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

- Strong increase in population ageing in Japan has caused a need for larger amounts of nursing care. In planning, support needs were ranked, for different causes of morbidity from 2 "support needed" categories to 5 "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.

Dr. Atsuyuki Kogure from Tokyo Keizai University gave a <u>presentation</u> on Bayesian Mortality Forecasts for Long-Term Care Subpopulations from Limited Data, highlighting 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 help model future mortality rates within the system by LTC stage

#### 4. Updates on Mortality Working Group Projects

- E-cigarettes: has been accepted by the NAAJ for publication in an upcoming edition
- Older Age Mortality: on pause waiting for input from Cause of Death study
- Long Term Drivers of Future Mortality: group is looking to make the project more future looking; authors looking to get the project done by May meeting in Brussels
- Underwriting Around the World: there are approximately 16 -18 countries in the report already, and team has information on some other 6-8 further countries
- Cause of Death: moving slowly; unsure where this might be by the Brussels meeting
- 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.
- 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

## 5. **IAA – ILO – ISSA Social Security Forum October 21**, 2019 in Geneva Brian Ridsdale gave an update on this Forum.

#### 6. Meeting close

The group is anticipating Marc Tardif to be elected as chair of the MWG 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

7. Planning for Brussels meeting and possible seminar in Paris The IAA committee meetings will be from 4<sup>th</sup> to 7<sup>th</sup> May 2020.

The date and time of MWG meeting will be confirmed later.

A half-day MWG/PIWG seminar is under consideration as part of the colloquia in Paris in the following week.

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