Long Term Drivers of Future Mortality – A Podcast Series - Chapter 1 – Introduction

Mortality and Longevity

Podcast Transcript

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SPEAKERS

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TRANSCRIPT

RONORA STRYKER 00:06

Hi listeners, and welcome to the Research Insights Podcast. I'm Ronora Stryker, a Senior Practice Research Actuary at the Society of Actuaries Research Institute. My role here at the Institute is to manage the Mortality & Longevity Strategic Research Program. And I am really excited to announce this special podcast series that we have put together focusing on an informative paper that was written as part of the 2023 Living to 100 Symposium. The title of the paper is Long-Term Drivers of Future Mortality. The paper is authored by Yair Babad, Professor Emeritus at the University of Illinois, Chicago, and Al Klein, Principal and Consulting Actuary at Milliman. Our Mortality & Longevity Strategic Research Program Steering Committee felt that this paper would be a good focus for a podcast series.

Today we're joined by one of the authors, Al Klein. And Al is also a member of the M&L Steering Committee. Welcome Al!

AL KLEIN 01:09

Thanks, Ronora, and welcome to everyone from near and far!

RONORA STRYKER 01:13

We're also joined by another member of the M&L Steering Committee, Erik Pickett. Erik is Actuary and Chief Content Officer at Club Vita. Erik is going to give his perspectives on the paper. Hi, Erik, glad to have you!

ERIK PICKETT 01:27

Hello hello - it's great to be here!

RONORA STRYKER 01:31

Okay, listeners, I know you want to get started, but before we do, I want to make sure you all know how to navigate to this paper. Just go to soa.org and click on the Research Institute tab, under Research By Topic, click on the words Mortality & Longevity, and it will take you to the M&L landing page. In the upper right-hand corner, you will find a link to the landing page for this paper, as well as the podcast series. Without further ado, I'm going to turn this over to Erik and Al to discuss the motivation behind the paper, how the paper came about, and much, much more. So, take it away Erik!

ERIK PICKETT 02:10

Thanks Ronora! As Ronora said, I'd like to kick this off by giving you a bit of an overview of what to expect in this podcast series. The paper we're discussing is on future drivers of mortality. There are 10 chapters in the paper. The first is an introduction, and each of the next nine chapters contains an overview of a specific group of drivers.

Each podcast in this series will cover one chapter, and therefore one group of drivers. So, if you follow along with this podcast, by the end of the year, you should have a good understanding of some of the big-hitting drivers of future mortality. If you're anything like me, and you find it hard to find time for long reads like this, we're really hoping that this podcast series will give you a convenient way to engage with this material. One way we envision this working would be for you to download the paper and read each chapter alongside its corresponding podcast episode. In fact, if you're able to do that, why don't you download the paper now. Once again, it can be found by going to soa.org, clicking on the Research Institute and under Research By Topic, selecting Mortality & Longevity. In the upper right corner, you'll then see a link to the landing page for this paper and the podcast series. If you're able, if you're not out walking your dog or driving at the moment, then feel free to pause the podcast now while you save it somewhere.

Okay, is everyone back? Then? Let me pass you over to Al. Al, perhaps you can start us off with sharing how this project originally came about.

AL KLEIN 03:43

Thanks Erik! I was a Co-Vice Chair of the former Mortality Working Group of the International Actuarial Association and was responsible for the projects that our group completed. One of the projects we decided to do was on the potential drivers of future mortality. Initially, we had 10 authors from seven countries, so it was a wide variety of people working on it. We began the project, but then everybody got busy, and the project stalled. Years later, Yair

contacted me about finishing the paper. We agreed to do it, and the Yair took the lead and was the primary author. I have to give him credit for really digging into the research for the paper and writing the first draft.

ERIK PICKETT 04:28

Now the paper is on the drivers of future mortality. I was really pleased to see this subject covered in a paper like this. I think it's a really good way to think about contributions to projected mortality improvements. As actuaries, I think we sometimes get very preoccupied with projecting overall trends in past data. I feel we sometimes forget to look into the root causes and underlying drivers of these trends when assessing how they will continue into the future. Sometimes I've heard that more traditional approach described as looking in the rear-view mirror while driving forward when really we want to be looking ahead.

AL KLEIN 05:04

Erik, I haven't heard the term expressed exactly that way but looking at past data is really important. Now, before I explain this further, you use the term root causes, and I think that is the essence of this, in terms of looking in the past. We can learn a lot from studying trends from the past and probably more importantly, what caused them. And as you said, what are the root causes? Because understanding these root causes allows us to better project future mortality. Let me give you an example. Up until recently, male mortality improvement was greater than that for females, and had been for a number of years, at least in the US. I'm not familiar with other countries on this. Now, this may not make intuitive sense because females have lived longer, but when you dig into the why, you find that this was the primary cause and due to the number of men who quit smoking relative to women. Back in the 1950s and 60s, over 50% of men smoked, while about only 30% of women smoked. Although this is high from where we are today, the anti-smoking programs at that time were effective, but many more men quit than women. Now I'm older, but not old enough to remember this, my knowledge on this comes from the research I did, and I want to encourage others to also do research to better understand the past mortality trends of any of the data that you happen to be using. So, I agree with you that we need to be more thoughtful with how to apply these trends in the future. I like this example of the past trend because many people are not aware of the reason for the years of higher mortality improvement for men. Understanding many of these historical trends in underlying drivers of mortality cannot only help us determine how these drivers may continue into the future, but it also helps inform us of how new drivers of mortality improvement or deterioration may develop and affect us. A good, more recent example of this is understanding the mortality related to COVID. But this makes for a good conversation another time. While I've never been a big fan of using the term look in the rear-view mirror, I prefer to say that is important to look both backwards and forwards. Now, if you hear me say this, you'll know what I mean. While looking both backwards and forwards may hurt your neck in doing so, you'll thank me in the future, when your mortality improvement assumptions are improved. Sorry about that poor actuary humor. Moving forward, I think we agree in that understanding future drivers of mortality is important for longevity and mortality practitioners. But Erik, why do you think it's important for the Mortality and Steering Committee to bring this paper to a wider audience?

ERIK PICKETT 07:52

Well, I think this is a fantastic resource for people thinking about future mortality trends. As we mentioned before, I wasn't involved in writing of this paper, but it was brought to my attention during the meetings of the Mortality & Longevity Steering Committee, as you'll know, Al often when we were discussing an area for potential future research, you would highlight that it had actually already been covered to some extent in this paper. So there's some really great material in here, but if I hadn't participated in the steering committee, it would have completely passed me by. So, I was really keen to raise the profile of this work and get it onto more people's radar to help them in projecting future mortality. You've got nine chapters in there, and each has an overview of a different driver of future mortality. You stated in the paper that it's not intended to be an exhaustive list, but I really think it does

contain an excellent overview of the major considerations for future longevity. I'm really hoping that in presenting it in this bite sized format throughout this series, it'll become more accessible to a wider audience.

Al, let me turn this back to you now. I know you were keen to give the listeners some additional detail on the paper that might help them with the application of some of this material.

AL KLEIN 09:03

Thanks, Erik. Our motivation for writing this paper was to provide a comprehensive understanding of potential drivers of future mortality and mortality improvement. The paper can be used for work involving annuities, life insurance, pensions and the general population, maybe even more. It was created to be used by actuaries, underwriters, insurers, demographers, academics, economists, public health officials, and really anyone who wants to improve their understanding and ability to estimate future mortality, potential trends, costs and their understanding and implications of everything involved. Each chapter contains a broad topic to help the reader more easily get started and determine what is of most interest or importance to them. As you mentioned, Erik, there is a lot of detail on subtopics in each of the chapters. It is up to the user to determine the topics most valuable to their work. One important thing to keep in mind is that we purposely did not quantify the impact of each driver or sub-driver, because each user situation is going to be unique. Also, if an individual uses the same drivers for more than one project, their quantification is likely to be different between the projects. At the end of each chapter, we summarize the main topics in that chapter and gave our opinion on whether we expect the short- and long-term movements in mortality to be positive, negative or neutral. I have to give credit to the SOA reviewer of our paper who suggested adding this, and this actually might be a good place to start at looking at our paper as well to get an idea of the overview.

Erik, that's some of the background and nuances in our paper that will hopefully help our listeners in going through the paper. And I just want to add that those who I have shared the paper with have found it to be helpful in their work. Listeners feel free to reach out to me or my co-author, Yair, if you have any questions on our paper, Erik, now back to you to discuss what the listeners have to look forward to in the next podcast.

ERIK PICKETT 11:10

Thanks. Al, very helpful indeed, and it's always good to remind us to think of the purpose of our work when assessing what information we need to consider. So, listeners, the chapters we have coming up in the series are the following. We're going to look at Aging, Lifestyle, Inequality, Diseases, Healthcare, Medical Advances, Technological Advances, the Environment and Catastrophes. And we'll be releasing a podcast episode in the last week of each month. So, mark your diaries, especially if there's a topic in there of particular interest. And we're even hoping to have the main author of the paper, Yair Babad, joining us for one or two of the future episodes.

Our first topic next month will be Aging. I think it's often taken for granted that age is the most predictive factor of mortality rates. So, any interventions that could change the aging process or age related conditions really could have a profound impact on future mortality. I've always found this topic fascinating, and I'm really looking forward to discussing it with you next time.

RONORA STRYKER 12:15

Thanks, Al and Erik for your insights today and for your commitment to the podcast series on the M&L paper, Long-Term Drivers of Future Mortality. I'm really looking forward to the upcoming episodes. The chapters seem to be pretty jam packed. It'll be a fun time.

AL KLEIN 12:32

Thank you for listening from near and far, and I look forward to sharing additional insights with you in future podcasts.

ERIK PICKETT 12:39

Thanks very much Ronora, and it's goodbye, goodbye!

RONORA STRYKER 12:43

Okay, everyone. Thanks for listening this month and tune in next month for our February edition on Aging. And remember, please download the report and read Chapter Two on Aging before next month's podcast. We'd also love to hear feedback on this podcast series and thoughts on topics for future research. To share your feedback, just email us at Research-ml@soa.org your feedback really does help us better serve you. So, this wraps up today's podcast for the Mortality & Longevity Steering Committee and the Research Insights Podcast I'm or Ronora Stryker with the Society of Actuaries Research Institute.

ROSE NORTHON 19:22

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