



## **Q&A: Setting biometric assumptions in a post-COVID world**

### **Q. Can slides be shared with non ifoa colleagues?**

A. Yes – the speakers have agreed that slides can be shared with non IFoA colleagues

### **Q. Why project with pre-2010 rates?**

A. Statistical projections of future mortality improvements such as the CMI 2022 model may incorporate population mortality data from a long time period (e.g. the CMI model uses 40 years of data) to inform the projected rates of future mortality improvement. The degree to which the older data is referenced in the projection of future improvements will depend on the choice of smoothing parameter within the model. Our paper focuses on the use of driver-based approaches which are forward-looking and use recent data and analysis to inform a judgement-driven view of future mortality rates.

### **Q. Thoughts on allowance for future non-COVID pandemics in best estimate projections?**

A. It seems reasonable to assume that any pre-pandemic view based on recent (pre-2019) data would not have included an allowance for pandemics within it since there weren't any pandemics in that period. Our draft paper does not address an allowance for future non-COVID pandemics in best estimate projections. Instead, we make the implicit assumption that the COVID-19 pandemic did not materially change forward looking expectations of how other (non-COVID) pandemics will have an impact on mortality rates.

### **Q. Do the investigations include female mortality? How do results and recommendations compare via gender?**

A. The original research we refer to in our paper includes studies on both male and female rates. For the purposes of the presentation we used male rates to illustrate some of the general principles in our paper. Our conclusions in the working paper are materially similar between the genders. However, it would also be reasonable to consider different calibrations of a risk driver approach for males and females, to the extent that this is supported by any more granular analysis carried out.

### **Q. How would you implement the driver based view in the CMI tool (or using base mortality) in order to get the desired shape**

A. As noted in the presentation, a driver-based approach could give the same expectation of life as an approach based on the CMI 2022 model, but with very different shapes. To obtain the shape of a driver based approach, a viable approach would be to use the overlay parameters within the CMI 2022 model. An alternative approach would be to adjust base table and improvements as a package to achieve a broadly similar projected shape.