

Risk of Living Longer

Session 1: introduction to the question

Outstanding Q&A

This document accompanies [the webinar recording and slides](#) from the Club Vita and Nationwide event on 16 April 2024, titled *The Risk of Living Longer Series, Session 1: An Introduction to the Question of Human Longevity: How Long Can We Go?* It provides some high-level responses to questions put to the panel that we did not have time for during the event.

1. What are your thoughts on this headline, which I just received in an e-newsletter this morning? "Cancer among people under 50 around the world is projected to increase by 31% by 2030"

Club Vita: This is an interesting headline. We plan to ask our panellists for the Cancer research session in this series to comment on this. If you'd like sign up for that session, [details are here](#). ([Recording will appear here](#) after the session).

2. Young people (under 40) in the US mostly die from accident, suicide, violence or drug overdoses. These do not appear in your list of longevity areas of study.

Club Vita: As the majority of our audience was made up of stakeholders from annuity insurers and pension plans, we focused on areas that affect mortality for the post-retirement population, mainly focusing on contributors to life expectancy at 65. The causes of death you list are indeed having some impact on life expectancy at birth, so to increase longevity for the whole of the population throughout their lives tackling these societal issues would be important.

3. Phil, you mentioned that we may see some revolutionary developments within the next 10 years. How long would you predict these revolutionary drugs or treatments take to be accessible to general populations vs. super wealthy.

Phil:

- SUPER WEALTHY: safely administered, off-shore: 5 years
- WEALTHY: within regulated market: 10 years
- GENERAL POPULATION: within regulated market: 12 years

4. Phil, does "Change the face of humankind" mean life beyond age 120. Or is it just rectangularisation?

Phil: RECTANGULARISATION: humans can't genetically live past 125 years (currently); people living to 100 healthy will become common for GenX, 110 for Millennials

5. Is there a directory of reputable longevity clinics?

Phil: No, not yet. But we are creating one at Longevity.Technology. Check out this link for survey of clinics: <https://longevity.technology/investment/report/longevity-clinics-survey-2023/>

6. Phil, what did the testing in Florida cost?

Phil: PRICES: range from \$10k to \$100k per annum ... average is \$25k

7. If a plan sponsor institutes a program to induce healthy behaviors (e.g., providing free subscription to ZOE or similar programs, handing out wearables & other incentives) with a goal of improving population health risk score and reducing health plan budget, would you say the pension plan assumption should reflect expected positive outcomes of these programs and therefore assume longer life expectancy of the pension plan population?

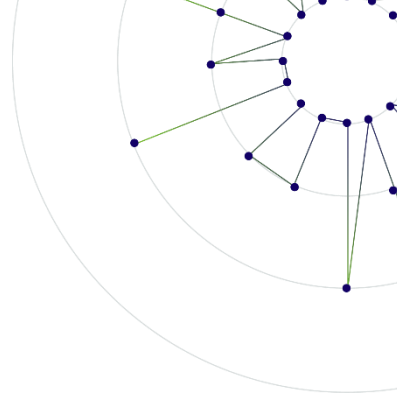
Club Vita: This will depend a bit on the purpose of the assumption. There are certain regulations that require certain mortality assumptions to be used for certain purposes (such as accounting disclosures or funding disclosures - and these requirements can vary depending on jurisdiction). If your purpose is to get an accurate estimate of life expectancy for the plan for financial planning it would seem appropriate to allow for any knowledge you have about your specific population when developing your assumptions. Quantifying the potential outcomes of these interventions may be challenging though and care would be needed to ensure you were not capturing these effects more than once (for example if take up of these behaviours were already captured in a multi-factor mortality analysis).

8. Are exercise, diet and stress not difficult ones to improve universally in the population? How do we combine this research with behavioural economics as none of these requirements for a healthy lifespan are new news, but we are still living in an obese society?

Dan: The issue is that while all of these could be improved through change in behaviours, traction so far has been poor where it matters. The increasing use of digital apps, gamification and social platforms are helping to promote exercise, but as we have seen in the pandemic this often leads to those that are already exercising increasing their levels rather than reversing sedentary patterns. As far as obesity is concerned, a recent report from the Lancet has highlighted the continuing rise in obesity with 1 in 8 of the world's population now being obese, which represents a doubling in adults and a quadrupling since 1990. [The WHO Acceleration plan](#) to stop obesity in 2022 has been adopted by 31 governments, and involves the following core interventions:

- actions to support healthy practices from day 1, including breastfeeding promotion, protection and support;
- regulations on the harmful marketing of food and beverages to children;
- school food and nutrition policies, including initiatives to regulate the sales of products high in fats, sugars and salt in proximity of schools;
- fiscal and pricing policies to promote healthy diets;
- nutrition labelling policies;
- public education and awareness campaigns for healthy diets and exercise;
- standards for physical activity in schools; and
- integration of obesity prevention and management services into primary health care.

A key issue that is preventing progress is the increasing use and consumption of ultra-processed foods. Indeed, behavioural economics is probably being used at present more successfully to promote products that are not good for individual health than in promoting healthier behaviours, for example promoting low-fat products without highlighting what other ingredients have been substituted.

- 
9. How far has Covid moved the clock back in terms of longevity improvements? Firstly since it is now a permanent feature and has not replaced other viruses, older people are still vulnerable to it and as discussed it worsens people's long-term health?

Dan: The key role of the ACE2 receptor that binds to the SARS-CoV-2 receptor in the circulatory system and maintaining blood pressure means that SARS-CoV-2 virus has the potential for a continuing impact on those with poor or disrupted immune responses. Given volatility of mortality rates, it is difficult to estimate how many years of improvements have been lost to the COVID-19 pandemic, but it is likely to be at least 5 years given that mortality rates are only now showing indications of returning to rates that were seen before the pandemic. Current levels of notified COVID deaths are likely to underestimate the continuing impact of the virus. In the USA, the number of deaths involving COVID-19 during 2024 is approximately [20k out of 900K](#) for all-causes ie approximately 2%. [Recent data](#) from the Behavioural Risk Factor Surveillance System suggests that the prevalence of Long COVID is greater than 9% in 7 US States, although we are still trying to get a better understanding on what long-term impact Long COVID will have on disability and mortality.

10. Great session!! lots of valuable information.

Club Vita: Thanks very much. Don't forget to sign up to [the rest of the series here](#).