FutureProofing Healthcare started in 2018 to benchmark how health systems are performing today to prepare for the future. The frameworks and data aggregated by FutureProofing Health will support discussions on the policies, healthcare system designs, and interventions necessary for a sustainable future.

We asked **Tony Estrella**, one of our APAC-based experts, futurist and author, to write a **thought experiment whitepaper** imagining what healthcare will look like in the year 2050.

How the mission for health differs in 2050:

Healthy Longevity as the motivation for change

The inflection point for the end of healthcare as we knew it came in 2037 - scientists figured out **how to slow ageing**, transforming the world's focus to **healthy longevity**. By increasing human lifespans to at least 150 years, sickness became an enemy. Individuals and society no longer accepted that becoming older = suffering from chronic

disease. **Personalised medicine** became the norm and by 2050 **dynamic prevention** aided billions to avoid illness altogether.

Let's look at how personalised medicine and dynamic prevention affected the countries of APAC in 2050.

Replacing the industry of healthcare:

The foundations for a proactive health system

In 2050, the mission of the healthcare industry evolved far from its 2020 cousin. Now called *Longevity Health*, **five axioms** guided the transition to develop a proactive, data driven, individualised, and collaborative system:



Governments developed **policies**, **budgets**, **and robust governance** to shift from sick care to precision medicine with dynamic prevention

Lessons learned from the COVID-19 pandemic prompted a global healthcare reinvention in 2025, driven by a common goal to eliminate future viral outbreaks. The **Pandemic Prevention Framework** was designed, with the UN, WHO, and all governments adopting all the baseline recommendations by 2030. FutureProofing Healthcare supported these challenging policy negotiations, firmly establishing its place as a global resource.

The discovery of the miracle approach to slow ageing in 2037 triggered a new set of policy and governance battles. APAC benefited from having widespread technology-enabled platforms. APAC policymakers addressed a range of questions under **three categories** to establish a new health system designed to support proactive interventions: **Public and private sector funding, helping people enjoy their longer**

lives, measuring and quantifying impact. Eventually, a convergent approach came out from the policy debates, resulting in **Common Resolutions**.



Society operated with a new **social conscience**; health longevity benefits were available regardless of social standing, demographics, and political affiliations

When the longevity solution became widely available, an immediate concern from policymakers and individuals alike arose. Would the solution only be accessible and affordable to the wealthy citizens and countries?

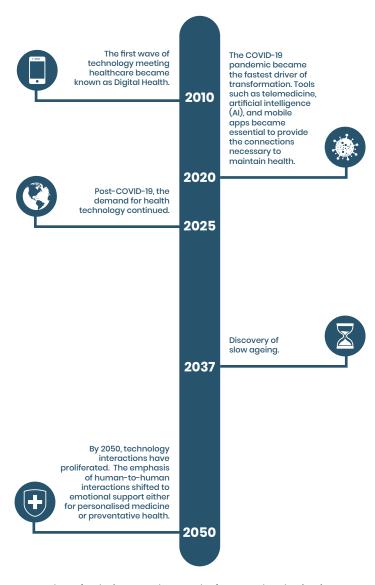
Initially, higher GDP countries in APAC did have faster mass adoption, but as the positive economic impact of an increase in the labour pool became measurable, smaller GDP countries became more creative. In 2050, the skyrocketing GDP growth across APAC justified the risk taken by these countries.

COVID-19 also affected the approach for people-friendly policies in a new health economy. Policymakers and citizens alike came together to protect every human life and focused on social good. An ethical tipping point arrived. These altruistic behaviours ultimately became measurable through an **index of Social Conscience**.



Health organisations realigned into **interconnected ecosystems** of physical infrastructure, virtual interactions, financial exchanges, and technology interventions

In 2050, the interface, data collection, data management, and interventions for all consumer journeys in *Longevity Health* are driven by technology. This didn't happen overnight:



Examples of solutions and core platform technologies in a proactive, tech-enabled health ecosystem include: virtual reality enabling real-time initial consultations; proposed interventions conducted on people's 'Digital Twin' – a virtual representation of a person; Al informing real-time decisions from any *Longevity Health* stakeholder.



Individuals accumulated their personal data into a **Humanome**; a protected repository containing their biology, genome, behaviour, real world activity, and quality of life preferences

With technology being part of everyone's healthcare journey in 2050, every human or robotic clinician began any conversation with one question – "Can I have access to your data?" If asked in 2020, it would likely have been met with scepticism, befuddlement or disbelief. Overcoming this dynamic required the development of a Digital Social Contract – enforcing personal ownership of health data – increased data management, transparency, and collaboration across country borders and measurement allowing for numerous case studies for prevention and health outcomes. By 2050, this question elicited one response – a resounding "YES!"

The data required for fully analysing an individual became known as the 'Humanome'. This collection of sources enabled any clinician – human or Al, to fully understand the health risks for any individual.





Clinicians **personalised** *Longevity Health* **for any individual** through technology innovations

Once the 'Humanome' became widely adopted, a personalised approach to every individual became the standard approach .

Developing a personalised approach for both preventative and therapeutic care requires adaptable health products. There are also complexities that come from meeting efficacy and safety requirements from each country's regulatory bodies. Within Longevity Health, products should address: prevention, diagnosis, access to treatment, tailored interventions, and monitoring. Data modelling is also essential to be able to identify the right interventions for any individual at the right time. To understand how Longevity Health addresses challenges in these spaces, the full white paper includes four example case studies of personalised health in action.

By 2050, Asia Pacific remains the largest global territory with 60% of the world's population across 44 countries. Establishing Longevity Health as a sustainable industry didn't come easily. But despite the challenges, trends in Asia Pacific from the 2020s, including near universal mobile phone penetration and Asian social structures, enabled a coordinated adoption for re-defining traditional healthcare and enabled the **five axioms** to exist across geographic boundaries throughout the region.





To understand how Longevity Health addresses challenges in these spaces, you can explore Wee Hong, Rizwan, Fatimah and Olivia's stories in more detail in the full whitepaper here.



Closing Thoughts from the Future Proofing Health team including the author

We welcome feedback from readers, as the **thought experiment whitepaper** is intended to stimulate conversation and debate. The ideas put forward for having healthy longevity serve as a motivation for expanding personalised medicine and dynamic prevention across Asia Pacific might have seem far-fetched at the start of 2020. But, as the world responds to the current COVID-19 pandemic, these ideas no longer seem completely unlikely.

We will fight through these challenging times together, and we hope that the resulting changes enable a better healthcare system that benefits all of humanity, both today and in 2050.

