How much for a life?

Transport and Pharmac-based values are problematic and inconsistent

Kathy Spencer

Putting a dollar value on a life strikes many people as distasteful at best, and immoral at worst. But the fact is it happens all the time in public policy.

For programmes in Health and Transport, for example, saving lives, extending life, or improving the quality of life, are often key benefits. Without putting a value on these benefits, the government would struggle to decide how to get the best outcomes.

How much should be spent to save lives by rebuilding dangerous pieces of road or adding median strips? And, how much should be spent to extend lives by purchasing expensive drugs, screening for bowel cancer, or immunising against the flu?

To facilitate this cost-benefit analysis, Treasury provides a long list of "impact values" that government officials are expected to use in their analyses, including two critical values relating to life itself.

The first is an estimate of how much New Zealanders are willing to pay, collectively, to avoid one death on our roads: it currently sits at $16.6 million.

The second is the value attributed to one year of healthy life for one New Zealander: it currently sits at $36,670.

When one life saved on the roads is equated with over 450 years of healthy life, something has gone badly wrong. To get sound decisions about public spending, we need a level playing field that values a life, and a year of life, on a much more consistent basis.

But first, where did the current values come from?

Saving a life

A *willingness to pay* approach has been used by the transport sector to put a value on avoided deaths and injuries since 1991. In a survey of 3,000 households, people were asked how much they would be willing to pay to: travel on a safer road; attend a road safety course; or improve road safety through extra taxes. Their answers produced a wide range of estimates for the *value of a statistical life,* and an average *of* $2m was chosen.

The $2m figure was simply inflated by increases in average hourly earnings until it reached $5.2m in 2023.

Meanwhile, the NZTA had another survey done which asked about willingness to pay an extra $100 or $200 in tax per year for a nationwide road safety programme to reduce annual deaths and injuries by specified amounts. People were also asked to rank the importance of reducing: deaths, injuries, travel times, and traffic congestion.

The new survey led to a massive jump in the value attributed to saving a life: from $5.2m in 2023 to $15.2m in 2024. Accounting for inflation since, gives today's value of $16.6m.

On the plus side, the *willingness to pay* method attempts to establish what New Zealanders value, and is independent of past government decisions and budgets. But it has a number of problems, not least that the survey questions can be very challenging to answer, raising concerns about reliability.

Researchers also recognise that willingness to pay is likely to be overstated when people aren't actually stumping up, and when they aren't offered alternatives like directing extra taxes into health or education instead of road safety.

Gaining one year of healthy life

QALYs, or quality-adjusted-life-years, are used in a wide range of cost-benefit analyses in the health sector, including when Pharmac decides which medicines to fund. A year lived in full health is 1 QALY, while a year lived with a serious illness, for example, might equate to 50% of a QALY.

Until recently, Pharmac published the number of QALYs gained from the decisions it made during each year. Based on the particular deals done, the amount paid for a QALY moved up and down quite dramatically, falling below $6,000 in 2020/21. Treasury's current QALY value of $36,670 is based on the last figure published by Pharmac, adjusted for inflation.

At the risk of stating the obvious, the metric for a year of healthy life should not bounce around like the price of cauliflower.

For comparison, the UK uses a range of NZ$58,000 - NZ$82,000 for a QALY, and will pay significantly more in particular circumstances.

Pharmac could easily argue for more funding, leading to a higher QALY value and improved access to medicines, but in general it chooses not to. As a case in point, the recent Budget increased funding for purchasing pharmaceuticals by less than 1%.

In my view, the Pharmac-based value for a year of life is highly problematic and should be abandoned. The way we value our lives should influence Pharmac's budget and decision-making, not the other way around.

Ideally, the NZTA, Ministry of Health, and Treasury would work together to come up with consistent values for saving a life, and gaining one year of healthy life, that can be applied to make better spending choices across the public sector.

Officials could consider incorporating data on what New Zealanders are *actually* willing to pay to extend or improve their lives. Sadly, it has become all too common for people to pay out-of-pocket to get the health services they need from the private sector, or even from Australia, when our public health system fails to deliver.

Kathy Spencer worked in public policy for over 30 years, including as a Deputy Director-General in the Ministry of Health, a General Manager in ACC, and a Manager in the Treasury.