



## New Zealand gets its own surgical risk calculator

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Unique New Zealand data has been used in a surgical risk calculator that allows patients to better understand the risks versus the benefits of their operation, taking into account their age, the type of surgery, pre-existing health conditions and ethnicity.

The web-based [nzRISK.com](http://nzRISK.com), which is available for patients and clinicians, has been developed by specialist anaesthetist Dr Doug Campbell from Auckland City Hospital. It is a pre-operative risk prediction tool which, allowing for pre-existing health conditions, provides an estimate for the risk of death at one month, one and two years following non-cardiac surgery.

Dr Campbell says overseas-developed risk calculators have proven to be inaccurate for the local population. "One reason may be the unique ethnic mix in New Zealand. This risk prediction tool is tailored for our population," he says.

"Other risk calculators are not using the large, high quality data sets that we have in New Zealand. A UK risk calculator is one of the largest with 20,000 patients whereas our risk calculator, nzRISK, is based on two whole years of surgery in New Zealand involving 360,000 patients. Places that have quite sophisticated healthcare like the US and the UK can't do what we have done with this data," says Dr Campbell.

"A New Zealand-based risk calculator means we are able to make more accurate, better-informed decisions as to the risk and benefits of surgery for New Zealand patients," he says.

The web-based calculator is freely available to anyone with a computer or smartphone by going to [nzRISK.com](http://nzRISK.com) but should be used with the advice and consultation of a clinician to guide patients through.

The research into the calculator has been funded by Precision Driven Health (PDH), a multi-million-dollar research partnership aimed at improving health outcomes through data science. It has also been supported by the Perioperative Mortality Review Committee (POMRC), a sub-committee of the Health Quality and Safety Commission.