

## Measuring and Managing Longevity Risks

### The Opportunity

Longevity risk transfer and reinsurance activity are on the rise. ~\$400B of pension risk was transferred in the recent few years. Currently, the risk is valued by generic, large population-based models which have high variance in the pension plans/annuity blocks that are transacted. Using our proprietary algorithms, we can accurately assess and price the longevity risk of a population based on updated information we collect and our predictive models. Our analysis enables better hedging and securitization of the risk, as well as the creation of incremental revenue streams based on the risk.

### A data-driven approach to longevity risk

Our team of physicians and data scientists built a system to accurately gauge and reduce the cost of longevity risks. At the crux of our approach are mortality predictors we identified in a +2M person-years dataset. This allows us to predict 5-20 years mortality more accurately based on the unique characteristics of the population.

Our process includes data collection on the population through public information, inference from public and proprietary datasets, and actual population sampling using our proprietary tools and questionnaires. This data is fed to our simulation tools in order to generate an accurate assessment of the mean and spread of longevity risk in the population.

### The value proposition

- During a risk transfer process, we provide risk buyers a negotiation advantage through an ability to select blocks and price them properly. (more than the mortality indices)
- Detailed analysis and simulation to improve deal structuring, securitization of the risk
- Our ability to project utilization of services that will often be funded by the annuity, combined with our network of long term care (LTC) providers enables a win-win solution:
  - LTC providers provide bulk discount in order to be included in our private pay network - guaranteed volume and easier billing to the annuities.
  - Discount is shared between the pensioners who use the services and the risk owner, creating a quantifiable and predictable revenue share mechanism which is also an additional "natural hedge" to the longevity risk.