

Topical Issues in Group Insurance

LIWMPC and SPC

12 September 2016

This presentation does not constitute Actuarial Advice upon which to base decisions. No liability to any party will be accepted for the consequences of relying on this presentation.

Agenda: 12 September

- Greg Staunton – The QInsure experience
- Andrew Gill – Reinsurance: role and challenges
- Daniel Stone – Data Analytics in Group Insurance
- Panel discussion and Q and A

The QInsure experience

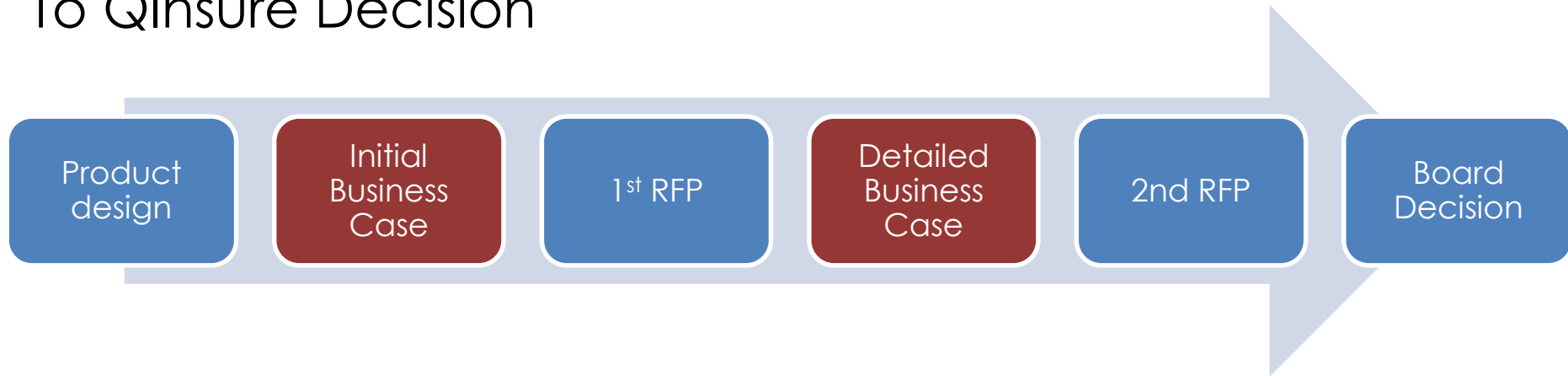
GREG STAUNTON

QInsure Drivers

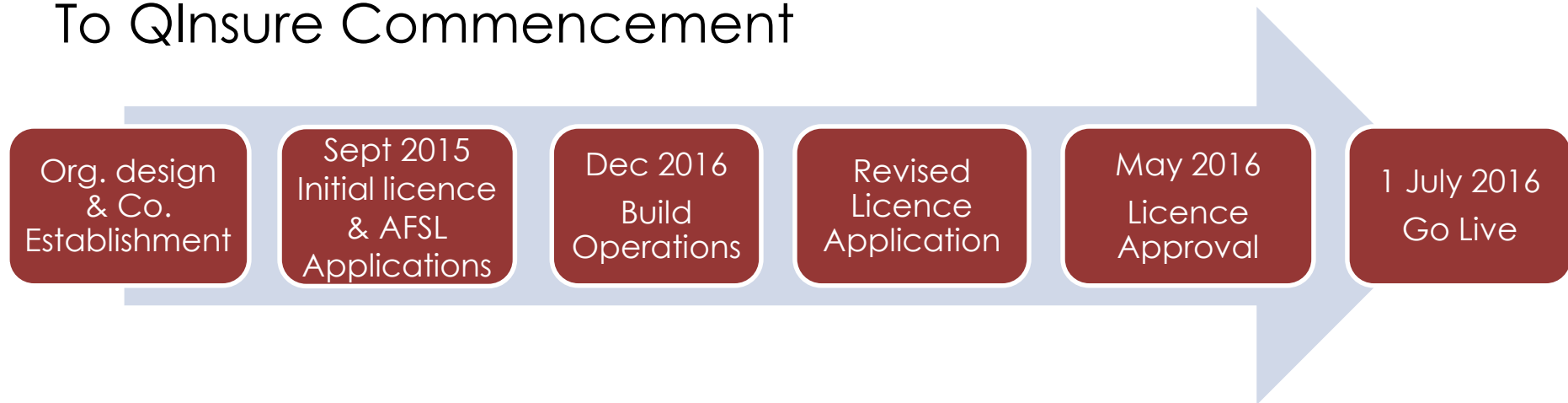
- Regulatory requirement to cease self insurance by 30 June 2016
 - Existing insurance split between self-insurance and external insurance
- Choice of Fund and Open Fund changes likely
 - Product review necessary

The Journey

To QInsure Decision



To QInsure Commencement

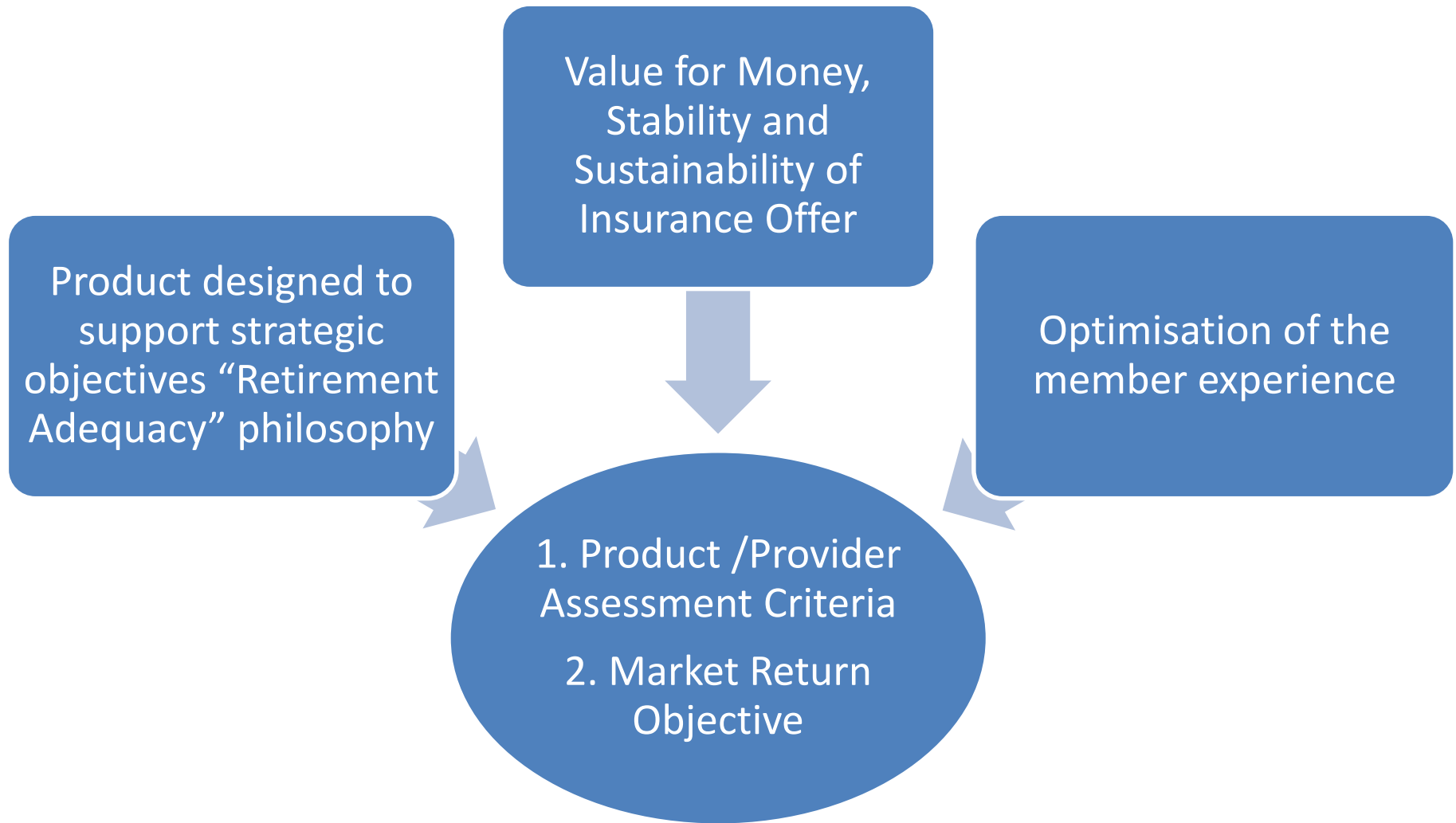


Key Guidance

Members' best interests:

- SIS Act requirements regards insurance:
 - Formulate, review regularly and give effect to an insurance strategy for the benefit of beneficiaries of the Fund
 - Consider the cost to all beneficiaries of offering or acquiring insurance of a particular kind, or at a particular level.
 - Only offer or acquire insurance of a particular kind, or at a particular level, if the cost of the insurance does not inappropriately erode the retirement income of beneficiaries
 - **To make an arm's length decision to select the insurance in the best interests of members;** and
- SIS Act requirements regards investments – **investments of a superannuation entity to be made and maintained on an arm's length basis.**

Interpreting Members best interests



Assessing QInsure vs Insurers

Assessment Criteria	QInsure	Ins 1	Ins 2
Risk assessment – capital ratio, takeover terms and client conflicts	✓		
Product features and conditions	✓		
Proposed service approach			✓
Underwriting Management capability		✓	✓
Claims Management capability	✓		
Pricing and associated terms	✓		
OVERALL ASSESSMENT	✓		

Other Business Case Considerations

- Enhancement of existing core capability required
- Investment return met members best interest
- Lower premium cost with similar capital risk to external insurance
 - external insurer loss/profit share arrangements
- Improved stability of price and enhanced product development capability
- Reduced market constraints

Establishing QInsure – Lots to Do

- QSuper existing insurance operation - 20 years
- Licencing – APRA and ASIC
- New Governance (Board, Risk and Conflicts of Interest)
 - Establish Company & new Board
 - Board policies and guidelines
 - Risk appetite statements and risk register
 - Conflicts of interest
- Design/implement a new corporate structure
 - balance efficient integration with independence
 - Enhance existing skills and build new skills
 - End to end review and documentation of process
 - Systems and Reporting
 - Recruiting - without a licence
- Draft and implement commercial contracts

How did we get there

- strong project & change management framework
- Great people - all hands on deck
- External consulting and other help
- Engagement with APRA and ASIC
 - Early licence submission
 - Dec 2015 operational review flushed out areas to address
 - Prioritised and methodically addressed
- Necessary and sufficient for 1 July 2016 and then build

Selecting our Reinsurers

- Low requirement for reinsurance – noting other benefits
- overlayed with capital, strategic and operational impact
- SCOR - Group Insurance
 - Aligned pricing assessment
 - Full product support
 - Strong alignment – u/w & claims management approach
 - Low operational impact - processes and delegations
 - U/w manual and other services
- Existing Lloyds catastrophe cover moved to QInsure

Retrospective

- Market conditions drove the outcome

What went well	What were/are the challenges
<ul style="list-style-type: none"> • APRA and ASIC engagement highly proactive • Strength of the business case options assessment drove design and delivery • Assumptions based planning allowed progress despite ambiguity • Strong internal Program Management with an effective balance of internal resources with external expertise <ul style="list-style-type: none"> • Actuarial, Legal, Tax, Reinsurance, Auditors, Specialist consulting • Transparency/engagement with and support from insurers and reinsurers 	<ul style="list-style-type: none"> • Timeline • Managing competing priorities • Managing ambiguity • Balancing duplication of functions, efficiency and independence • Delivering necessary and sufficient vs ideal target operating model • Timing of recruitment without an approved licence • Contingency plan if capability could not be delivered

Reinsurance: role and challenges

ANDREW GILL

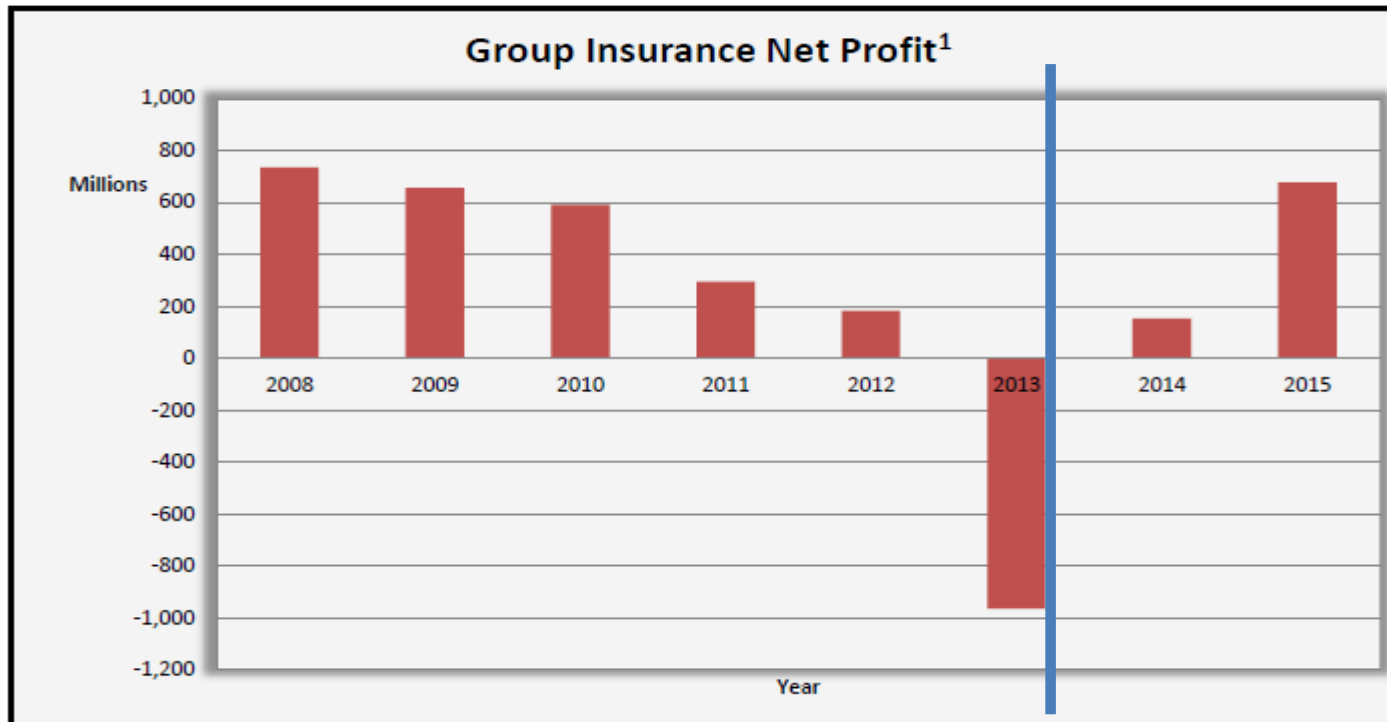
Setting the Scene

- The Australian Group market is:
 - Challenging – product terms appropriateness / media scrutiny / reinsurer losses / uncertainty
 - Efficient – return of each dollar of member premium better than any other market
 - Paternalistic – performs a common good (the “Medicare of Life Insurance”)

We as an industry should be proud of what the group market achieves but we must continue to work diligently to improve the level of trust in the industry.

Role of Reinsurance

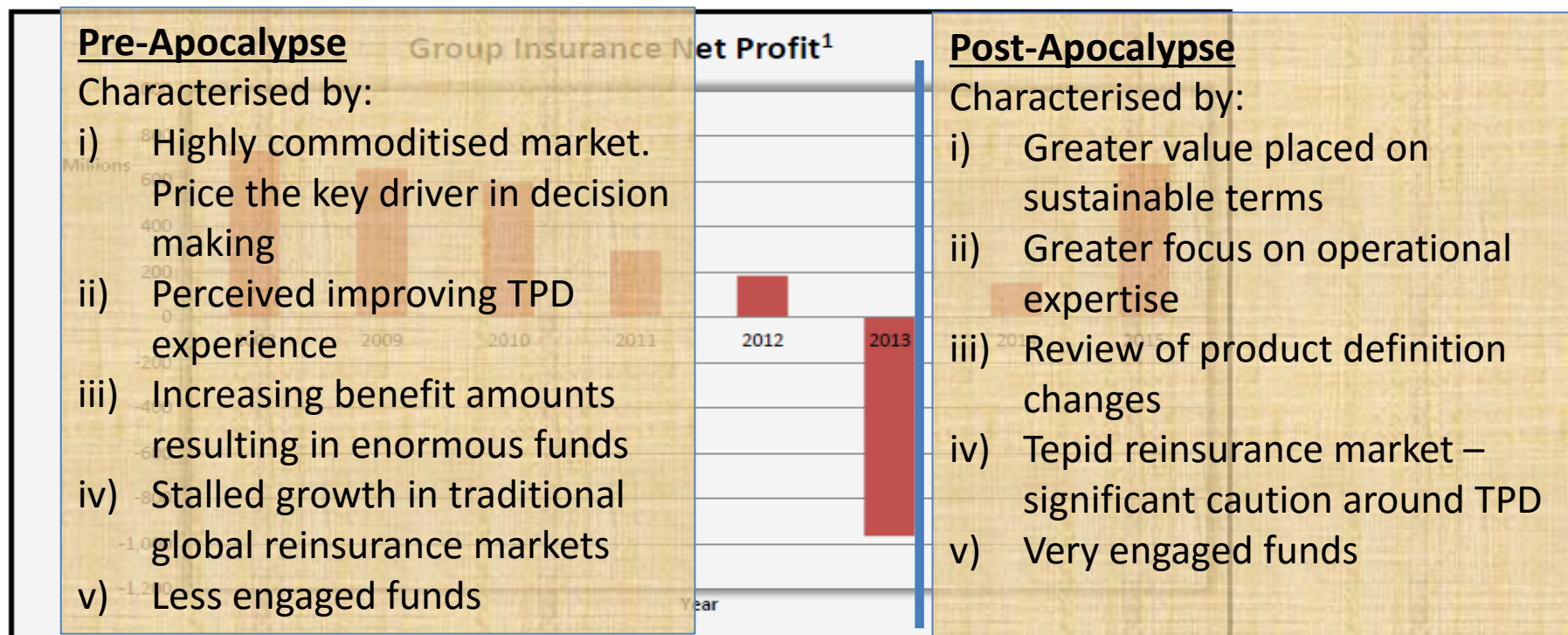
- The role of reinsurers in the group market has changed over time:



¹ APRA Quarterly Life Insurance Performance Database – August 2016. Profits are for Group Disability Income Insurance and Group Lump Sum Risk

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Role of Reinsurance (cont'd)

Pre Apocalypse

What do insurers value from their reinsurers?

Capital

Price
Competitiveness

Volatility
Management

Pricing
Expertise /
Validation

Claims Support

Product Support

Underwriting Support

Role: Price Taker

Most Important

Post Apocalypse

What do insurers **and** trustees value from their reinsurers?

Capital

Claims Support

Experience
Monitoring

Price
Competitiveness

Pricing
Expertise /
Validation

Product Support

Volatility
Management

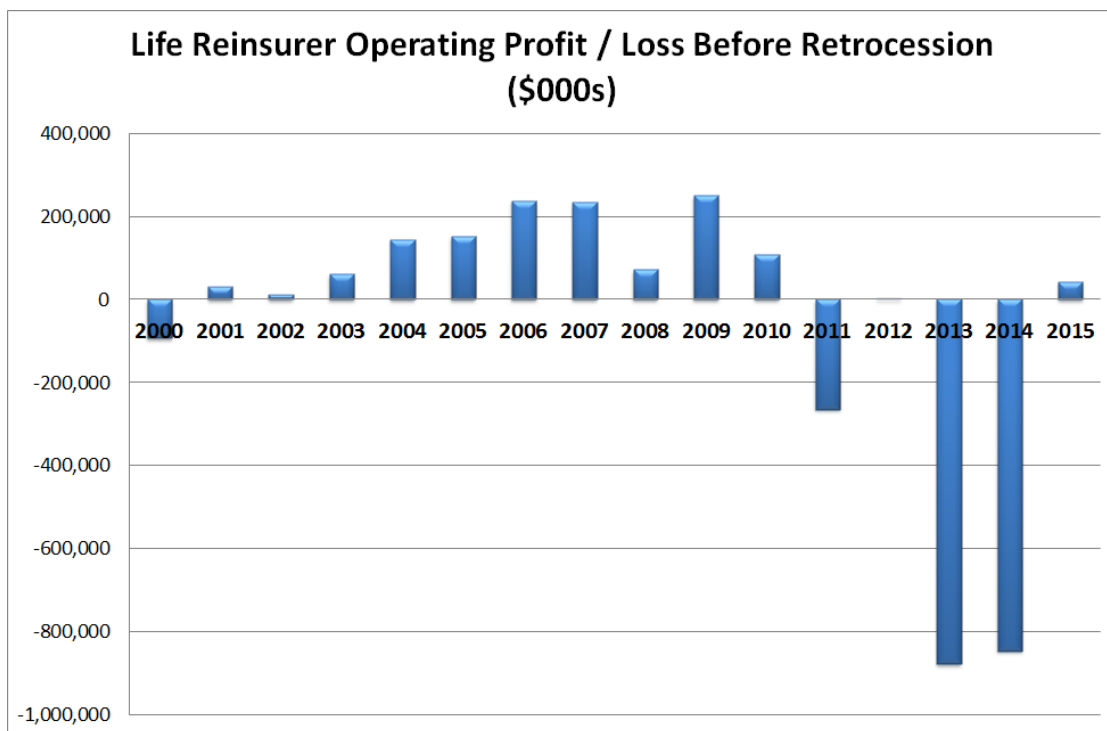
Underwriting Support

Role: Value Adder

Least Important

The Challenge for Reinsurers

- “Reinsurance cycles” are common in markets that are price-driven and with regular tenders
- Reinsurers often end up at bottom of “food-chain”



Source: Reinsurer Financial Reports 2000 - 2015

The challenge for reinsurers is to meet shareholders return expectations in a very competitive, but large market.

The Challenge for Reinsurers (cont'd)

The challenge for reinsurers is to meet shareholders return expectations in a very competitive, but large market.

How?

- By developing a proposition that delivers additional value to the propositions of insurers and trustees
- Sustainable pricing and product terms that aim to achieve a reasonable return on invested capital
 - Super returns / sub-standard returns are not-sustainable

The Challenge for Reinsurers (cont'd)

What are the key obstacles to success?

- Rebuilding trust in reinsurers as “trusted advisers”
- Increasing appetite of insurers and funds for insurance risk
- A return to unsustainable pricing (high and low) and product terms
 - Undisciplined pricing / “emotive pricing”
 - Role of non-regulated “off-shore” reinsurance
- Lack of data to enable us and the industry better understand the underlying risks
- Forgetfulness

“History doesn't repeat itself, but it does rhyme” – M Twain

Data Analytics in Group Insurance

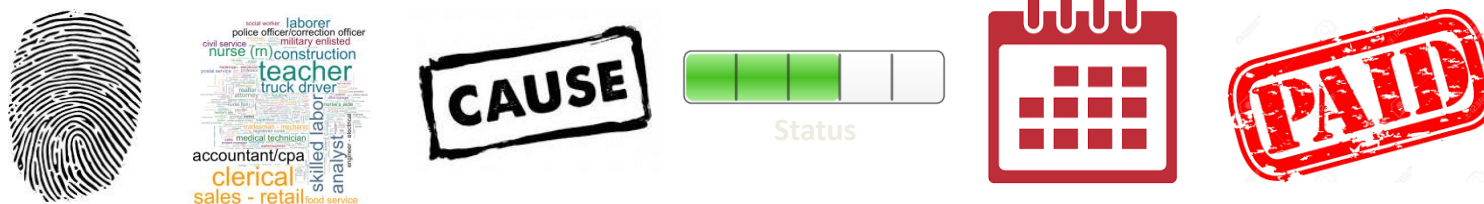
DANIEL STONE

Group Data Dilemma & enrichment

Fund Member data



Claims data



ABS Census data



Custom census data



What can we do with this...

Risk analysis



Data checks



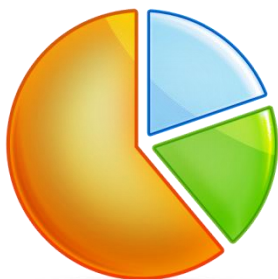
Benefit design



Risk insights

- Segmental analysis of claims by fields in membership
- IP Salary vs cover under/over insurance
- Analyse impact of new designs in data

Targeting



Needs



Voluntary propensity



Campaign analytics

- Customise propensity model
- Used in targeted campaigns
- Campaign analytics
- Refine model

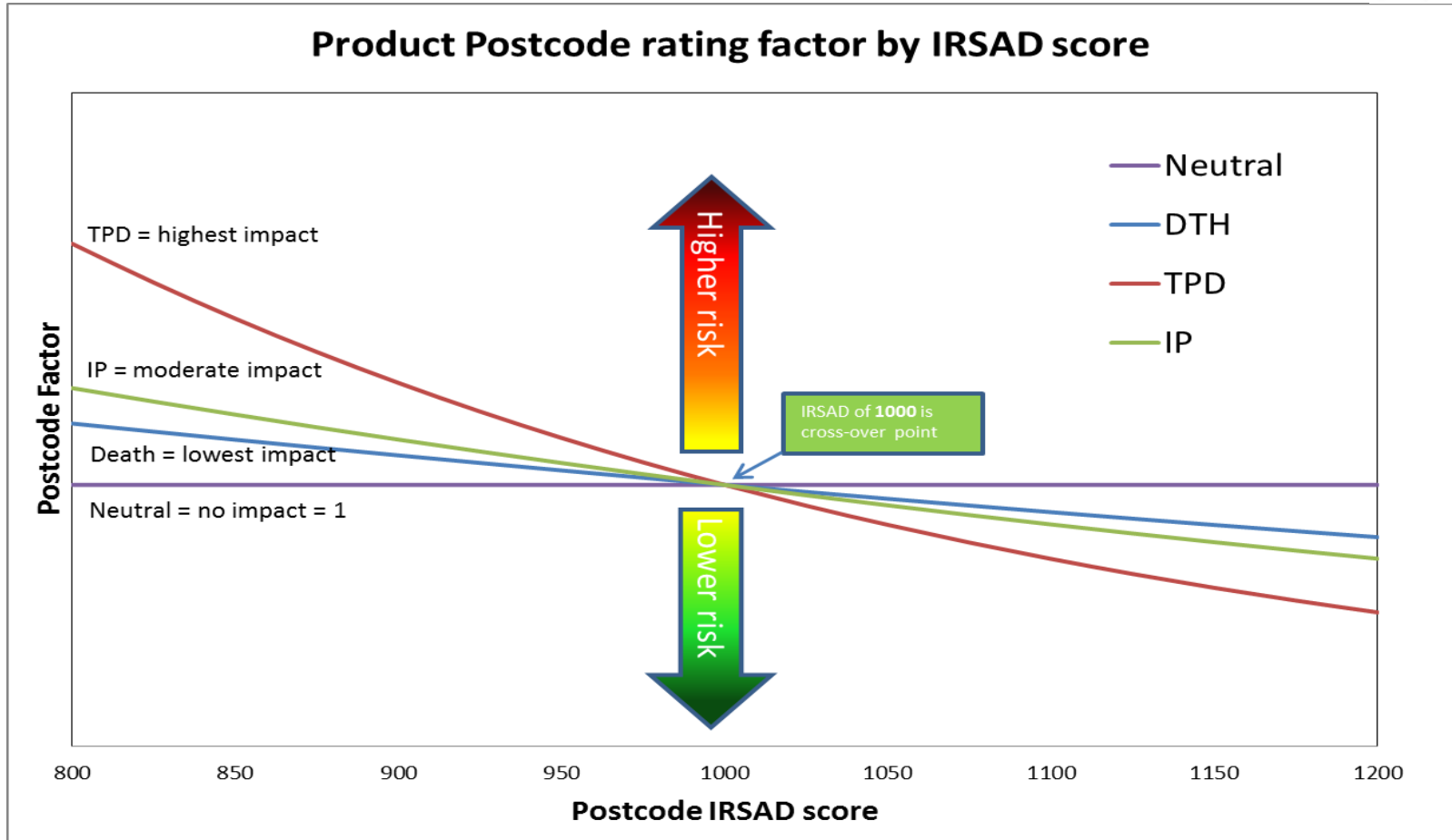
Claims analytics



Claims insights

- Deep dives into claims
- Prediction of length of IP claim

Risk based on where you live



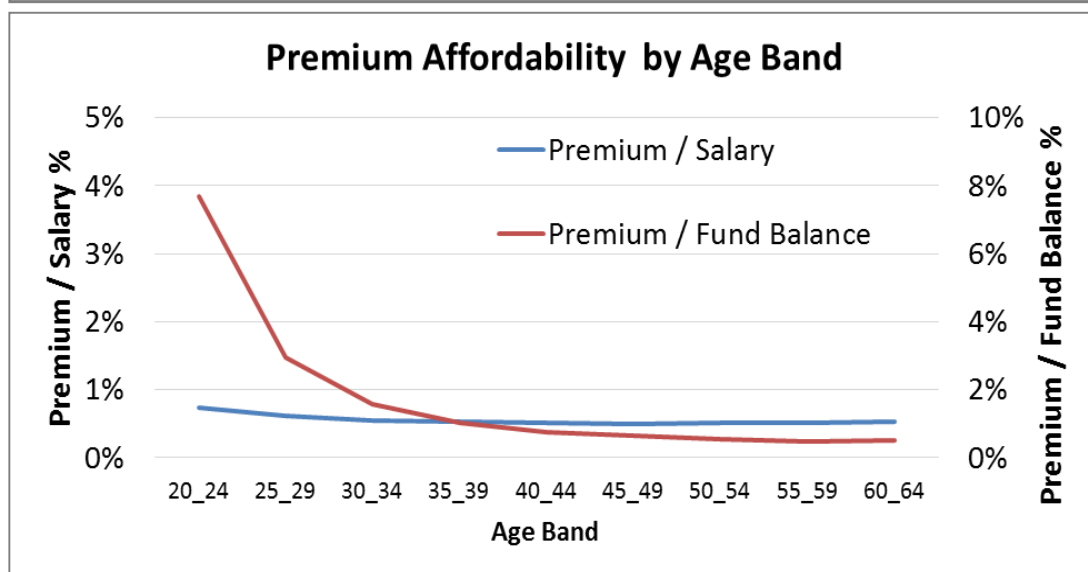
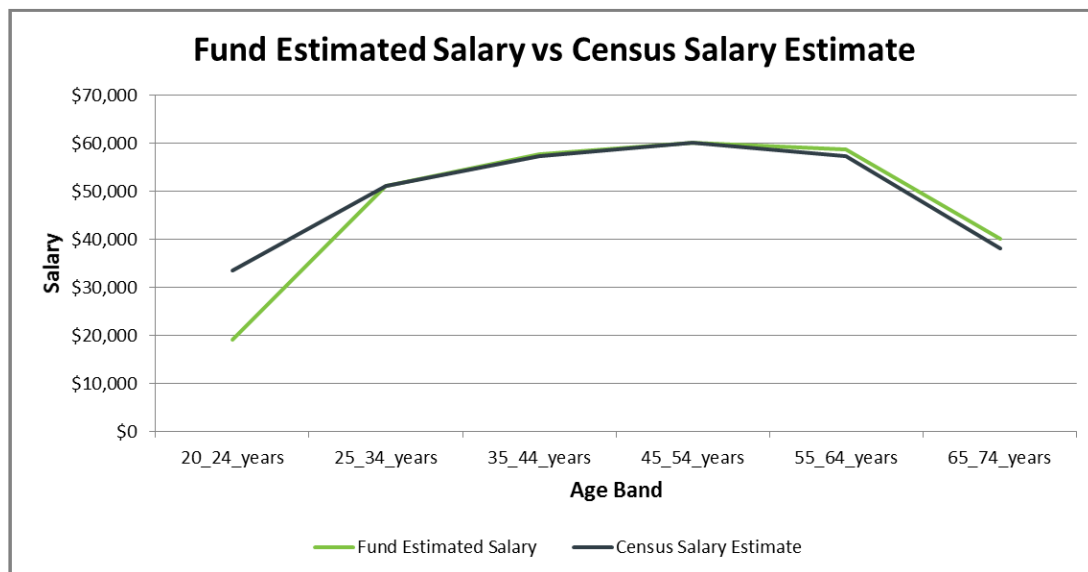
An IRSAD score of less than 1,000 attracts a higher insurance risk and above 1,000 a lower insurance risk.

Data checks & product design



Calculate Salary

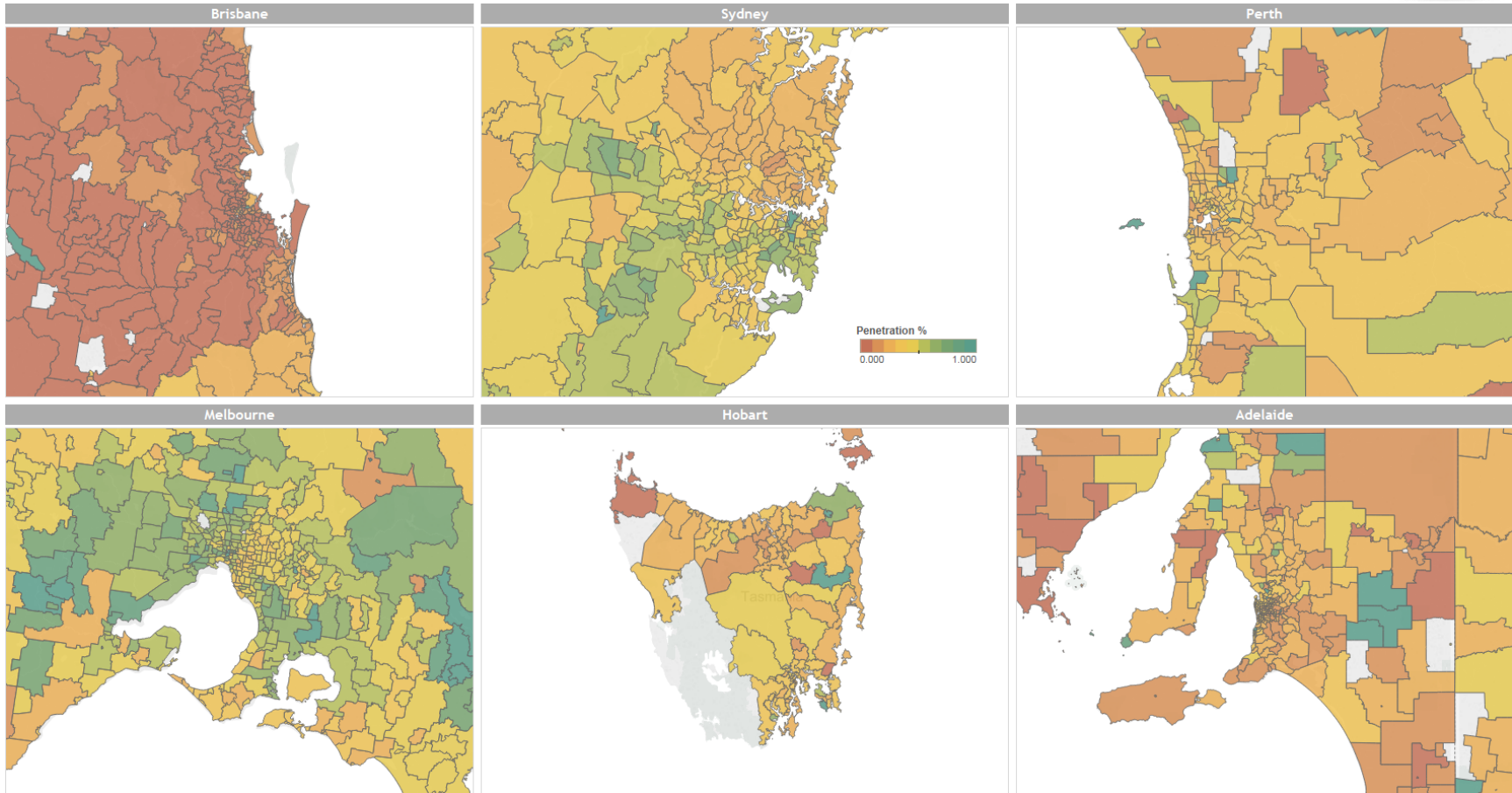
- Using SG Contribution
- Using Census data based on postcode, age, gender
- Allow for salary inflation
- Validate data & backfill



Affordability

- Use calculated salary
- Consider individual (scatterplot) and aggregate (fund view) affordability
- Relationship between salary and fund balance by age

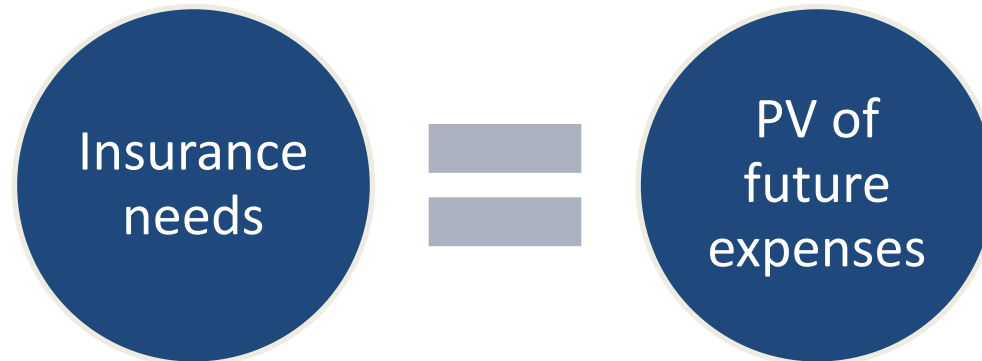
Fund penetration & Targeting



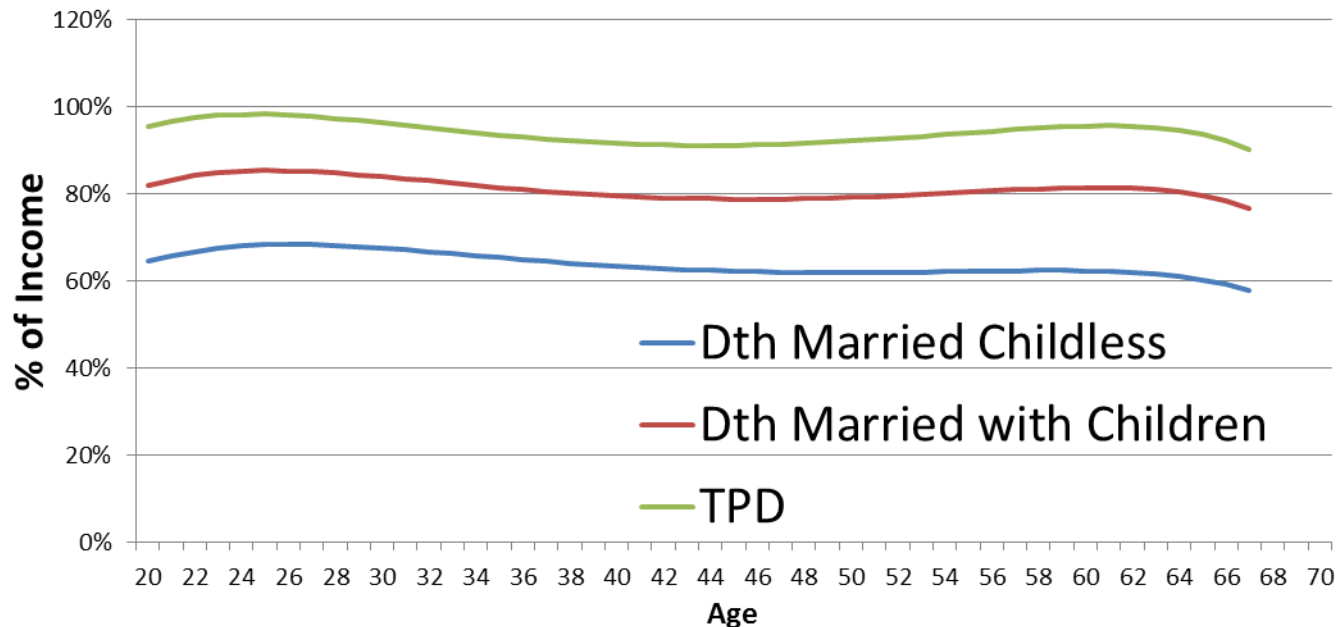
$$\text{Penetration \%} = \frac{\text{\# members}}{\text{\# Census "Industry Group"}}$$



Automated Needs analysis



Expense % of income required after event by age



Note: Based on Household Expenditure Survey (2009/10) and the ABS Household Income and Distribution Survey (2009/10)

Underinsurance visualisation

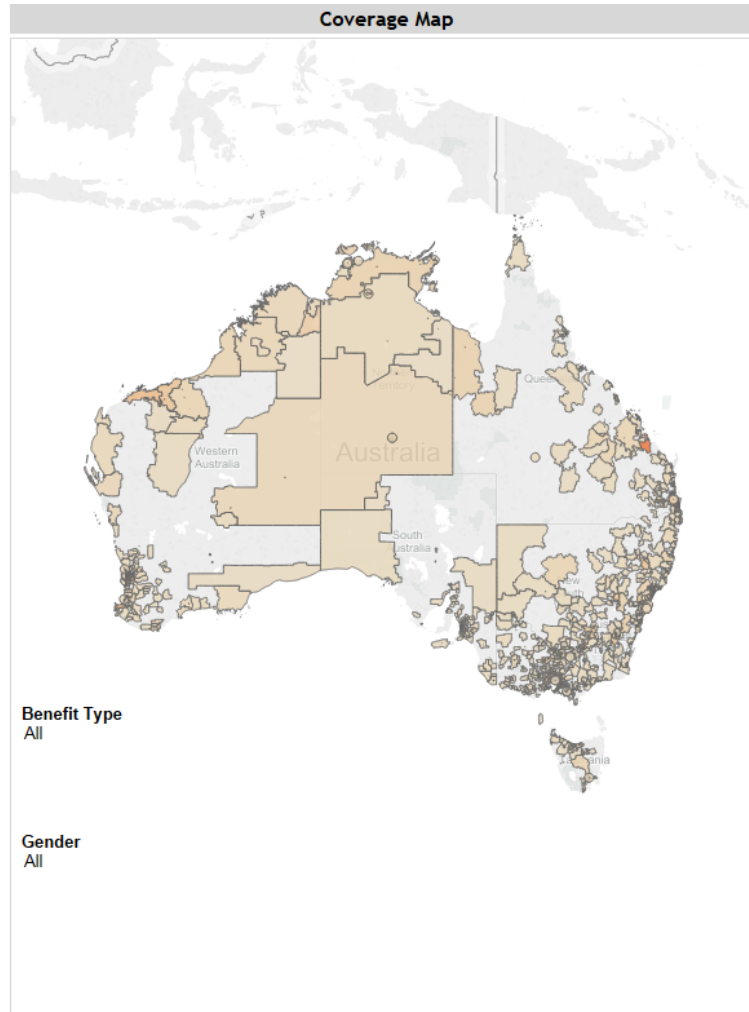


Gender			
Gender	Death	TPD	IP
Female	86.96%	94.68%	59.90%
Male	88.59%	94.15%	76.85%
Unknown	86.13%	91.18%	56.62%

Income			
Salary Group	Death	TPD	IP
< 50k	85.12%	92.19%	57.43%
50k to 100k	95.07%	98.99%	98.53%
100k to 150k	92.51%	99.35%	99.35%
150k to 200k	91.89%	97.30%	100.00%
200k to 500k	100.00%	100.00%	100.00%
> 500k	100.00%	100.00%	100.00%

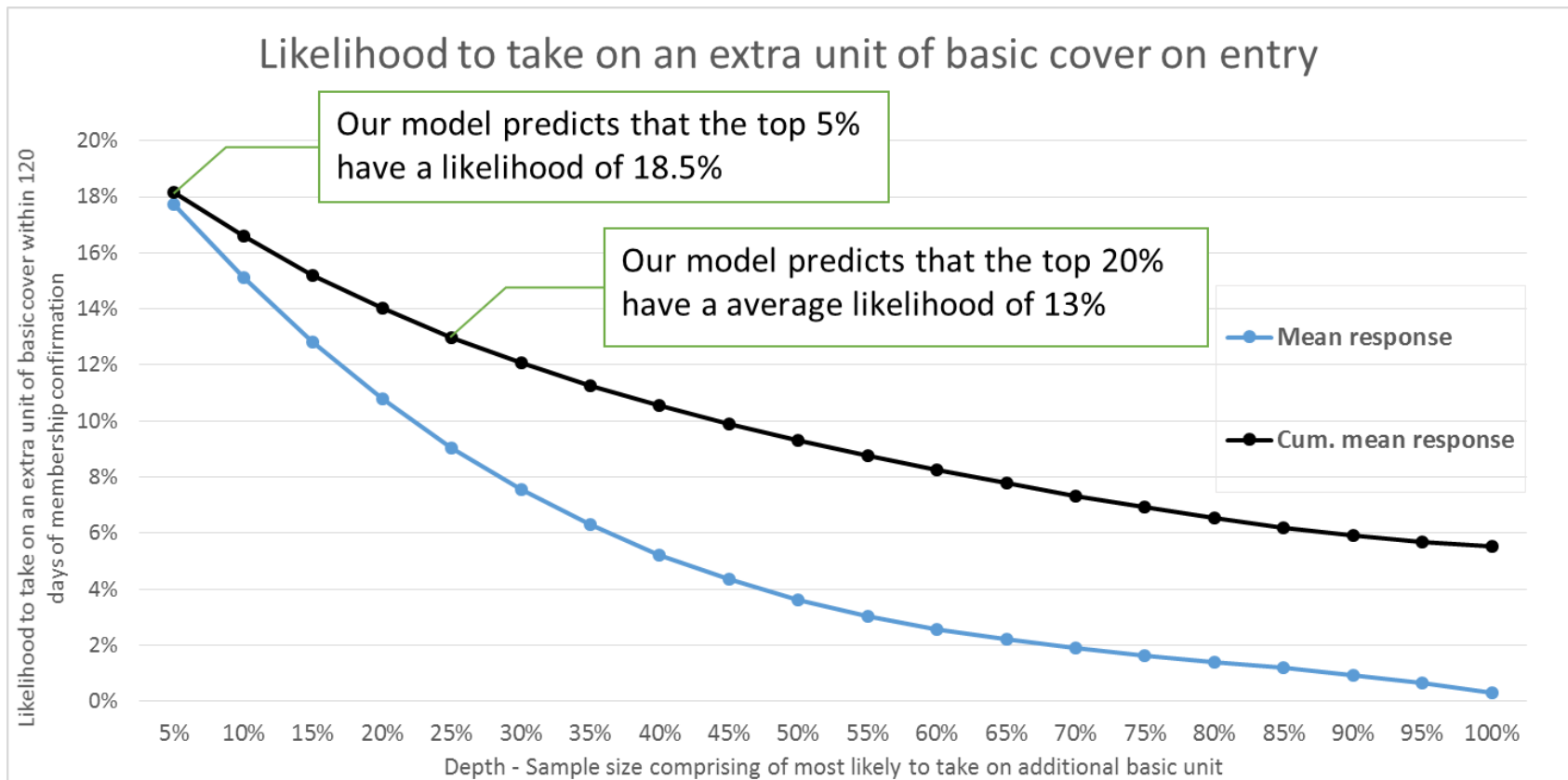
Age			
Age Group	Death	TPD	IP
21-25	93.94%	96.40%	56.39%
26-30	80.14%	83.11%	62.46%
31-35	92.06%	95.89%	72.28%
36-40	87.72%	96.30%	73.00%
41-45	85.45%	96.28%	72.21%
46-50	87.56%	97.53%	71.08%
51-55	87.81%	97.54%	74.16%
56-60	88.31%	96.66%	77.46%
61-65	93.68%	99.26%	82.16%

State			
State	Death	TPD	IP
ACT	90.63%	93.13%	61.25%
NSW	86.26%	93.77%	68.60%
NT	87.55%	92.77%	66.27%
QLD	86.60%	92.99%	69.61%
SA	88.97%	94.48%	68.03%
TAS	92.55%	96.81%	69.15%
VIC	88.14%	94.92%	68.55%
WA	89.46%	93.81%	70.11%

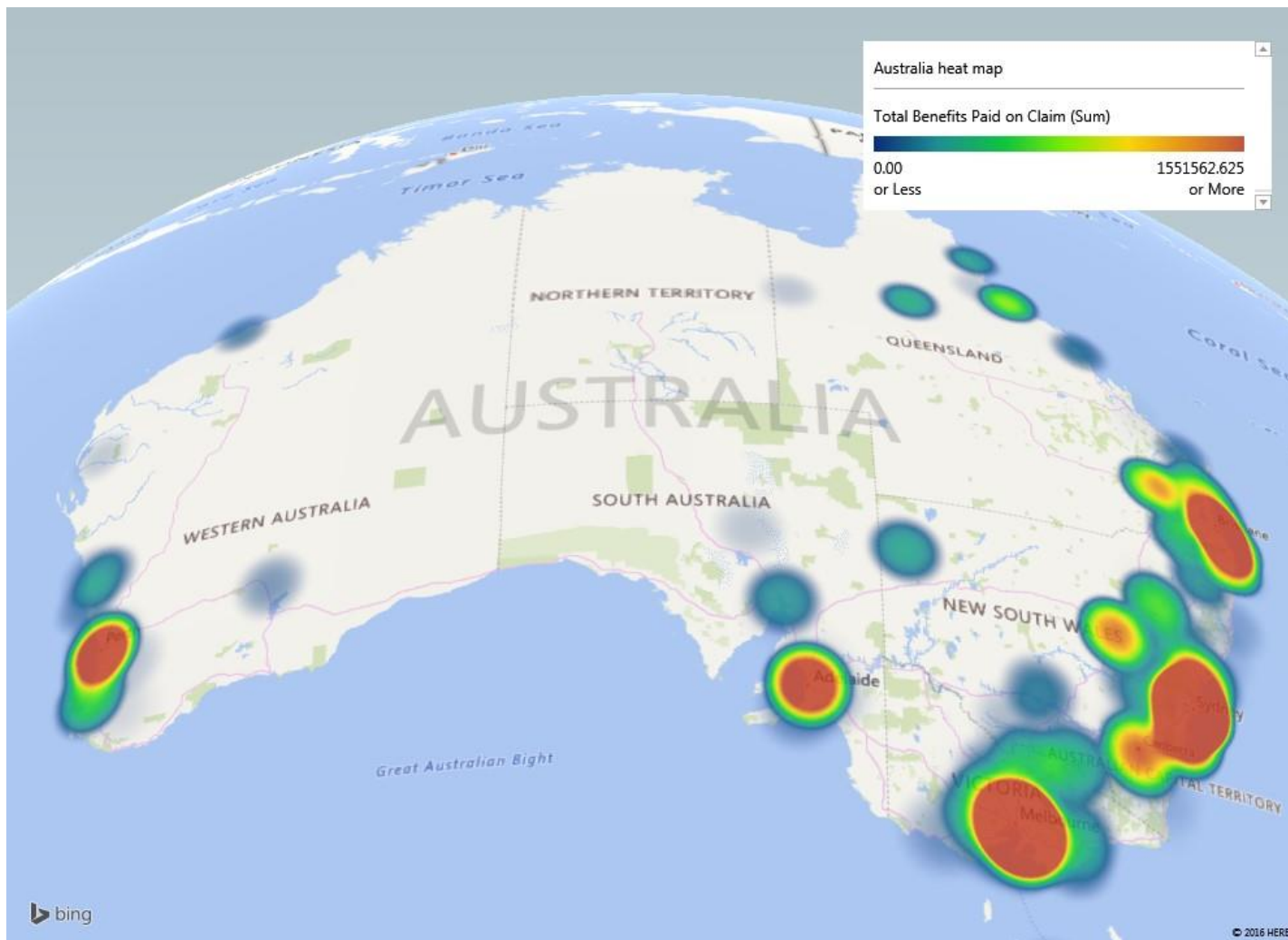


Illustrative example: map of underinsurance by area and factors

Voluntary Propensity & targeting



Claims analytics visualisation



Panel Discussion and Q & A