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# Oops Don't do it Again

## *Learning from the Mistakes of the Past*

Joan Coverson



## Oops Don't Do it Again!

Not a Britney Spears tribute!

Hard lessons learnt from reinsuring LTC since the start

- Pricing
- Reviewability
- Underwriting and Claims

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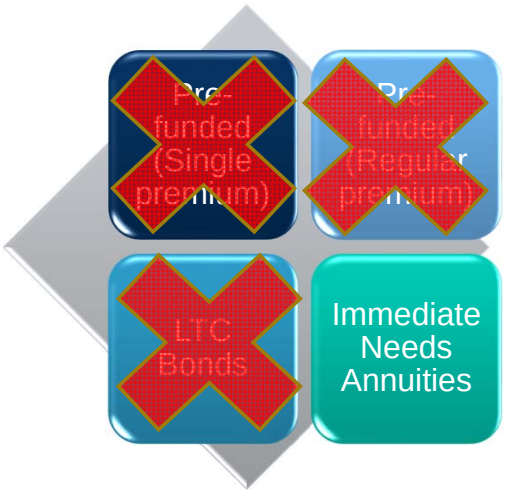
## History – Product Types (1990's)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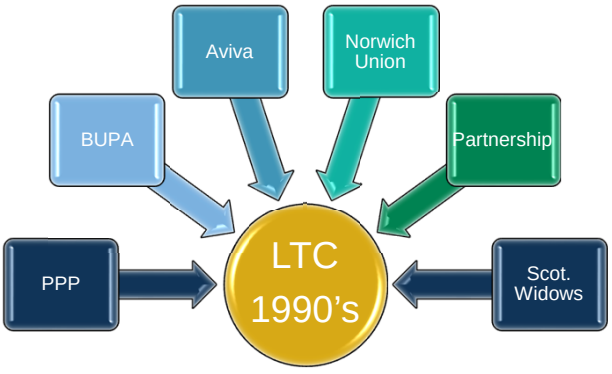
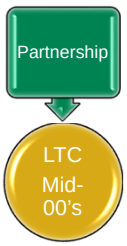
## History of Prefunded Products





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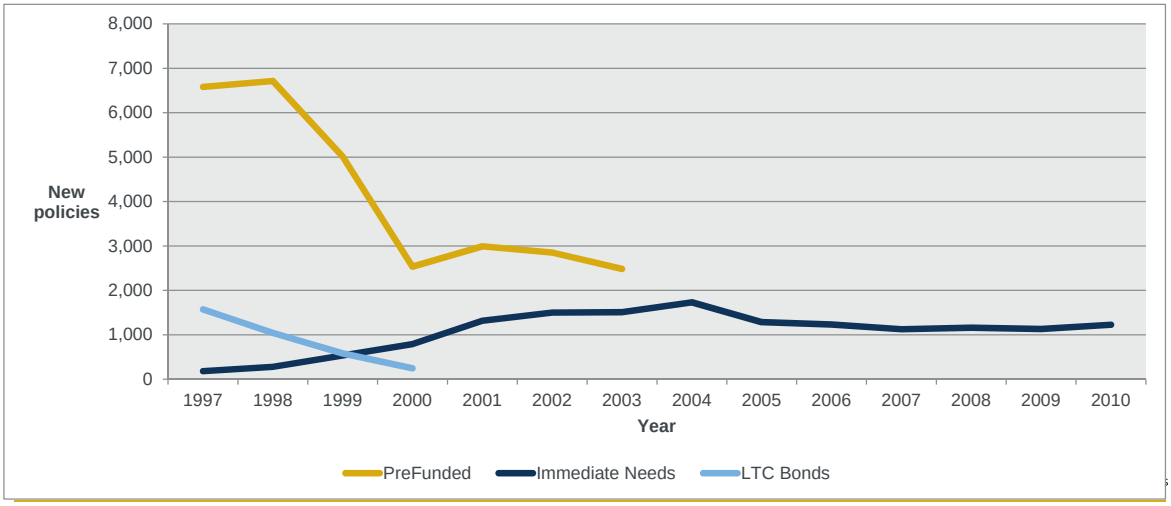
# Long Term Care New Business






Source: ABI



# Market Coverage Y/E 2013

| Type | No. of Policies |
|---|---|
| Prefunded – Single Premium + LTC Bonds | 16,111 |
| Prefunded – Regular Premium | 10,729 |
| Immediate & Deferred Needs Annuities | 4,980 |

*Source : ABI*

**Population 65+ : 11.1m**

*Source : ONS 2013 Population Estimate*

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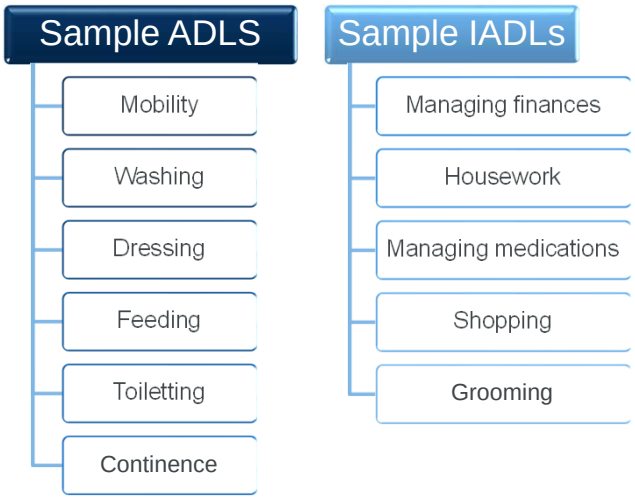
## Prefunded Plans – Typical Structure

- Benefit payable on 2 or 3 ADLs, or cognitive impairment



## ADLs and IADLs



## Prefunded Plans – Typical Structure

- Benefit payable on 2 or 3 ADLs, or Cognitive impairment
- Deferred period (typically 13 weeks)
- Cash (fixed benefit) or care
- Exclusions
- Lifetime benefits or pool of money
- Single or regular premiums
- Reviewable premiums / reviewable benefit

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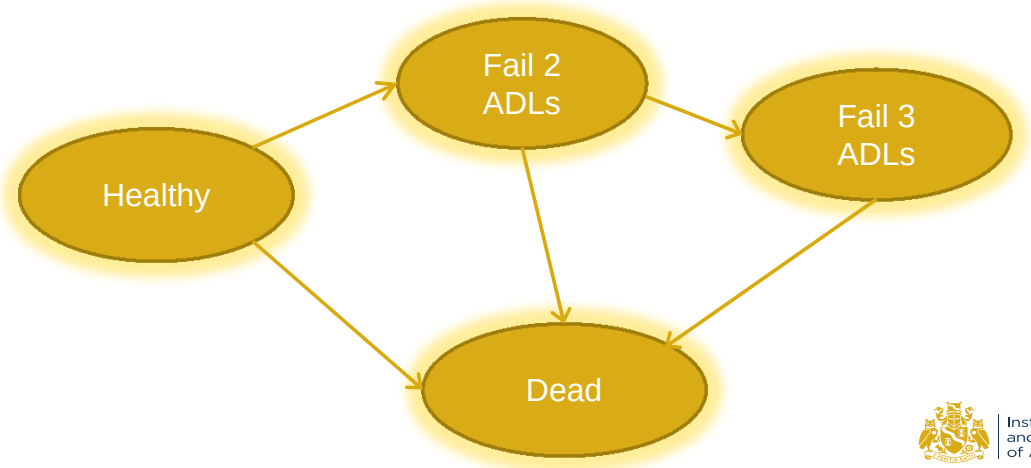
## Pricing / Multi-State Model - Theory

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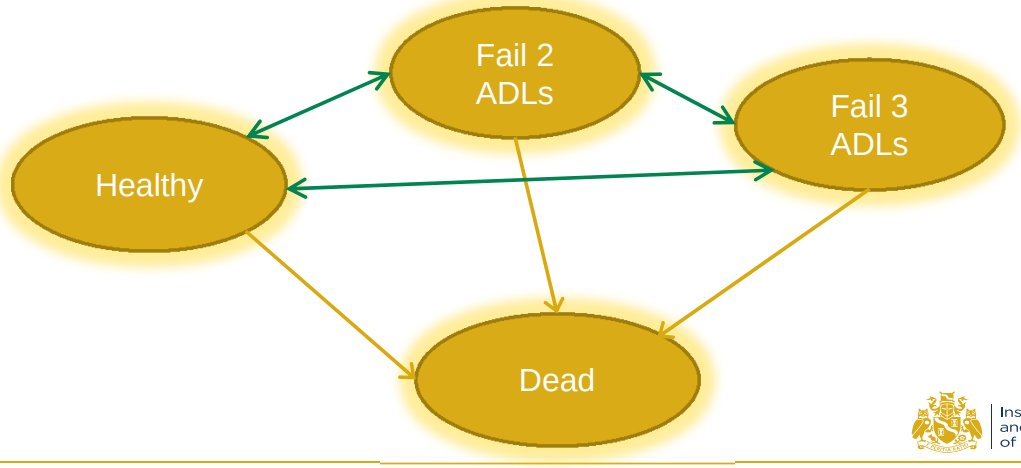
## Pricing - Multi-State Model - Theory

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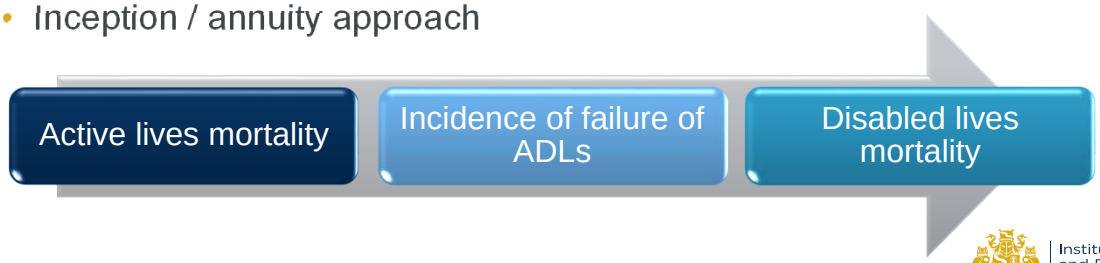
## Pricing - Practice

- Determining true transition rates challenging!
- Movement from 2 ADLs to 3 ADLs rapid
- Very few people recover
- Inception / annuity approach

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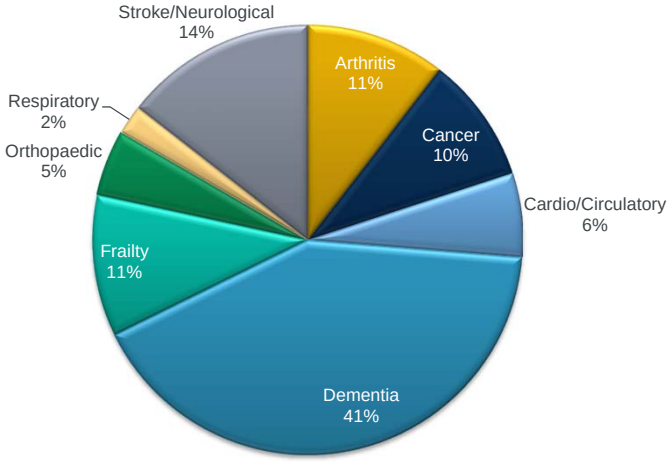
# LTC Claims by Condition




*Source : Gen Re data*

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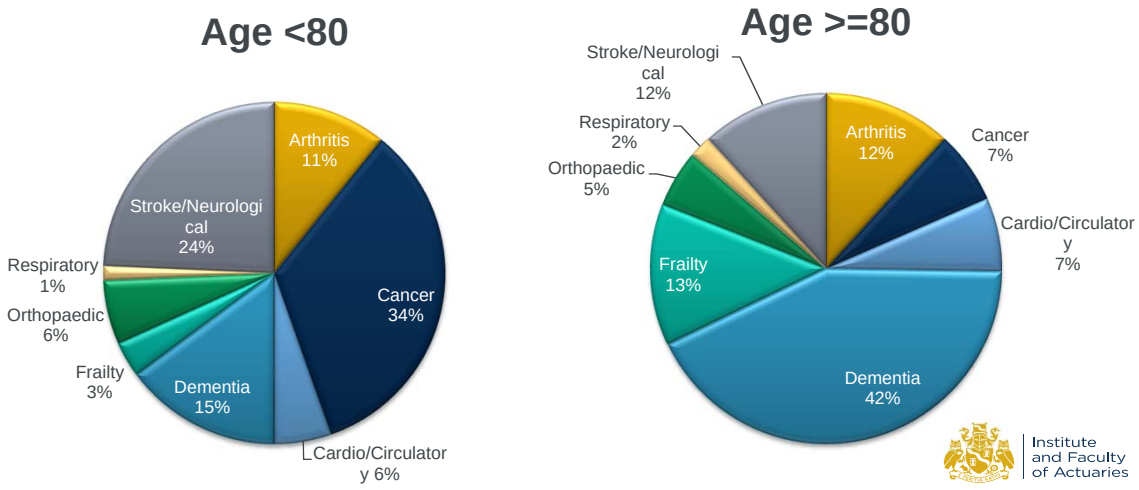
# LTC Claims by Condition by Age

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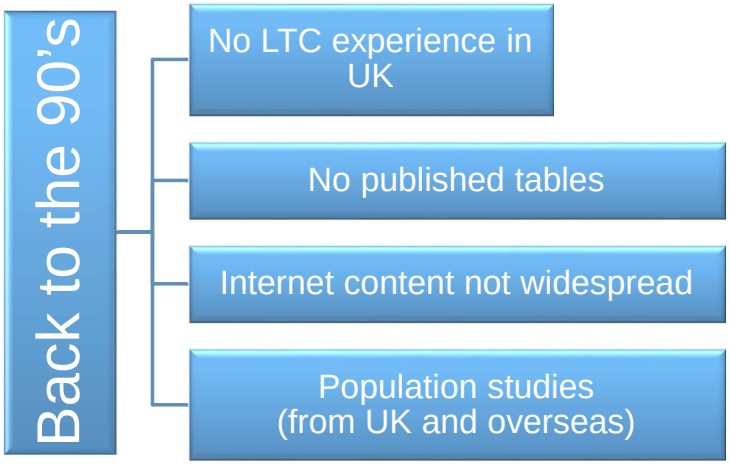
## Pricing in the 90s

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## Population Data for Incidence Rates

- Finding relevant incidence rates
  - Prevalence rates more common
  - Self-reporting
  - Older age data
- ADLs
  - Mapping to population data
- Cognitive impairment
  - Data specific to insured definition
- Overseas data – less relevant to UK

OPCS Prevalence of Disability among Adults 1985

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# OPCS Disability Scores

OPCS Prevalence of Disability among Adults 1985

| Categories |
|---|
| Locomotion |
| Reaching/Stretching |
| Dexterity |
| Personal care |
| Continence |
| Seeing |
| Hearing |
| Communication |
| Behaviour |
| Intellectual functioning |
| Consciousness |

11 categories → Score in each → Disability score = combine highest 3

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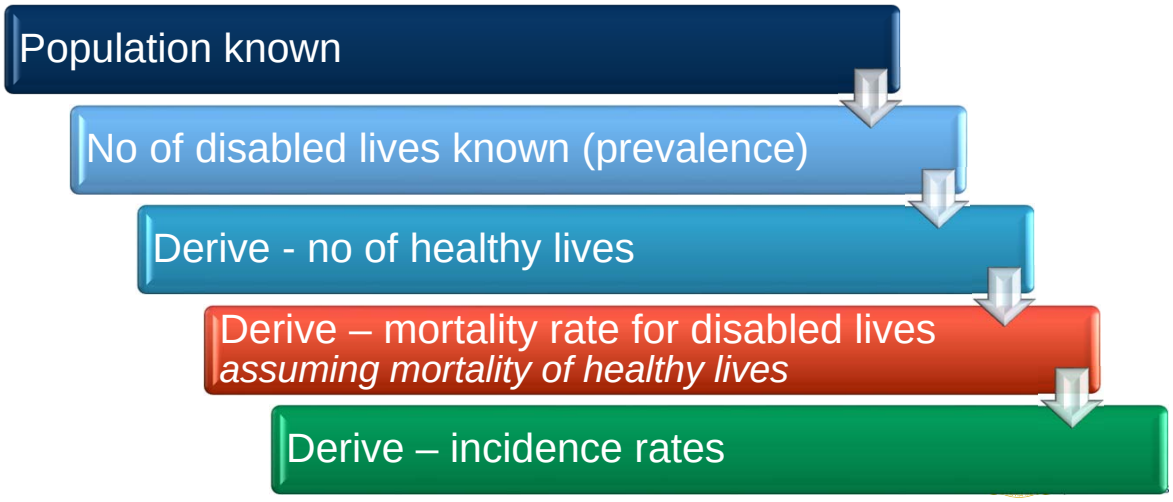
# Deriving Incidence Rates from Prevalence

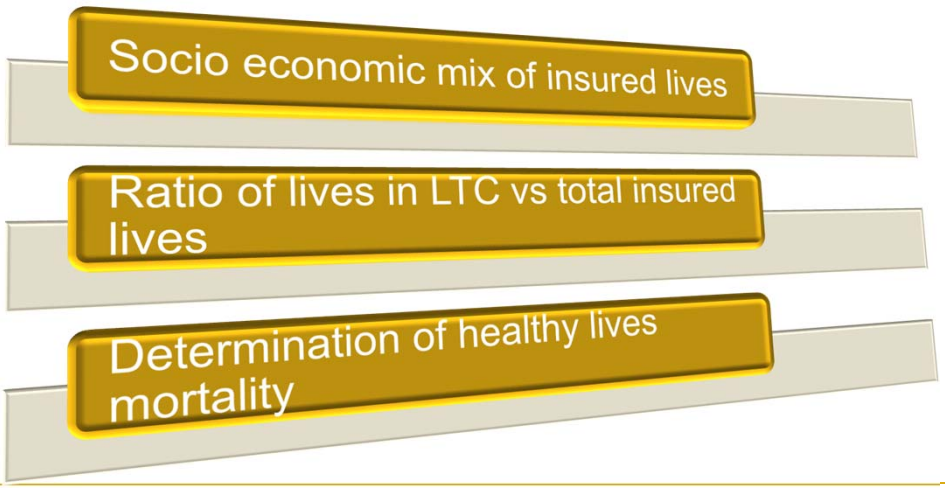
- Population known
- No of disabled lives known (prevalence)
- Derive - no of healthy lives
- Derive – mortality rate for disabled lives
- Derive – incidence rates

## Deriving Incidence Rates from Prevalence






## Incidence Issues

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## Incidence
### *Socio-Economic Bias*

- Typical customer = higher socio-economic class
  - Financially aware
  - Can afford LTC
- Indirect anti-selection
  - Delay purchase as long as possible
    - Eg memory or personal care problems
  - Admit themselves sooner
- Early underwriting weak

**Unexpected early claims**

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## Terminations *(Disabled mortality)*

- Mortality of disabled lives in population vs. LTC terminations
  - Originally assumed type of disability biggest factor, not social class
  - Higher class can afford better care homes
    - Higher longevity
  - People improved with regular medication and care
  - Dementia patients lived longer than we thought

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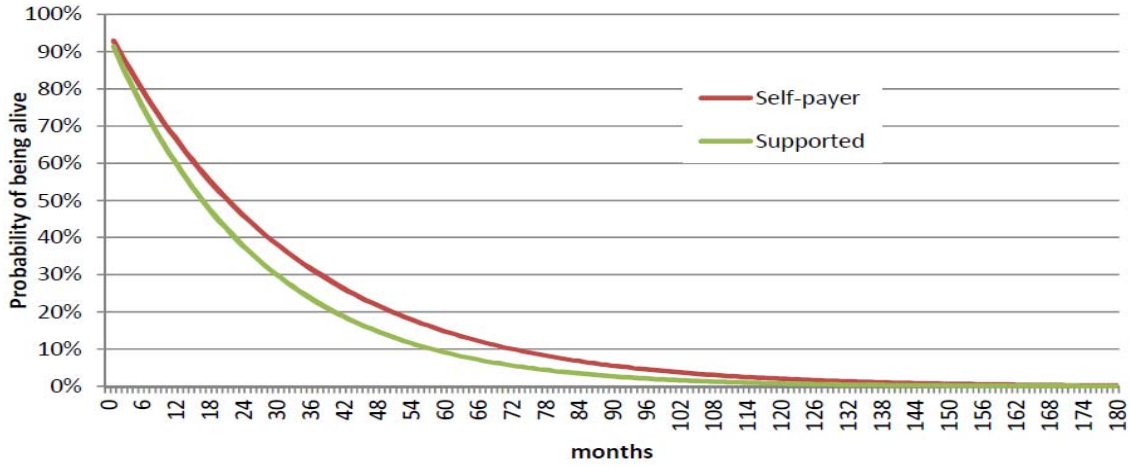
# Life Expectancy of Care Home Residents



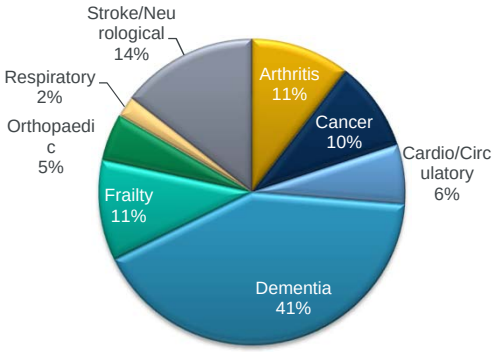



Source : Forder, J and Fernandez, J-L (2011) *Length of stay in care homes*, Report commissioned by Bupa Care Services, PSSRU Discussion Paper 2769, Canterbury: PSSRU



# Termination Issues

- Assumed some would recover
  - But mostly they didn't
- Didn't allow for improvements in disabled lives mortality




*Source : Gen Re data*

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# Active Life Mortality

- Important where there is reserve build up
  - Level premiums
  - Single premium
- Mortality improvements
  - Higher social class = better improvements
- LTC mortality improvements even greater
  - Continual pool of “Select”ish lives
  - More lives left to claim = more incidences

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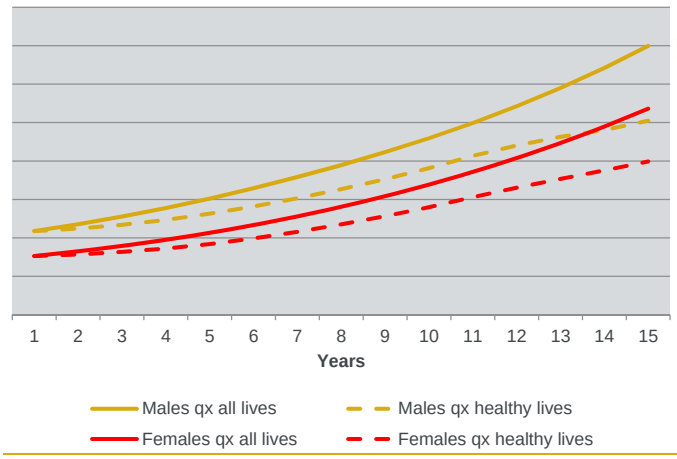
# Effect of LTC on healthy mortality Age 65, Commencement 1995




Average 2.2% p.a

Average 1.6% p.a

Healthy lfe improvements:
+50% males
+100% female

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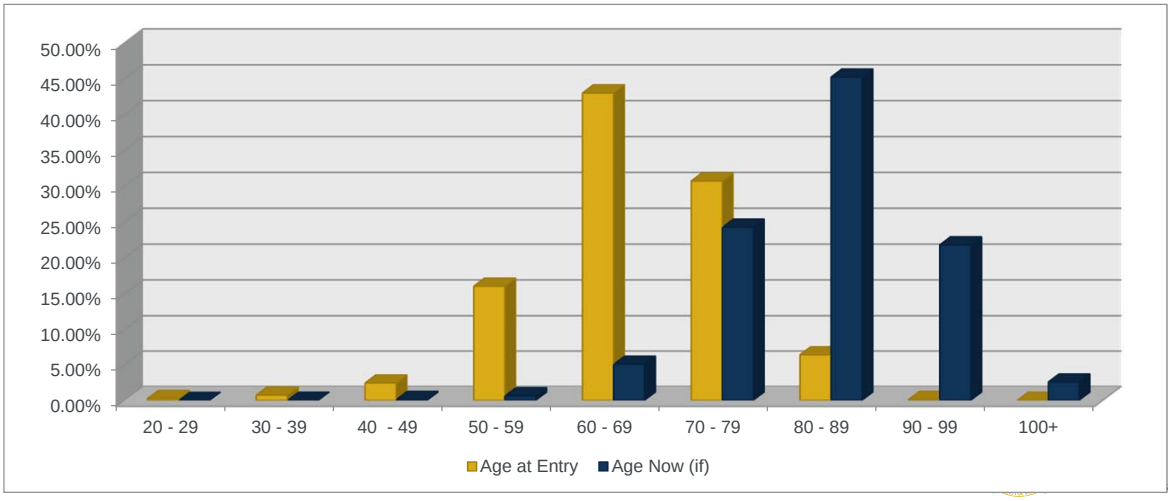
# Pricing – A General Issue

## *Experience monitoring takes years*




14 May 2015

*Source : Gen Re data*

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# Reviewability

- Sounds like a good idea
- Practicalities
  - Expectations at outset
  - Older people
    - Did they understand
    - Are they capable of making a decision?
    - Affordability
  - Big reviews may result in anti-selective lapses
  - Will brokers ever sell LTC again?

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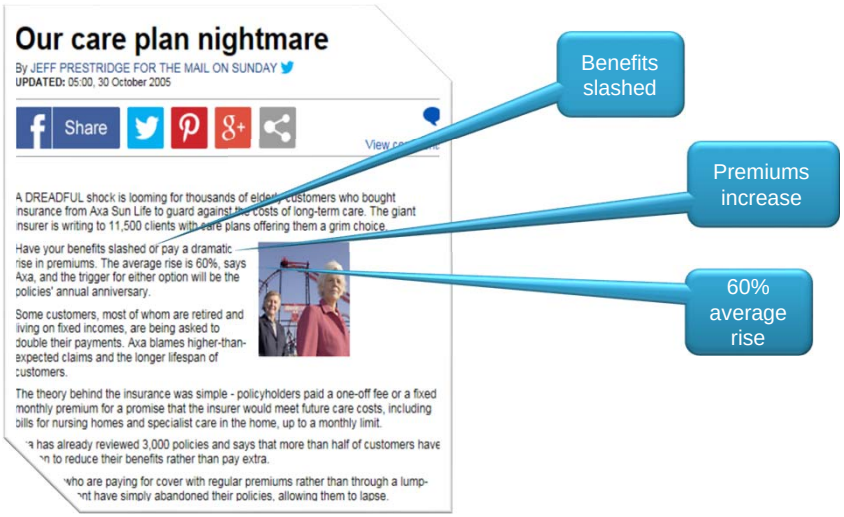
# The Reality of Reviews

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# Underwriting

| Life Assurance | LTC |
|---|---|
| • Medical History<br>• Smoking, avocation, occupation etc<br>• GPR, paramed, MER etc | • Medical history<br>• Cognitive ability<br>• Functional ability<br>• Course of decline as well as severity<br>• GP may not know current state<br>• Multiple conditions |

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# Underwriting - Frailty

## *Risk Factors*

- Age
- Co-morbidity
- Nutrition
- Social isolation
- Income
- Cognitive state
- Ability to undertake IADLs
- Physical inactivity
- Education
- Vision

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# Underwriting Issues in the 90's

- Naivety
  - Life underwriting with a few tweeks
- Inadequate tests for cognitive ability
- Additional loadings insufficient
  - Co-morbidity
  - Effects of ageing
- "Good for their age"


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## Claims Management Issues

- Claims assessors often open and helpful
  - Policyholders elderly / vulnerable
  - Empathy
- Lack of objective criteria for testing ADL ability
- Lack of suitable tests for cognitive impairment
- Policy exclusions hard to apply

**Claims > Pricing**

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## Learning from the Past

Pricing

Use insured experience
Be realistic about improvements and potential for recovery

Underwriting

Tailored to LTC triggers

Claims

Philosophy tied to what was priced for

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# Questions

# Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

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