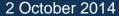


Medically underwritten bulk annuities

Michael Anderson Hymans Robertson

Andy Morley
Partnership Assurance



Concentration of risk

- Typically, 50% of a DB pension scheme's liability is made up from only 10% of the members. This dynamic creates a significant concentration of risk:
 - the experience of this small group of members will drive pension scheme's finances
 - in particular, significant risk that they live longer than expected
- A medically underwritten buy-in ("an enhanced buy-in") (a bulk annuity policy, with premium that takes account of the health of your members) is a new way of tackling this concentration of risk

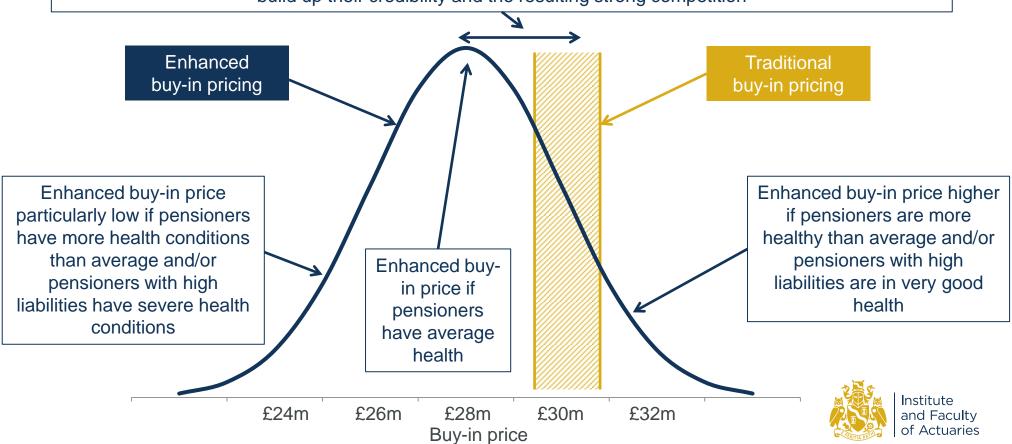


How is an enhanced buy-in different from a traditional buy-in?

Enhanced buy-in Traditional buy-in £2m **Traditional Enhanced** buy-in buy-in £30m £28m Health information is collected, which insurers fully No health information is collected, so insurers reflect to refine their pricing assume the health of the pensioners is average

Enhanced buy-in pricing

For the time being, the price of an enhanced buy-in is likely to be lower than the price of a tradition buy-in, even if pensioners have average health, due to the strong appetite from the enhanced buy-in providers to build up their credibility and the resulting strong competition



What are the benefits of enhanced buy-ins

- Low cost of investigating whether beneficial for you
 - insurance company bears the cost of gathering health information as part of quotation process
- Our experience is relatively high member response rates in excess of 60% of pensioners providing health information
- The fact that it's a new market, means there is a significant early mover advantage during the first half of 2014

Enhanced buy-in prices are currently close to Technical Provisions and at least 5% cheaper than a traditional buy-in



Enhanced buy-in providers

Provider	Background	Buy-in deals to date
partnership seeing retirement differently	 UK's second largest provider of enhanced annuities to DC members (£1,100m of individual annuity revenue for FY 2013) Entered bulk annuity market for DB schemes in 2012 	20 enhanced buy-insCovering c£178m of liabilities
justretirement	 UK's largest provider of enhanced annuities to DC members (£1,200m of individual annuity revenue for FY 2013/14) Entered bulk annuity market for DB schemes in 2013 	6 enhanced buy-insCovering c£79m of liabilities
Legal &\ General	 Multi-line insurer and longest established insurer in traditional buy-in market – covering all transaction sizes Experience of medically underwritten annuities for DC members and now quoting on enhanced buy-ins 	 No enhanced buy-ins 73 buy-ins covering £3.9bn of liabilities in year to June 2014
AVIVA	 Multi-line insurer and established insurer in traditional buy-in market – currently focussing on sub-£50m buy-ins Experience of medically underwritten annuities for DC members and now quoting on enhanced buy-ins 	 No enhanced buy-ins 68 buy-ins covering £529m of liabilities in year to June 2014 Institute and Faculty of Actuaries

How health information is obtained

Letter to pensioners

Obtaining more detail on any health conditions

Information shared with insurers

Underwriting

- 15 short questions in relation to their health / lifestyle;
- permission for a 15 minute telephone conversation to discuss this matter in more detail; and
- permission to obtain a GP report from the member's doctor.

For members who have given their permission:

- telephone pensioners who have high liabilities and/or whose responses indicate a health condition;
- further reassure pensioners on the background; and
- GP reports obtained.
- The third party who has gathered all of the medical information then shares this in a consistent format with the insurance companies who are being asked to provide a quotation.
- Insurance company providers then use the health information obtained to establish their specialist view of each pensioner's life expectancy and determine their buy-in quotation accordingly



Medical underwriting – the benefits

Medically underwritten bulk annuity



Traditional bulk annuity (buy-in or buy-out)



Members' actual medical and lifestyle features captured in your premium

"...medically underwriting a BPA can offer schemes savings of about 10% – much more in certain cases – relative to the cost of conventional underwriting"

'A healthier way to de-risk' Pensions Institute, February 2013

By getting detail on members' actual health we can be more confident in how long they will live



We don't only rely on proxies for health status e.g. postcode and pension size

Health and lifestyle data means there is no simplification and so no 'cross subsidies' between schemes



Conservatism in traditional longevity pricing leads to an asymmetric distribution of outcomes following medical underwriting



Increased data means increased confidence.

Increased confidence means we're less conservative

Less conservative means a lower premium



Traditional approaches to assessing longevity treat members with large benefit entitlements as 'super healthy'. We use medical/lifestyle data to tailor the price.



New opportunities to de-risk

1. Complete buy-in or buyout

- √ Targets small/medium size plans
- On average schemes better off
- Targeted member underwriting
- Can be applied to whole schemes

2. Top Slicing

- Traditional pricing prudent
- Removes concentration risk
- ✓ Potential for large premium reduction
- Can work for a £1bn or £20m scheme

3. Selective risk removal

- Medical underwriting is truly individualtrustees can "cherry pick"
- Get quotations for largest lives
- Only insure those showing the best result of cost vs risk reduction

In December 2013, we won the first whole of market transaction following a joint underwriting process

The £12 million, 45 member deal with BACB insured all the pensioner members of the scheme

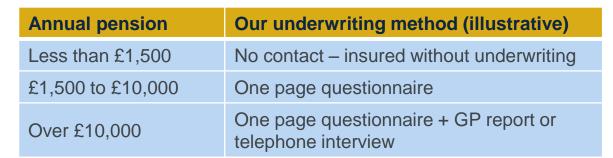
In September 2013, we transacted a £22 million top-slicing deal with a UK services industry company

The 17 members insured represented 50% of the scheme liability

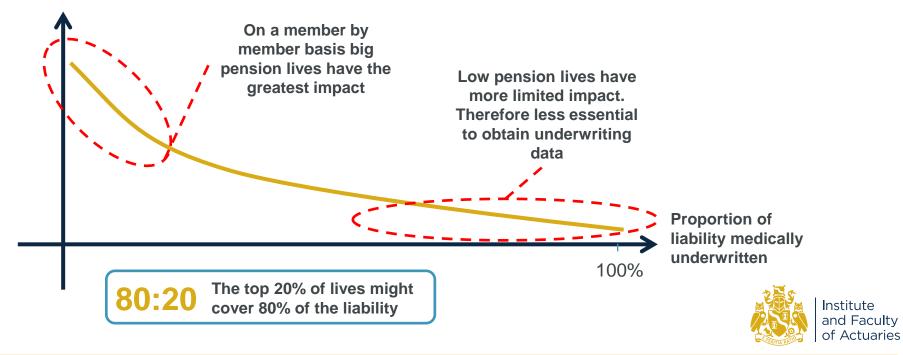
Suitable for pension schemes of all sizes, use when no broad bulk annuity exercise is intended in the near future – avoids issue of impacting future bulk exercises



Underwriting – concentrating on where it matters



Impact of medical underwriting



Mortality curves are tailored to specific medical and lifestyle features

Factors which influence a premium adjustment

There are a wide range of factors which feed into an individual member's premium adjustment following medical underwriting.

Type – the type of health and / or lifestyle factors, either standalone or in combination

Severity – the level of the impairment will have a bearing

Timing – a recent condition will have a greater impact

Treatment – the approach and success of treatment

Member specific factors are also an influence – age, pension size, pension increases and dependant status.

A member's premium adjustment will only be known with certainty once they have completed a medical underwriting process



Asymmetrical distribution of outcomes

The table below sets out ten illustrative medical underwriting illustrations for our example member, Tony. Whilst these illustrations are generic (and so in no way tailored to a specific scheme) they do reflect in full our approach to assessing longevity.

	Tony
Sex	Male
Age	65
Annual pension	£30k
Increases	RPI (min 0%, max 5%)
Dependant	3 years younger 50% benefit



Tony Premium adjustment versus a non-underwritten premium(1) Mild Severe Smoker -1% -4% -19% 2 Heart attack -4% 3 Cancer -38% -1% Stroke 0% 4 -24% High blood pressure 5 -1% -4% Diabetes -22% 6 -3% Liver disease -9% -25% **Angina** -2% -17% Lung disease -8% -29% 10 Healthy

Health and lifestyle conditions present in combination would usually warrant a larger premium reduction

These examples are simplified and only for illustration purposes. In reality the impact of medically underwriting could fall outside the ranges provided above

A 'mild' lung disease could involve asthma with recurrent chest infections and occasional steroids

A 'severe' cancer could be a recent colon cancer diagnosis with ongoing treatment



One of our recent transactions

Date	March 2014	
Size	£30 million, 440 members	
Туре	Full scheme de-risking	
Competition	One other insurer	
Background	 Industrial manufacturer based in North and Midlands. The works section of a scheme had a modest surplus on a strong technical provisions basis. The trustees wanted to take advantage of the funding position and lock into favourable terms quickly. The benefit basis had a couple of unusual features including a SERPs offset 	
Process	 We analysed the scheme data and benefits and were confident of beating the other insurer and reaching the target price regardless of underwriting outcome Mindful of the trustees desire to lock into terms quickly, we agreed an underwriting process for 1 in 10 members We subsequently delivered a premium reduction based on the underwriting data 	
Outcome	The trustees secured the benefits at their target price with Partnership without the need for a contribution from the employer	

Institute and Faculty of Actuaries

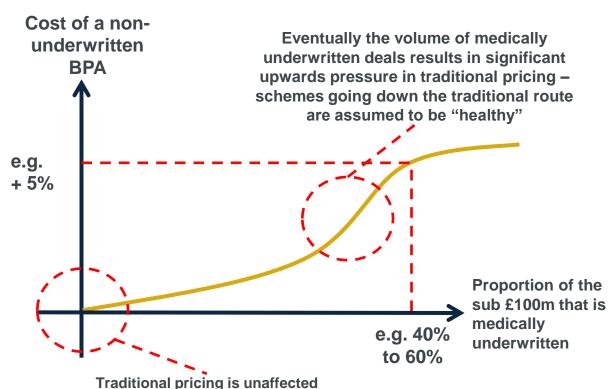
Medical underwriting will soon be mainstream

Size	£200 million, 100 members
Туре	Top-slicing
Competition	Three insurers
Background	The trustees and employer are working collaboratively to take advantage of the top-slicing proposition to derisk the 100 biggest liabilities. This transaction is expected to be placed in 2014.

Size	£20 million, 180 members
Туре	PPF Plus
Competition	One insurer
Background	Insolvent house builder in the north of England, currently 105% funded on s179 basis. An expectation that medical underwriting can recover benefits comfortably in excess of PPF level



Attractiveness of medical underwriting will increase because traditional pricing will increase



We anticipate the transition of bulk annuities to medical underwriting will be faster than the retail market, due to:

- Already established in retail market - no proof of concept needed
- **Defined benefit pension** schemes are sophisticated **buyers**
- Access to employee benefit consultants

by a small incidence of Institute underwritten deals and Faculty of Actuaries

For illustration purposes only. Percentages are for ease of communication and do not represent actual analysis

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 presenters.

