

Healthcare reserving survey – initial results

Sheila Anstead, Scor Global Life Reinsurance UK
Sue Elliott, Watson Wyatt Limited

IoA Health Conference
11 May 2007

1

Agenda for today

- Healthcare reserving working party - background
- Healthcare reserving survey
- Initial results
- Future work
- Q&A

Healthcare reserving working party - members

- Sheila Anstead (chairperson)
- Jo Alder
- Andy Chan
- Chris Coote
- Sue Elliott (acting as a consultant to the WP)
- Neil Hilary

Note: the FSA has agreed to providing a person
(Robert Kipling) to consult to the working party where
specific regulatory issues arise

Healthcare reserving working party – scope

- To study the reserving practices of different firms with reference to the health & care insurance products – namely critical illness (stand alone and accelerated), income protection, private medical insurance (including medical expenses and hospital cash) – with a view to determine good business practice in health & care reserving. Long-term care will be included among the products studied only if it is an interlocking product.
- Territory will be UK only (at least initially) and it will cover both individual and group risk.
- The working party will carry out some initial work to prepare and send out questionnaires to Actuarial Function Holders/other actuaries in firms providing the products listed above.

The Actuarial Profession
making financial sense of the future

Healthcare reserving working party - issues to be considered include ...

- The role of ICAs / implications for ICAs in reserving in relation to preparing for Solvency II
- PS06/14 implications
- Reserving methodology, for example deterministic versus stochastic
- The impact of options and guarantees by product (for example, Waiver of Premiums, buy-back for accelerated CI)
- Allowance for data issues
- FSA regulatory oversight (for example reserving and capital).

The Actuarial Profession
making financial sense of the future

Healthcare reserving working party - organisation (owner/reviewer)

- PMI/Cash plans – Jo Alder/Chris Coote
- Critical illness – Sheila Anstead/Andy Chan
- Income protection – Chris Coote/Sue Elliott

The Actuarial Profession
making financial sense of the future

Healthcare reserving survey

- objective

- On behalf of the Social Policy Board and in liaison with the Life Board, the survey is being conducted by the Healthcare reserving working party under the Health & Care Committee
- To obtain a better view of the methods used for reserving of healthcare insurance products (CI, IP and PMI/Cash Plans) in the UK
- With this information on board, the working party hopes to produce a best practice note, in consultation with the two Boards mentioned above and representatives of the FSA and BAS.

The Actuarial Profession
making financial sense of the future

Outline of the survey (main section headings)

- Type of business and general reserving approach
- Experience investigations
- Mortality (for accelerated CI only)
- Morbidity
- PS06/14 implications
- Expenses
- Options (for CI only)
- Additional reserves (eg IBNR)
- ICA scenarios for stress testing

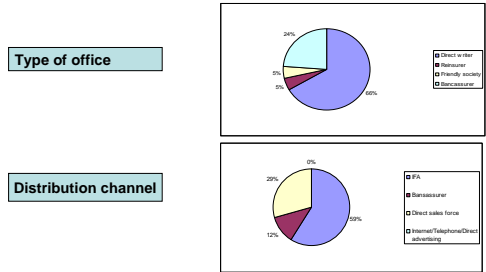
The Actuarial Profession
making financial sense of the future

Initial results

- Number of respondents (@ 3 May 2007):
 - Critical illness = 21
 - Income protection = 22
- Draft results
- High level
- More analysis to follow (pending receipt of outstanding survey responses)

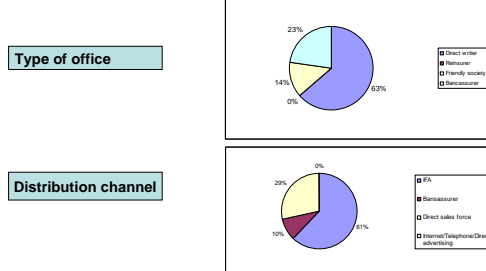
The Actuarial Profession
making financial sense of the future

Type of business and general reserving approach - CI



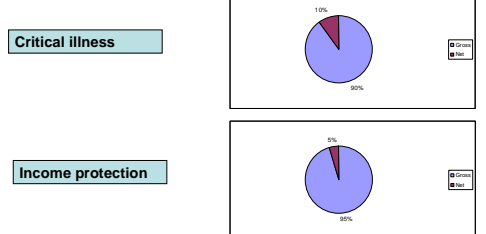
The Actuarial Profession
making financial sense of the future

Type of business and general reserving approach - IP



The Actuarial Profession
making financial sense of the future

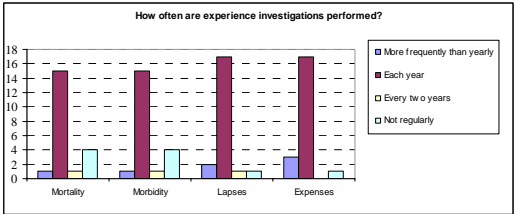
Type of business and general reserving approach – gross premium vs net premium



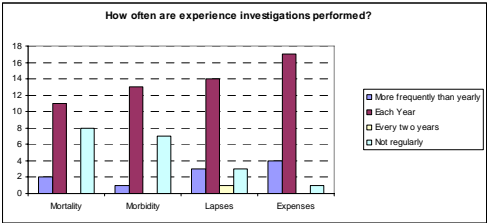
Note: smaller companies use an approximation (not included in the above results)

The Actuarial Profession
making financial sense of the future

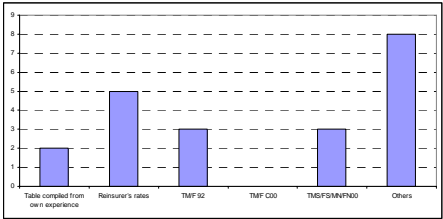
Experience investigations – frequency for CI



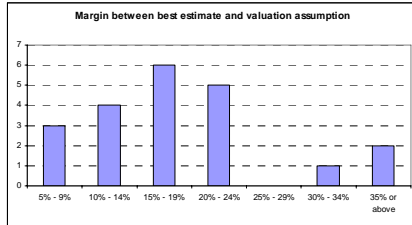
Experience investigations – frequency for IP



Mortality (for accelerated CI) – base table



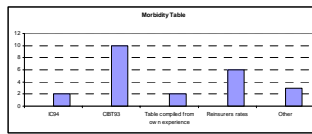
Mortality (for accelerated CI) - margin between best estimate and valuation assumptions



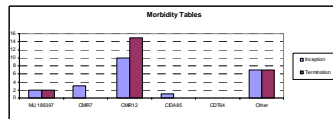
The Actuarial Profession
making financial sense of the future

Morbidity – base table

Critical illness

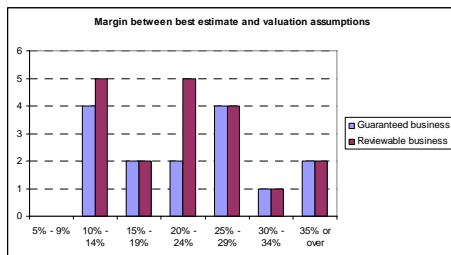


Income protection



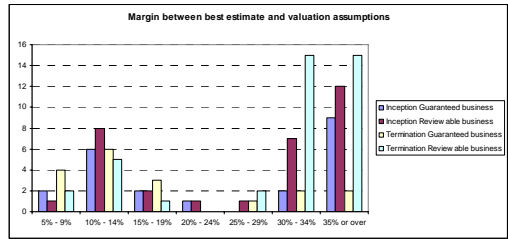
The Actuarial Profession
making financial sense of the future

Morbidity margin between best estimate and valuation assumptions - CI



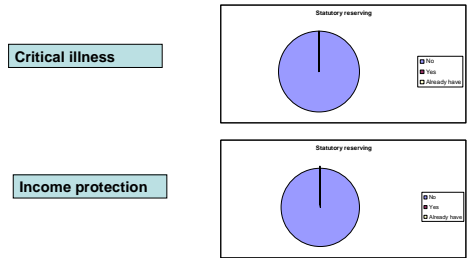
The Actuarial Profession
making financial sense of the future

Morbidity margin between best estimate and valuation assumptions - IP



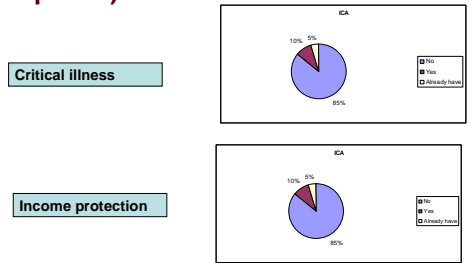
The Actuarial Profession
making financial sense of the future

Morbidity – stochastic models (statutory purposes)



The Actuarial Profession
making financial sense of the future

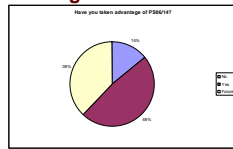
Morbidity – stochastic models (ICA purposes)



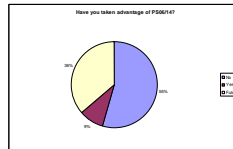
The Actuarial Profession
making financial sense of the future

PS06/14 implications – have you taken advantage of the relaxations for lapses and negative reserves?

Critical illness



Income protection



The Actuarial Profession
making financial sense of the future

Expenses – average assumptions

Type of expense	CI	Individual IP
Pound per policy	25.22	26.55
Investment related (% of reserves)	0.14%	0.11%
Claims related (% of in force claims)	n/a	9.5%
Claims related (pound per claim)	n/a	389.22

The Actuarial Profession
making financial sense of the future

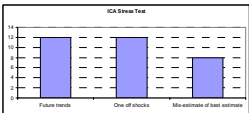
Additional reserves – percentage of respondents that said yes

Reserve	CI (%)	IP (%)
IBNR	62	59
Unearned premium reserve	24	27
Notified claims awaiting authorisation	29	n/a
Notified claims awaiting authorisation - with the DP	n/a	41
Notified claims awaiting authorisation - beyond the DP	n/a	41
Disputed claims	n/a	45
Data quality	24	18
Premium deficiency	14	5
TCF considerations	5	5
Guaranteed insurability options	19	14
Substandard extra risk	62	32
Reinsurance credit risk	67	45

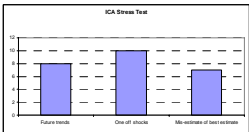
The Actuarial Profession
making financial sense of the future

ICA scenarios for stress testing

Critical illness



Income protection



The Actuarial Profession
making financial sense of the future

Future work

- Chase outstanding survey responses
- Complete analysis of results for all product lines (ie CI, IP and PMI)
- Article in "The Actuary" with high level results
- Presentation at Life Convention in November
- Consult with FSA and BAS regarding updating best practice notes

The Actuarial Profession
making financial sense of the future

Questions and answers

The Actuarial Profession
making financial sense of the future
