

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2014 examinations

Subject ST1 – Health and Care Specialist Technical

Introduction

The Examiners' Report is written by the Principal Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

D C Bowie
Chairman of the Board of Examiners

July 2014

General comments on Subject ST1

Candidates who approached the questions, especially the more substantial elements of each question, in a methodical and detailed manner were far more likely to satisfy the examiners and receive a pass in the subject. Candidates will gain few marks if they do not address the question asked. The mark allocation for each question part gives an indication of the relative length of answer or number of points to be made to gain full marks.

It is often helpful to use subheadings when answering long part questions.

Comments on the April 2014 paper

Overall, the paper was of a fairly standard level and well-prepared candidates scored well across most of the paper. As usual, questions that focussed on knowledge of the Core Reading were well answered by those who had prepared thoroughly. However, questions requiring wider thinking or application of core reading to specific circumstances, such as questions 5 and 6, were less well answered and students should recognise that these are generally the questions which differentiate those students with a good grasp and understanding of the subject. The comments that follow the questions concentrate on areas where candidates could have improved their performance. Candidates should include these areas in their revision.

1 Linked claims

These relate to IP claims whereby a claimant, having been in receipt of claim payments, recovers and returns to work, but within a specified period (the “link period”) suffers a recurrence of the same disability, and is eligible for immediate claim payments without the imposition of another deferred period.

Proportionate benefit

Under IP policies, if a claimant takes up employment in an occupation that is different to the one from which he or she was originally incapacitated, it is usual for the continuing benefit to be reduced. The reduction will relate to the ratio that the gross earnings from the new job bear to those from the occupation against which disability was being claimed.

Rehabilitation/partial benefit

This IP benefit is payable when a claimant is no longer totally unable to follow his or her original occupation and returns to it in a reduced capacity. The amount of benefit is usually calculated in the same way as that for proportionate benefit, as described above.

Replacement ratio

This refers, in the context of income protection insurance, to the ratio of net (in benefit) income to net pre-disability income.

This was a standard bookwork question and many candidates scored well. However, not all candidates knew the differences between proportionate benefits and partial/rehabilitation benefits.

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- (i) (a) Statistical estimation is appropriate for particular types of homogeneous claims where the portfolio is large enough and the experience is deemed to be stable.
 - (b) Outstanding claims are assessed “en masse” in relatively homogeneous cohorts and credible groupings based on historical trends and patterns adjusting for known or anticipated future changes.

The portfolio might be split by contract type, by distribution type or by geographical region (or other splits such as age, gender, claim type). A statistical distribution is fitted to the past experience to estimate the claims incurred. Extreme outliers may need to be excluded from the statistical analysis.

The measure of exposure used is typically earned premium.

Changes in trends in incidence and in cost should be allowed for through specific adjustments to factors or reserves. An element of

prudence may be included depending on the purpose of the reserves. An allowance for IBNR may also be included.

Other available data could be used to benchmark the results.

- (ii) As claims now take longer to be paid, the recent claim development factors (from the statistical analysis / claim triangles) will not be directly relevant.

Impact on reserves

The recent development factors would not be relevant for the latest claim paid data and the estimated outstanding claims will be too low as these development factors assume that claims have developed more than is the case. Hence (if no adjustments are made) the reserves would not be sufficient to pay for claims relating to this period.

If discounting is used in setting claim reserves, there will be a slight reduction in reserves due to the deferral of payments.

Impact on calculation

The OCR (outstanding claims reserve) [or IBNS (incurred but not settled)] will be higher/increased. To allow for the change in claim payment pattern, the reserves need to be strengthened, i.e. increased. The insurer could add a manual reserve or additional margins or it could make adjustments to the development patterns to reflect the fact that claims are taking longer to be paid, and allowing for the possibility that larger claims may take longer to settle and that there may be increased errors due to greater workload.

There may be an effect on the IBNR depending on how it is calculated.

The reserve calculations should then be monitored and updated over the next few months.

It is important to understand whether these new payment patterns will become the norm. The claim payment pattern should be monitored going forward to see if these patterns continue. When the payment patterns have stabilised, the observed development patterns can be used without further specific adjustments.

- (iii) This will cause volatility in the claims payment development patterns. Applying recent development patterns to these payment amounts will lead to reserves being higher than required to pay claims relating to this period.

As temporary workers are used, these payment patterns are not likely to continue in the future.

The impact of these payments on the development factors (trends) should be removed for setting reserves.

Errors in claim payments made by the temporary workers, due to lack of experience, could also have implications for the claims development analysis.

Part (i) of this question was bookwork and whilst (a) was generally well answered, few candidates included sufficient detail of the approach under part (b).

Parts (ii) and (iii) were more challenging, and candidates appeared to struggle to generate a wide range of points with many not considering that the pattern of development factors would change and what the implications of this would be for estimating reserves. [Candidates are reminded that understanding of the technical principles covered in the CT subjects is expected for ST1.]

- 3** (i) Underwriting can protect an insurance company from anti-selection and in particular from lives whose health is so seriously impaired that it is impossible to assess the risk accurately.

It enables insurers to identify lives with a substandard health risk for whom special terms must be quoted. For the substandard risks, it will identify the most suitable approach and premium level for the special terms to be offered.

Adequate risk classification within the underwriting process will help to ensure that all risks are rated fairly.

Underwriting will help in ensuring that actual morbidity experience does not depart too far from that assumed in the pricing of the contracts being sold.

It may help to obtain reinsurance at affordable rates.

For larger proposals, financial underwriting will help to reduce the risk from over insurance.

Claims stage underwriting ensures only valid claims are paid.

- (ii) **Business levels**

The insurer might have grown its new business volumes significantly, and hence there has been a significant increase in total cost of underwriting, although the per policy cost of underwriting might not have increased.

Alternatively, if the increase identified is the cost per policy, then it may have been due to a fall in new business levels, so that fixed costs have been spread over fewer policies.

Inflation

The increase may be in line with the general level of inflation, which has been high recently.

Underwriting cost is mostly related to medical inflation, which might have been exceptionally high recently e.g. the introduction of more costly and sophisticated special medical tests.

The State health service might be in need of extra funds and so has increased the costs of the medical attendant reports.

The increase might reflect high wage inflation e.g. because of competition for underwriting staff/medical staff.

There might be a new statutory requirement to pay pension contributions for employees / increased social welfare contributions.

New underwriting system

The higher costs might reflect the development of new systems.

The system might have failed to perform and more policies needed to be manually underwritten than before, which is more costly.

It may have come to the end of an outsourcing agreement and the renegotiations (or a new provider) have resulted in increased costs.

Or there may have been change in reinsurer, requiring a change in underwriting manuals/systems

Change in underwriting strategy

The insurer might have changed its underwriting strategy to be more stringent e.g. moved from medical history disregarded to full underwriting, or no longer using reinsurance and losing the technical expertise provided by the reinsurer. This may have increased the amount of information asked for on the proposal form and/or increased the cost due to a higher number of medical exams, doctors' reports. For example, it might have reduced the sum insured limits which trigger the additional evidence requirements.

New underwriting strategies may have evolved (e.g. based on genetics).

The insurer might have found that it needed to use more highly qualified and hence costly staff in its underwriting team in order to maintain standards.

The insurer might have decided to reduce its use of pre-existing condition exclusions and hence needs to perform more underwriting in order to assess additional premium loadings. Similarly the insurer might have decided to reduce the number of declinatures at outset.

If the increase relates to initial underwriting costs rather than claims management costs, then it may reflect a change in focus from the latter to the former e.g. due to poor publicity following refused claims.

A reinsurer might have required the insurer to improve the stringency or quality of its underwriting or it might have decided to do this in order to obtain cheaper reinsurance rates.

There may have been more claims underwriting because of an increase in the number of claims or a change in the claims definition (e.g. becoming more complex). There may have been an increase in claim fraud and non-disclosure, so increased claim underwriting has been needed (if this is included in the costs that are being considered).

Mix of business

There might be a different customer base which results in an increase in the average per policy cost of underwriting e.g. due to using a new distribution channel, or a shift from internet distribution to broker distribution, or a shift from group business to individual business.

There may have been a shift towards older customers, triggering earlier the non-underwriting limits, or customers of worse health, requiring extra investigations to find appropriate policy loadings or larger policy sizes, triggering more evidence limits, or customers in different territories where the cost of underwriting is higher.

For group business there could be more business over the free cover limit.

There could be a shift in product mix if different levels of underwriting are used.

Anti-selection

The insurer might have been experiencing increased anti-selection e.g. due to increased understanding amongst distributors or due to changes in the underwriting strategies used by other insurers in the market.

Other

There could have been a worsening of health within the general population, leading to an increased need for underwriting.

There may have been changes in regulatory/compliance requirements, with related underwriting costs e.g. more documentation.

It may reflect the loss of experienced staff, resulting in operational inefficiencies and the costs of training and recruiting new staff or setting up a new team.

Part (i) was standard bookwork and most candidates scored very well.

Part (ii) was also generally well answered, with candidates providing a wide variety of points and showing that they understood the various factors that might affect underwriting costs.

Not all candidates mentioned points relating to anti-selection or the underwriting system itself.

- 4** The product could be reinsured using original terms (also known as coinsurance). This method involves the sharing of all aspects of the original contract. The ceding company will supply the reinsurer with the premium rates it is using for the critical illness product it wishes to reinsure. In return the reinsurer will determine the level of reinsurance commission it is prepared to pay the ceding company for the business. In some countries, the supervisory authority may require the reinsurer to “deposit back” its share of the total reserve under a reinsured contract with the ceding company e.g. to reduce credit/counterparty risk.

The amount to be reinsured could be specified on a quota share basis, i.e. a fixed proportion of each policy is reinsured, or it could be specified on an individual surplus basis, i.e. the proportion relates the preferred monetary retention to the overall size of the sum insured. Proportional reinsurance may be used, for example, to reduce solvency capital requirements or increase the capacity to write business.

Proportions may be based on the sum insured or the “sum at risk” i.e. the excess of the stated policy benefit over the reserve that the ceding office holds. For critical illness business, reserves may be relatively low and the sum insured approach may be preferred for administrative ease.

Another method of reinsurance that could be used would be risk premium reinsurance. Here the reinsurer charges a specific premium for the risk. This may be level over the term of the policy or may vary annually with the probability of claim. In this situation, it is most likely that the risk reinsurance premiums would be on a net level premium basis, in order to match the policy premiums.

Risk premium rates may be guaranteed or reviewable. Here, it is likely that the insurer would want them to be guaranteed in order to match the policies. Risk premium rates are applied to the sum reinsured, which may be a proportion of the sum insured or of the sum at risk.

For either of the above types of reinsurance, the retention limit may be relatively low given the solvency position of the company. If the retention level is set at a low level, the company may receive more technical help from the reinsurer.

A facultative arrangement could be put in place to deal with large individual cases. The company might decide to purchase aggregate excess of loss (or stop loss) reinsurance or catastrophe reinsurance which would cover total losses under the particular class of business above an agreed limit and possibly below an upper limit. This would help to reduce the claims volatility of the portfolio, and protect it against an accumulation of losses which could jeopardise its solvency e.g. by location. However, the claims volatility may not be sufficiently high to warrant paying for this type of protection.

The company may also decide to use financial reinsurance to improve its low level of solvency. Reinsurance commission can be provided to the ceding company under

either an original terms or risk premium method. This helps to meet any new business strain incurred when writing the business. It represents “factoring” of future margins in premiums to be passed to the reinsurer. “Repayments” of this “loan” are added to the reinsurance premiums, spread over several years.

An alternative approach is to make use of the future profits contained in a block of new or existing business. The reinsurer again provides a loan to the direct writing company. However, as the repayment is contingent on the emergence of future profits being generated by the business the direct writing company does not have to reserve for the repayment within its supervisory returns (depending on the regulatory regime). This increases the assets in the regulatory balance sheet, but has no impact on the amount of liabilities – and hence improves the solvency position.

A company with low solvency would also need to take particular care over its choice of reinsurer to minimise counterparty risk.

This was a relatively standard question which was generally well answered. It was good to see candidates linking their points to the fact that the insurer had a low solvency margin. This helped identify candidates who could show that they could apply their knowledge to the characteristics of the insurer given in the question rather than just providing a list of facts about reinsurance, some of which were irrelevant. When discussing financial reinsurance many candidates made the relevant points about the paying back of the loan, but did not describe how this is relevant to the solvency position of the company, i.e. that the insurer does not have to reserve for this and hence it increases the assets but not the liabilities.

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(i) Asset-liability management

Low asset yields imply higher reserves as lower discount rates increase reserves. They also imply likely higher capital requirements.

When interest rates fell to the current low levels, the value of fixed interest assets would have increased. The extent of asset/liability matching is therefore important. If well matched, there is more protection provided from changes in interest rates. If the duration of liabilities had exceeded that of assets when interest rates fell, this could have caused solvency problems depending on the speed and magnitude of the change. This is particularly the case for long-term health insurance business.

Asset-liability matching could also be important if yields are expected to increase in the short to medium term future. If the duration of assets exceeds that of liabilities, then such a change would cause a loss. For short-term health insurance business, the value of liabilities is expected to be less sensitive to a change in interest rates than that for long-term health insurance. In addition to differences in duration, the relative size of liabilities is generally larger for long-term health insurance than for short-term health insurance business.

The level of guarantee is also relevant: renewable products and products with reviewable premiums are expected to have lower and shorter-term liabilities.

The impact of lower interest rates on the value of assets and returns will depend on the relative proportion of bonds in the insurer's asset portfolio. A reasonably high proportion of assets held are likely to be fixed interest assets, which increase in value when interest rates fall. However, any cash held will now have lower expected future returns (without any offsetting increase in value).

Overall the impact on the investment return of the asset portfolio will also depend on how the returns on equities and other asset classes are affected by lower interest rates and low inflation.

Some insurers may implement hedging strategies using derivatives such as swaps and options to allow them to "lock in" higher interest rates. However, making use of hedging strategy tends to increase the counterparty risk. There is a reinvestment risk where the duration of liabilities exceeds that of the assets.

Some insurers may adopt a riskier investment strategy in order to increase returns.

The insurer might invest more in corporate bonds in order to take advantage of illiquidity spreads. However this also increases credit risk. The insurer might seek alternative asset classes, e.g. property, if the market looks strong.

The low inflation environment may reduce the need to invest in index-linked assets. However, if inflation is expected to increase in future may invest more in such assets now.

The overall approach may depend on the level of free assets.

Customer demand

If the low interest rates are linked to a stable economy then new business levels could also be stable. However, if the low interest rate environment is protracted then it could indicate slow economic growth or a recession, leading to higher unemployment and lower levels of disposable income. In this case, new business could be low as health insurance is often seen as a "luxury" spend. Similarly, employers may give group insurance schemes low priority in such economic conditions.

On the other hand, if the low interest rates result in a stimulation of economic growth then this could increase sales e.g. increased employment levels could lead to higher sales of income protection insurance. There may be more individual purchases linked to mortgages e.g. critical illness cover if the low interest rates mean that the residential house purchase market is buoyant. Low mortgage rates may also mean higher disposable income. Employers may be more able to afford group insurance schemes due to lower interest costs on capital or due to more stable input costs.

Some customers may prefer to purchase insurance contracts than to save in a low interest rate environment.

Individuals might be deferring their retirement due to the low interest rates (and thus poor annuity rates) and hence there may be greater demand for health insurance coverage during this extended pre-retirement period.

If premium rates generally increase (see below), this could reduce demand (or vice versa). Specific types of business might appear less attractive due to higher premium rates e.g. immediate needs annuity rates (based on short term yields) could be seen as poor value.

Demand may be linked to changes in State provision e.g. cutbacks in medical treatments provided for free in a recessionary environment with lower taxation receipts.

Product design

Unit-linked variants (e.g. for pre-funded long term care insurance) might be preferred if they are perceived as better value in these economic conditions.

Product designs could be adapted to allow for later retirements (e.g. later termination dates on income protection).

Inflation-linked benefits and premiums will increase at relatively low rates so benefit increases could appear to customers to be poor value e.g. for long term care insurance, where index-linked benefits might not keep pace with care cost inflation. For long-term business, there could be more customer interest in benefits that are not index-linked (as the inflation effect is not perceived to be significant) though this could prove problematic if inflation increases in future.

If demand falls this may encourage more innovative product design in order to attract new customers, or the introduction of simpler/cheaper products in order to offset any premium increases and keep products affordable. Alternatively, a different subset of the market might be targeted e.g. the more affluent.

Experience and pricing

Premium rates may have to increase due to lower expected future investment returns, particularly for long-term insurance business products, and due to higher reserves. Similarly, premiums may rise because claim experience might be higher, if linked to a recession e.g. higher claims on group insurance if employees think they might be made redundant or they think the scheme might be withdrawn by the employer or there may be an increase in stress-related claims.

For existing products where premiums cannot be increased (guaranteed premiums) the impact will be lower profitability. More emphasis will then have to be placed on underwriting and managing persistency experience.

The above adverse experience impacts could be offset to some extent by lower inflation of benefits and of expenses.

Lapses/non-renewals could be higher if the environment is recessionary as policyholders may be unable to afford to continue to pay their premiums due to other priorities or due to having lost their job.

There may be greater selective lapsing and hence higher average claims experience.

Medical and technological advances mean that PMI premiums are likely to increase at a rate which is greater than the low levels of inflation which could similarly reduce the renewal rate. Per policy expenses would be higher if business volumes fall.

If the economic conditions are unstable, risk margins may need to be included. Alternatively, if the low interest/low inflation regime is thought to be temporary then the insurer may decide not to change assumptions.

This question was not particularly well answered, despite the solution (particularly the sections on customer demand and experience) being based on detail given in the Core Reading. Many candidates did not demonstrate that they understood the effects of low interest rates on reserves or pricing and what those conditions might mean in the wider economy. The section on asset-liability management was generally poorly answered, with few candidates discussing the duration of the assets and liabilities or even recognising that the value of fixed interest assets would rise when interest rates fell. The question was looking for demonstration of basic understanding of how assets and liabilities interact and their relationships with interest rates, and demonstration of understanding of a likely investment strategy for a typical health and care insurer, as described in the Core Reading. [Candidates are reminded that the principles studied in subject CA1 are assumed knowledge for the ST subjects.]

Credit was given for any examples where candidates argued in the opposite direction under the appropriate alternative economic environment (provided the example given still made sense in terms of low interest rates and low inflation).

Not all candidates answered the question under the headings provided, which made their answers more difficult to mark.

- 6** (i) Premiums, with inflation (if relevant)
Expenses e.g. initial, renewal, claim, termination, investment, with inflation
Commission
Claim payments allowing for both claim inceptions and recoveries
Benefit inflation (if relevant)
Options and guarantees (if relevant)
Investment return (on reserves and cashflows)
Tax, if applicable
Changes to reserves
Changes to solvency capital

Reinsurance premiums
Reinsurance recoveries

(ii) **Input = Output:**

Reconciliations between inputs to and outputs of the model, for example on the total premiums and number of policies.

Projections:

Check all benefit features/variations have been allowed for and check all regulatory and /or tax changes have been allowed for.

Check that projections within the model are reasonable.

Check that lapse rates have been correctly applied within the cashflow projections, i.e. that any year dependent or duration dependent rates apply to the correct year or duration.

Check that expense output from the model increases in line with the inflation assumption.

Check that output numbers of claim inceptions are higher for older ages and recoveries are lower for older ages. A similar check can be done for different occupation classes.

Check that premiums and sums insured increase each year in line with the relevant increase option (i.e. no increase, RPI, or fixed percentage).

Check that no claims outgo is paid during the deferred period.

Output checks:

Carry out spot checks on some calculations to ensure correct.

Check that the profitability indicated by the model is reasonable.

Profitability can be compared to output from previous pricing exercises and to new business profitability information produced by a reporting team.

Check that profitability rates are in line with profitability requirements that have been set.

Could check against the results from a formula approach.

Check that the sensitivity analyses give sensible results.

Have an external review done or review by internal audit.

Premium rates:

Check that premium rates are consistent with the objectives set for the pricing exercise; for example, it could be to reduce premium rates to be more competitive or to increase rates to improve profitability or it might have been due to changing the benefit definition/term.

Check that premium rates look sensible by “model point” e.g. higher premium rates for older lives, but need to consider that premiums for ages nearing the ceasing age would reduce (due to the potential benefit term reducing); higher premium rates for shorter deferred periods compared to longer deferred periods; higher premium rates for occupation classes that pose a higher risk; higher premium rates for increasing cover compared to level cover.

Check the new rates against the old ones.

Compare results against competitor rates.

Part (i) was relatively straightforward and was well answered.

For part (ii), whilst candidates generally mentioned several of the points relating to output checks and pricing checks, relatively few discussed how the cashflow projections themselves might be checked. Some candidates also discussed data checks, even though the question states that inputs to the model and assumptions used had already been checked and that only “other” checks were required.

7 (i) Advantages

The insurer can make use of best industry practice, resulting in happier customers (faster claims payments) and a better company reputation.

A third party provider may be able to offer a range of claim handling services to a higher standard or more cheaply or may offer additional services that cannot currently provide e.g. preventative/rehabilitation services.

Less hassle involved and allows management to focus on other areas

There is more certainty over expenses and hence margins can be reduced. It is also easier to set pricing/reserving assumptions.

There is a lower risk of expense overruns

Claims management fixed overheads can be reduced or eliminated.

Provides flexibility, especially if the insurer expects to increase/decrease volumes.

The insurer can benefit from the economies of scale that an outsourcer is likely to have.

Lower expenses could mean more competitive premiums or higher profits.

There is the potential to outsource further functions if this is successful.

Reinsurance premiums may be reduced if outsourcing results in better quality claims underwriting.

Disadvantages

There will be a loss of control over the process and data collected.

Claims payments could be more generous than expected since the company making the payments is not the one that is bearing the claim cost.

Uncertainty over service and quality e.g. delays in claim payments.

There may be a lack of understanding of the product (and/or the insurer ethos) by the outsourcer's staff. This could lead to an adverse effect on the insurer's image or put its brand at risk which could lead to lower new business and/or lower renewal rates.

There is the possibility of third party default, increasing counterparty risk. This may increase capital requirements.

The insurer will still need to retain resources to manage relationship with third-party provider.

There will be one-off system/data transfer costs. There will also be a need to maintain link to insurer systems even though services are obtained externally.

There is a risk of having poor quality (or even no) claims administration data. Any data provided by the outsourcer will need to be carefully checked.

It will be less easy to implement changes.

The profit margin is passed to the supplier.

As the insurer is large, there may be a limited number of outsourcers large enough to be able to tender for the business.

There is the possibility of fee increases at time of re-negotiation. If renewal terms are unfavourable, it might be difficult to find another provider. It might be difficult or costly to set up in-house services again if the insurer fails to renew the agreement.

There will be a loss of in-house expertise.

Lock-in contract terms may have a penal termination clause.

There will be costs of making current staff redundant. This may result in low morale amongst remaining staff due to redundancies. There may also be

problems of morale during (prolonged) service transfer and possible reputational impacts.

There may be compliance issues, e.g. requirements by the regulator.

The insurer may not benefit from future cost savings.

It may not be possible to reduce the insurer's overheads materially (e.g. property).

There may be data protection/confidentiality issues.

There may be potential conflicts of interest if the outsourcer also works for providers.

Distributors may not like it.

- (ii) The main control would be a service level agreement, which would set out:

- Data format
- Costs per type of activity
- Method by which the costs are inflated
- Turnaround time per activity
- Dates when data etc must be received by the insurer
- Quality of data supplied
- Process to be followed in the event of any disagreements or failures
- Confidentiality agreement
- Customer service standards/minimum satisfaction ratings
- Financial penalties/profit sharing
- Data security arrangements
- Acceptable termination clause
- Agreed providers/rates

The insurer will need to monitor performance against all these agreed standards e.g. failure to meet given deadlines to the insurer, failure to meet turnaround times (delays/time to service)

Carry out spot checks on data quality and claim amounts.

Record claim

Authorise treatment

Assess claim

Set case reserve

The insurer will need to monitor claims experience including:

- Number of claims and individual amounts
- Number of adjustments to reserves required and implemented
- Ultimate claim cost compared to estimates
- Ultimate claim cost compared to past experience (inflated/adjusted as relevant)
- Proportion of declined claims
- Proportion of reopened claims

- Number of disagreements between outsourcer and insurer staff split by type and whether resolved to the insurer's satisfaction
- Legal action required by the insurer
- Level of complaints from customers
- Number as a proportion of claims handled
- Time to resolve and cost of resolution
- Number declined leading to further complaint e.g. to ombudsman

All the above would be compared to past experience.

The insurer could carry out customer satisfaction surveys and health care provider satisfaction surveys.

The insurer would need to monitor costs for additional services e.g. prevention/rehabilitation.

Agreement costs would be compared to past experience, inflated where relevant.

The insurer would have regard to the costs of monitoring the third party.

Non-renewals should be monitored including:

- Relationship between claims and non-renewals
- Time until lapse

All the above would be compared to past experience.

Counterparty risk controls would include:

- Careful due diligence of the outsourcer at outset
- Checking the outsourcer's past PMI claims management experience in particular
- Monitoring the average amount of insurer's and client money held at any time
- Checking the credit rating of outsourcer
- Investigating any changes in the above
- Any warning signs of potential default e.g. build up of funds, increases in delays would also be investigated
- Monitoring media reports on outsourcer

The insurer may commission an external audit.

Ensure regular communication between the two companies, including visits by insurer's staff.

Carry out outsourcer staff training and second some of the experienced insurer staff to the outsourcer, at least initially.

The insurer should retain some in-house expertise.

A reconciliation of the data on initial transfer would be performed.

- (iii) The main impact will be loss of control over the data. Poor quality data could result in incorrect reserves, which could cause reputational damage or regulatory intervention or require higher margins.

Poor quality data could result in mis-pricing, which could impact competition or sales volume or profit or result in greater anti-selection.

There may be frictions and compromises as the existing systems have to be fitted to the outsourcer's existing systems or new ones designed. This will take up the time of her team and lead to other tasks being delayed or cancelled, which will adversely affect actions which depended on the delayed or cancelled work.

Alternatively if her staff is not asked to comment on transfer plans the decisions made may not be acceptable, leading to future problems. Decisions may have been made to make the admin system handover as easy as possible rather than to safeguard actuarial systems e.g. claims which are part paid at the handover date may be closed and subsequently reopened on the new system by the new claim handlers.

Even if the process was intended to retain ongoing claims using the same definitions as previously, there is likely to be a discontinuity in the data pre- and post-outsourcing e.g. new staff will take time to understand the systems and agreed processes, and new staff may take the easy option when correcting mistakes – their own or ones made by the previous team - which may be inconsistent with previous procedures. A claim closed early or in error cannot be changed. Other errors in classification of claims, updates in case reserves etc will be more difficult to correct. This may extend over a significant period as the old team may close claims (possibly prematurely) prior to the handover and the new team may need to reopen the same claim.

The close link between claims underwriting and pricing may be more difficult to maintain.

Staff may leave and replacements have to be recruited and trained. The remaining staff may be stressed leading to further delays. There may be loss of product knowledge if key actuarial staff or claim handlers leave.

Changes in claim underwriting standards will impact the level of claims expected when pricing. The method of allowing for expenses will need to change as will the method of estimating inflation.

Projection models may need to be changed e.g. if the agreed expenses vary across model points by more factors than they previously did. Renewal rates may need to be reconsidered.

The risks have changed, in particular the importance of counterparty default has increased and so a suitable reserve/capital requirement will need to be calculated. Similarly the risk margins used in pricing and in reserving will need to be updated.

Changes in the time taken to record, authorise and pay claims will lead to changes in the run-off patterns (pre and post the outsourcing) which will affect the claim reserves calculated.

Changes in the amount set aside for authorised claims will impact reserve calculations as will changes to how far ahead future medical procedures are reserved for.

Claims in transit could be more difficult to determine.

Many candidates scored well on parts (i) and (ii), generating a wide range of ideas.

For part (iii) candidates generally scored less highly. Whilst candidates tended to make high level comments on changes in expenses and updating risk margins used in pricing and reserving, few mentioned the potential operational problems arising from the changeover from in-house to outsourced claims management in more detail or the potentially poor quality data that the insurer might receive.

END OF EXAMINERS' REPORT