F201 November 2015 Examiners' report

This paper consisted of three questions that covered a wide range of topics from the syllabus. The examiners considered this paper to be slightly less challenging than the previous two papers.

Candidates who performed well were able to demonstrate good knowledge of the core reading material as well as the ability to apply the principles they have learned to the scenarios created in each question, using a problem solving approach.

Candidates who performed poorly typically exhibit poor exam technique. Mistakes included not structuring their solutions to longer questions (which gives an indication of how they approached and thought about the problem), not answering the question that was asked and ignoring the contextual information provided in the question paper.

Question 1

Question 1 was a product design question dealing with Low Cost Benefit Options. Much of the solution was based on bookwork. Candidates that distinguished themselves were able to apply their knowledge and skills to the specific problem of designing such a product.

Between the time of the paper being finalised and the date of the examinations the Council for Medical Schemes published and then retracted a framework document that would allow medical schemes to apply for exemption in order to introduce Low Cost Benefit Options. Candidates who followed current events and read the framework would have benefited by having their minds stimulated and applying their minds in order to understand the thinking underlying the framework, as well as spotting any potential shortcomings in the framework. The intention of the question was, however, to test understanding of the relevant issues and the question was therefore framed in relatively general terms.

Some candidates made reference to the framework and incorporated this knowledge into their solutions. These candidates received due credit. Candidates who simply made uncritical reference to the framework did not. It very important to note that, while reading the framework would have been useful, this was not required in order to perform well on this question. Students who applied their minds to the problem would have been able to perform well based on the knowledge contained in the standard reading material.

The examiners are concerned by the poor understanding of relevant legislation and regulation demonstrated by the candidates. While an in-depth knowledge of these is not required many candidates could not demonstrate that they grasp the most relevant provisions and their implications.

(i) Briefly summarise the recommendations of the LIMS task team.

This question was based on bookwork and was generally well answered.

Membership of LIMS schemes would be limited to members earning below a defined income threshold (this would need to be clearly defined, monitored and inflated appropriately);

An alternative set of prescribed minimum benefits would be defined to address the needs of the population identified.

The impact on the existing medical scheme market would need to be managed and so it was proposed that LIMS schemes would not be permitted to cover private hospitalisation benefits. This would make it unattractive for existing medical scheme lives to "buy-down" to LIMS cover and thereby erode the existing risk pools.

It was also proposed that the means tested fees at public hospitals would be structured consistently with the LIMS income threshold so that these members would not be required to pay for public hospital care.

Provision should be made for migration to the medical scheme environment (to encourage "buy-up").

(Maximum 2)

(ii) Explain the problems which make it problematic for medical schemes to offer benefit options targeted at this market.

This question was based on bookwork and was reasonably well answered.

The main difficulty in entering a low income market is the ability to provide benefits at an affordable level.

It is likely that a substantial employer contribution (subsidy) will still be required in order to make this affordable to the target market, even if LCBO contributions are significantly lower than current medical scheme contribution levels..

The following problems, as perceived by the industry, make low income options problematic:

- A high level of consumer education is necessary in this relatively unsophisticated market.
- The cost of Prescribed Minimum Benefits is considered to limit benefit design.
- There is a minimum cost to administration. Because of this non-healthcare costs are likely to represent a large proportion of contribution income.
- Low income individuals are usually paid weekly, therefore monthly contribution collection is difficult.
- Workers in the agricultural sector typically have seasonal work and do not have a regular monthly income.
- Membership of schemes is usually voluntary, so members leave after three to six months to attend to other financial needs.
- Family members are added and removed as their health care needs dictate.

- Owing to the low contributions, commission payable to intermediaries is very low and therefore most intermediaries are not interested in getting involved and selling to this market.

- Low income individuals with earning below the means test threshold who are not on a medical scheme get highly subsidised medical services from the state, when they are paying for medical cover they expect access to the private sector services.

- The poor billing practices of some provinces mean there is a general perception that health care in South Africa is "free" from the public sector. This is not the case and all people earning above the means test should be billed according to how they are rated on the Uniform Patient Fee Schedule (UFPS) in the public sector. This can approximate the tariff levels in the NHRPL or private sector.

- A large proportion of the target market earns less than the annual income tax threshold and can therefore not benefit from the tax credit for medical scheme membership which would make contributions more affordable.

- Health insurance products exist (within the current demarcation regulations) that offer similar benefits to those envisioned for these types of options (with some additions like funeral cover that medical schemes may not offer). Health Insurers are able to offer these products at premiums that are substantially lower than what medical schemes may offer since they are not subject to the same regulatory requirements, making it difficult to compete..

There is also the matter of insurability, particularly if no cross-subsidisation occurs from other benefit options. Since cover will be more focused on day-to-day benefits rather than low frequency, high cost healthcare such as hospital cases the "risk premium" may be close to the cost of benefits on an individual policy level. The extent to which this is true will depend on whether community rating applies or not.

In such a case the scheme would not be providing risk pooling but simply pre-funding of day-to-day healthcare and health cross subsidies will be limited to the more predictable day-to-day healthcare expenses.

It is then fair to ask what benefit the introduction of an LCBO can have for a medical scheme since it wouldn't participate in the scheme's risk pool (by means of cross-subsidies). There may however be some value in these products if they facilitate pre-funding of healthcare and reduce out-of-pocket expenditure on healthcare.

Scheme may introduce such options for no other reason than to offer a full set of benefit options from low-cost to fully comprehensive cover, which will allow then to compete for corporate groups.

(Maximum 6)

(iii) List the provisions of the Medical Schemes Act and its Regulations that an open medical scheme is likely to apply to be exempted from and explain why this may be necessary.

This part was poorly answered. While most candidates could name the relevant provisions and explain what they are, many failed to explain why these provisions make it difficult to offer a Low Cost Benefit Option or how exemption may be used to make the LCBO product feasible.

Schemes may require exemption from the following provisions:

PMB regulations

- The current package of benefits is too expensive given the target range for contributions.

- A report conducted by the Centre for Actuarial Research in 2003 found that the weighted industry average price for the complete PMB package was
    - R640.33 in the private sector (in 2002 rands) for a family of four
    - R416.76 in the public sector.

{ These figures are badly out of date but are the values cited in the 2015 core reading.}

- These amounts (adjusted for inflation) represent the minimum cost for a benefit option which is fully compliant with the act and the PMB regulations.

- Adjusted for 13 years' worth of inflation the current values are far in excess of the R200 to R400 monthly contributions that are being targeted for LCBO products.

- Payment of PMB claims in full, as it is currently enforced (the scheme must pay whatever amount the provider invoiced), is not appropriate in an environment where the cost of claims must be strictly managed to ensure affordability.

- Schemes will therefore require exemption from the PMB requirements in order to offer an affordable product.

The self-supporting provisions

- The Act requires that each benefit option must be self-sustaining (i.e. generating an operating surplus or at least breaking even).

- Even with exemption from PMBs some cross subsidy from higher income medical scheme members to LCBO members may be required to make the products sustainable.

- Schemes may therefore require that LCBO options be exempt from the self-sustaining provisions.

- They will however need to show that the cross-subsidy does not undermine existing risk pools or put the sustainability of the scheme at risk

Underwriting provisions

- Schemes may apply for leave to implement simplified underwriting on these products in order to limit anti-selection and reduce new business costs.

- For example a blanket 12 month waiting period may apply to all new members on elective procedures such as maternity and dentistry.

- Schemes may require longer waiting periods in order to limit anti-selection and to build some reserves.

{ Several candidates stated that schemes need to apply for exemption in order to waive underwriting. This is not the case – regulation only limits the amount of underwriting that schemes may apply and does not impose a minimum. It is common practice for schemes to waive underwriting in certain circumstances – see Question 1 in the November 2014 examination.]

Underwriting after an option change

- The act currently allows members to change options within a medical scheme without any additional underwriting being applied.

- This creates a risk of anti-selection as members will choose more comprehensive cover when they require healthcare and less comprehensive cover when it is affordable.

- In particular anti-selective movements between current PMB-compliant options and LCBO products should be limited.

- Allowing schemes to underwrite when members move from one category of benefit option to another will help to mitigate the anti-selection risk.

Community rating provisions

- The Act mandates community rating.

- In terms of this provision contributions may only be determined by
    - Choice of benefit option;
    - Family size or composition; and/or
    - Income.

- Schemes may not use any other factor such as age, gender or state of health to determine contributions.

- In the absence of risk equalisation the demographic profile on a benefit option and the resultant average cost of claims are the major factors determining the cost of providing benefits on that option.

- The LCBO market may be expected to be even more price sensitive than the existing medical scheme market.

- This would lead to LCBO benefit options competing on the basis of the profile of members that they attract, which is undesirable.

- If an LCBO option is exempt from this requirement it may apply risk rating to contributions which will reduce the importance of the risk profile of the beneficiary pool to the scheme (but not to the members).

- This would however be contrary to the social solidarity principles underlying the Act.

Open enrolment provisions

- Open medical schemes must admit anyone who applies to join the scheme.

- This is to prevent medical schemes from turning away high risk members and denying them cover.

- The LCBO products are intended for a certain part of the population (formally employed individuals who have never belonged to a medical scheme before and who earn a low income).

- Higher claiming existing medical scheme members (such as pensioners who also have verifiably low income) who buy down to LCBO products would drive up average claim costs.

- Lower claiming existing medical scheme members who buy down to LCBO options would no longer be contributing to the cross subsidy within the “normal” benefit options, which may make those options unsustainable.

- It is therefore reasonable to say that LCBO products should be reserved for this target market as it would be undesirable for existing medical scheme members to buy down to LCBO options.

- Exemption from the open enrolment provisions make it possible to reserve membership of LCBO options to the target market.

- Schemes may also want to limit membership to employer groups where membership of the medical scheme is mandatory. This will reduce administration costs and remove much of the opportunity for anti-selection, which would keep contributions more affordable.

- Scheme may also want to address the anti-selective risks by applying for exemption from the regulation which requires that medical schemes allow members to choose to move to any option on the scheme at least once a year.

Broker commission limits

- Given a target premium of R400 and a maximum commission percentage of 3% (up to a maximum of R75) the scheme will only be able to compensate brokers with a maximum commission of R12 per member per month.

- This may not be sufficient to entice brokers to sell these products (it may not even be sufficient to cover a broker's costs).

- Schemes may want some form of exemption from the broker commission restrictions in order to be able to pay a worthwhile commission without adding significantly to the cost of providing these products.

(Maximum 14)

(iv) Explain the impact that the current solvency requirements may have on LCBO products.

This question was very poorly answered. Most candidates got the marks related to adding a reserve building margin to contributions. Other considerations such as how the impact may vary depending on the solvency level of a scheme were generally ignored, as were matters of potential cross-subsidisation.

Medical schemes will require sufficient reserves to meet the statutory requirements after the introduction of LCBOs.

If a scheme currently has a high solvency ratio and the volume of LCBO business remains a small proportion of total membership then the impact on LCBO options is negligible.

On the other hand if:

1. The scheme's solvency ratio is close to 25%; and/or
2. the introduction of LCBOs result in medical schemes attracting large volumes of business that put the scheme in danger of breaching the 25% minimum…

…then the schemes will be required to build reserves to cover the LCBO business.

The most obvious way to build these reserves is my means of a reserve building margin in the LCBO option contributions

OR via an increased reserve building margin in the contributions of current benefit options.

The latter approach will result in a cross subsidy from "normal" to LCBO members.

This should be acceptable (in terms of the social solidarity principles)…

…so long as the cross subsidy does not put the current risk pools under pressure or threatens the sustainability of the scheme.

Consider a medical scheme which has been operating for more than five years. Its reserving requirement should be 25%.

If an LCBO is intended to build its own reserves then a 25% reserve building margin will be required.

This will push up contributions and will make LCBOs less affordable.

If an LCBO option priced for breakeven has a contribution rate of R300 per member per month without a reserving requirement then adding a reserving requirement will increase the premium.

And then the requirement will become even more. Thus if the breakeven contribution is R300 then the contribution would have to increase from R300 to R400 = 300/(1-0.25) to allow for a full solvency loading.

{Credit given for sensible calculations}

The additional solvency burden may create an incentive for schemes who require a larger solvency margin in their LCBO product contributions to under-price, which places the viability of the scheme and the option in jeopardy.

Otherwise such schemes may be unwilling or unable to offer LCBO products. This will reduce member choice in the market.

(Maximum 7)

(v) Summarise all the factors that you need to consider in your benefit design and the preparation of the submission documentation described above.

Performance on this question was variable. Poorer candidates reproduced the list of benefit design considerations that attracted a few "core" marks but struggled to generate additional points. Strong candidates were able to work through the main points raised by the core marks (the headings in the solution) and expand their responses by applying them specifically to the problem of designing a Low Cost Benefit Option.

Several candidates wasted time listing the items that are required by the CMS's guidelines for the preparation of a business plan pursuant to registering a new option in minute detail or explained how they would price such a product, wasting valuable time in the process.

Clear identification of the target market

Our product design and business plan should be based on clear definition of the target market.

We will also need to understand the characteristics of this target market.

For example

- What is the income distribution in this market?
- Where do members of the target market live and work?
- In what industries do they work?
- Other than income is there another means of identifying such members (for example by standard industry job grades?)

We need to understand how large this market is.

Compliance

First of all the LCBO benefit option must comply with the Medical Schemes Act and its Regulations…

…except for cases where exemption will be applied for and granted.

Applications for exemption will need to be well motivated and be supported by evidence (as far as possible).

We will need to demonstrate that, as far as is practically possible, the LCBO product supports the principle of social solidarity underlying the Medical Schemes Act.

The product should also not result in unfair discrimination.

The submission should follow the CMS's guidelines for the preparation of a business plan pursuant to the registration of a new benefit option (as well as any other guidelines specifically related to LCBO options).

The actuary should be cognisant of the profession's standards and guidelines, including (but not limited to) Advisory Practice Note APN303: "Advice to South African Medical Schemes on Adequacy of Contributions.

Value for money

We can interpret value for money to mean that the price of the LCBO product is reasonable in relation to the benefit offered.

Contributions must therefore be affordable.

This would mean that as much of the contributions as possible should be used to purchase healthcare.

In order to sell well in the target market it will have to provide benefits that are **valuable** to members of the target market.

The product must also serve the needs of these members.

So we need to consider outcomes such as the LIMS project survey results which showed that these potential members place value on private primary care and emergency transport over hospitalisation.

This may be in conflict with the "focus on essential healthcare" that CMS would like to see.

For example vaccines are an important and essential tool in healthcare but the target market may value benefits such as over-the-counter medicine more highly.

Co-payments and other forms of out-of-pocket expenditure will not be readily accepted in this market.

This means that, as far as possible, healthcare should be free at the point of delivery.

Focus on essential healthcare

Benefit design will be severely constrained by the low contributions.

When developing the product we will therefore be performing some form of healthcare rationing by means of limits, co-payments and other benefit design elements.

This means that we will need to decide what the best use of available funds are.

It must however also be appealing to the target market and a balance will therefore need to be struck between the needs of the target market and essential healthcare (i.e. the clinically most appropriate use of the money).

Benefits may also be rationed by the application of formularies, protocols and referral rules.

Simplicity and stability

The LCBO benefit design should be simple.

This will make it easy to understand by the target market.

A simple design will also be less costly to administer, compared to “normal” medical scheme benefit options.

Benefits should be stable from one year to the next.

Healthcare delivery

Healthcare costs must be strictly managed.

This means that the level of provider reimbursement must be reasonable.

If the scheme is granted exemption from the PMB requirements on LCBO it may not be liable to pay PMBs in full at the price invoiced by the provider, as it is currently enforced.

It is likely that LCBO options will make extensive use of provider networks in order to manage costs.

Pricing

Since it will be a primary factor determining the cost of delivering benefits we also need an understanding of the demographic profile of the target market.

We need to consider the lapse rates in this market, particularly since medical schemes operate in an environment prone to anti-selection.

The price should be such that the contributions do not result in LCBO options producing significant surpluses (except where this is required for reserve building) as this would mean that the product is over-priced.

It could also be argued that LCBO options generating surpluses would be cross-subsidising members on loss-making "normal" options, which is certainly not the intention.

We can reasonably expect that the LCBO market will be particularly price-sensitive. This may create an incentive for medical schemes to under-price their LCBO products in an effort to obtain market share.

Such under-pricing will put schemes at risk, for example if there is significant growth in such loss-making options.

It will be better if LCBO options can be self-sustaining in order to achieve long-term viability.

Accurate benefit pricing will be difficult since, given the uncovered nature of the target market, medical schemes will not have data on the profile and claiming behaviour of these members.

Our business plan will therefore be based on a number of untested assumptions.

In order to allow for this margins should be built into the pricing.

However, such margins must not be overly conservative otherwise we may price ourselves out of the market.

We need to consider the structure of the contribution table. This may include factors such as the number of income bands, the size of adult and child dependant contributions

relative to member contributions and the number of children for whom contributions are charged.

Anticipate industry changes and adapt

We should consider what the impact of anticipated changes such as NHI or changes resulting from the competition commission inquiry into private healthcare (although there is currently much uncertainty about these matters)

Competition

The question states that no medical scheme has launched an LCBO product to date. This means that we are effectively doing our product design without knowing how competitors will price their products and what benefits they will offer.

We may need to adapt to the product designs that prove successful in the market as the LCBO market matures.

Or we may want to find ways to differentiate our product from those of competitors or focus on specific target markets.

Quality

We need to demonstrate good quality of care (the CMS does not want to see schemes introducing "junk" products to the market).

Do the networks provide sufficient geographic access to members?

In this we need to consider that the majority of members in that target market do not have access to personal transport and will be making use of other means of transport such as minibus taxis and buses.

The network must have sufficient capacity.

Any formularies and protocols must be evidence based and clinically appropriate.

How are the incentives for providers aligned?

For example where capitation is used as a reimbursement method do we have measures in place to manage the incentives to under-service and to refer upwards?

Non-healthcare expenditure

The proportion spent on non-healthcare expenditure must be as small as possible.

Which means commission will have to be low but still provide an incentive for intermediaries to sell.

How will the product be distributed?

Administration costs will also need to be kept to a minimum.

This may be a challenge since the product is likely to rely heavily on networks and will require an income verification process, both of which can be administratively intensive.

Weekly contribution collection will be more expensive than is the case with monthly contributions.

Risk management

There are a number of other risks that we need to consider such as anti-selection or fraud.

To what extent will we be able to apply measures such as underwriting and late-joiner penalties to manage such risks?

We also need to consider the cost of underwriting against the potential benefits in controlling anti-selection.

We need to demonstrate that we have anticipated these risks and that they are either not significant or that we have put measures in place to manage those risks.

We need to consider these risks not only in the context of the LCBO product but also in terms of the impact that the introduction of this product will have on the scheme as a whole (including its solvency).

Branding and marketing

The marketing and branding of this product must make it clear that members are not purchasing "full" medical scheme cover.

Administration

We will need to carefully consider the matter of credit risk and contributions that are in arrears, particularly how these will be handled if contributions are payable on a weekly basis as opposed to the monthly basis that is currently the norm.

We need to consider whether the administrator's systems need to be modified to accommodate the LCBO product and whether additional staff training will be required.

(Maximum 22)

[Question 1 Total 51]

Question 2

Question 2 considered the scenario of a small corporate restricted medical scheme that had decided to reduce its solvency ratio until some future point in time when it reaches an "appropriate" solvency level, at which time it will seek an amalgamation with another medical scheme.

Scenarios where medical schemes purposely reduce their solvency level are not uncommon in practice. Nevertheless some candidates seemed to struggle with the concept, answering how they would try to bring the scheme back into a sustainable financial position rather than answering the question..

Many candidates did not read the question properly and ignored information such as the single benefit option nature of the scheme. Some went as far as treating the scheme as an open scheme. As a result time was lost discussing matters that were irrelevant in the context of the question.

Based on the number of unfinished responses to part 2(iii) it appears that many candidates took on the other questions first and left Question 2 for last.

(i) List all the factors which should be considered in order to determine when it would be an appropriate time to seek an amalgamation.

Performance on this question was variable. Stronger candidates were able to distinguish themselves by covering a range of factors.

The most important factors to consider are:

- The size of the scheme (number of members)
- The scheme's underwriting results
- The schemes reserving level
- The reserves that would be required for an amalgamation by a partner

All of these should be considered in order to determine the appropriate level of reserves using a risk-based approach.

Solvency must not drop below the statutory minimum of 25%.

At the time of amalgamation the level of reserves should be sufficient for another medical scheme to be willing to amalgamate.

It is difficult to know what reserving level other schemes will require without asking them now.

One possible measure would be if the solvency ratio is the same for both schemes.

Another is to decide that the scheme should amalgamate if the number of members falls below a certain level.

Otherwise the schemes may compare the average reserves per member or per beneficiary.

The scheme should consider the financial outlook for the scheme, based on financial projections prepared by the actuary.

However we do know that Serenity has a poor risk profile as the average beneficiary age and pensioner ratio are significantly higher than the industry average.

It is likely that the other scheme will require Serenity's reserving level to be sufficient to compensate for this poor profile so that it will not be required to pass an additional contribution increase as a result of the transaction.

The Board of Trustees' first responsibility is to consider what is in the best interest of the Scheme's members.

This will include members' preferences.

We need to consider the impact of the amalgamation on members

- What is the quantum of the change in benefits?
- What is the difference in contribution rates?

Serenity has an income rated contribution table. With the exception of low cost options the majority of open medical schemes do not have income rated contribution tables.

Therefore we will need to consider the impact on the members in the lowest income bands in particular.

Serenity's poor demographic profile may also mean that, for a given package of benefits, the average contributions may be higher than the contribution rates on other medical schemes for the same benefits.

If this difference is significant then the impact of moving the members to another scheme with lower contribution rates may outweigh considerations of diluted reserves.

We would also need to take into account any contribution subsidies the members are currently entitled to…

…and how these subsidies may change if Serenity was to amalgamate with another medical scheme.

{The question says nothing about advising the employer. We should therefore assume that our primary responsibility is to the scheme. As such, discussions of PRMA liabilities are only marginally relevant to the question in the sense that the scheme depends on the continued support of the employer.}

The Trustees also need to allow for the Employer's prospects and future plans.

Since Serenity is a corporate restricted medical scheme half of the trustees may be nominated by the employer.

We therefore also need to consider whether the employer will support an amalgamation.

We need to allow for the fact that it may take time to find a willing amalgamation partner.

After the two boards of trustees agree to an amalgamation it will also take some time to complete the process (comment time for the exposition document, the voting process for members etc.)

If the scheme waits too long before it seeks an amalgamation partner it may not remain sustainable long enough to see the end of the process.

(Max 10)

(ii) Discuss the appropriateness of the Trustee's proposal.

This question was poorly answered. A surprisingly small number of candidates actually wrote down a conclusion.

By not passing contribution increases the scheme's net healthcare deficits will grow larger as contribution rates will remain the same while healthcare and non-healthcare expenditure will grow (exponentially) with inflation.

This will reduce the reserving level at an accelerating pace as:

- Eventually the deficit will be greater than the investment income and the scheme will start incurring net deficits

- These deficits will lead to a reduction in the absolute value of reserves.

- Lower reserves will result in decreased investment income, making the net deficits even larger.

- As reserve levels decline and the scheme relies more heavily on member funds to pay for claims and expenses it may need to change to a more conservative investment strategy than before with higher liquidity, resulting in lower investment income.

The regulator will notice the decline in solvency and may intervene, particularly if it feels that this approach is not in the best interest of members or places the scheme at risk. The regulator typically advises struggling or unsustainable medical schemes to amalgamate. The scheme has, however, decided that it will amalgamate.

Lower membership will result in an increasing solvency ratio, all other things being equal. However at a rate of 4% per annum the reduction in membership will not compensate for the net deficits if they exceed this percentage of contribution income.

Because zero contribution increases would be passed, there would not be the normal inflationary impact of contribution increases, which requires higher reserves for maintaining the same solvency ratio.

Given that the contribution table is income rated and members are still expected to receive salary/pension increases some contribution increases may still occur when members move from one income band to the next.

As the scheme is small and getting smaller claims experience will become more volatile.

A bad claims year or poor investment performance may result in an even larger deficit. In such a case the scheme will be required to amalgamate sooner than anticipated.

On the other hand a very good claims year or very good investment returns will frustrate efforts to reduce reserves.

As the scheme becomes smaller and the deficits increase the minimum reserving level calculated on a risk based capital basis will increase.

The scheme will then reach a point where the increasing solvency requirement meets the declining reserves. At this point the scheme should consider amalgamation.

Because of reducing size and increasing solvency requirement the scheme may reach a point where it is inefficient to hold large reserves, compared to a larger medical scheme.

Will benefits still be adjusted for inflation?

If yes then zero contribution increases will increase value for money for members.

However, you may reach a point where members pay less for same benefits on other schemes. When it comes time to amalgamate member would find themselves much more for the same benefits they were used to and experience a price shock because their contribution levels were out of line with the market norm for the level of benefits.

There is a danger that the Registrar may decline to approve the amalgamation owing to the large increase in contributions that members will suffer.

If benefits are not adjusted for inflation then their benefits will erode to such a point that it may be better to amalgamate.

The growing deficits may rapidly reach a point where the scheme needs to amalgamate in a short time or become insolvent. As discussed in the previous question, an amalgamation takes time. The scheme could get the timing entirely wrong.

Once this strategy is adopted the scheme will be more or less committed to it. If at a later stage it decides that it doesn't want to amalgamate high contribution increase and/or drastic benefit cuts will be required to stem the losses and return to a sustainable position. The longer the scheme freezes contributions the more committed it will become.

A single bad year, with unusually high claims and/or poor investment performance could result in the reduction of reserves quickly deterioration out of control.

Conclusion: Not appropriate given the risks involved, unless the scheme intends to amalgamate in the very near future (one or two years).

(Max 8)

(iii) Discuss all the factors that should be considered in the development and implementation of the Board's strategy.

This question was poorly answered.

Many candidates failed to answer the question and did not focus on developing an implementation plan for a strategy that has already been adopted by the Board of Trustees, wasting time by suggesting that the Board should take another course.

Serenity has essentially decided that it is no longer a going concern and that it should close down or amalgamate, but they want to use the reserves for themselves before doing that.

This strategy has two possible outcomes: It can amalgamate or it may be liquidated.

An ordered amalgamation is the preferred option (and also what the Board of Trustees intends) as it would be based on well-thought through benefit mappings, no need to decide how to distribute remaining reserves to members (as it would in a liquidation) and so on.

- If it is eventually liquidated the members who remain on the scheme until that time run the risk of being underwritten when they then need to move to another medical scheme.

- But if the members have to change schemes on 1 Jan because of "employer changing or terminating the scheme", then there would only be underwriting for those not applying to a new scheme within 90 days.

- If the members move to another scheme on 1 January as a group then the medical scheme they join will have no choice but to accept them without underwriting (however, new employees may subsequently be underwritten). The other scheme may be more willing to amalgamate as this would result in the transfer of the remaining reserves within Serenity.

The scheme should contact other medical schemes *now* to get a sense of what reserving level would be required as a condition for amalgamation. This will be one of the first steps as it informs most of the strategy and timing.

The Trustees will need to consider whether there are any willing amalgamation partners who are also *suitable*. It is not in the best interest of members to amalgamate with a struggling medical schemes which is only willing to amalgamate because it is desperate for more members and additional reserves.

The target date for the amalgamation/liquidation should be at year-end (31 December) for the reasons stated above and because it will be more appropriate for members to move to a new scheme at the start of a benefit year.

The reserves should be reduced (in real terms) at a gradual pace. (This is only true if reserves are currently higher than would be required by an amalgamation partner.)

The scheme needs to consider what the best approach to reducing solvency is.

- For example keep the operating deficits to a certain percentage of contribution income.

- Another approach would be to target a breakeven result *after* investment income. Then reserves would decline in real terms but not absolute terms.

The scheme's financial health must then be monitored continuously.

Except for reserving level the Board of Trustees must consider all the factors that are relevant to the future of the scheme in the context of the members' best interests, not only the reserving level.

Long term projections will be required to understand the implications of various scenarios and also to create a "roadmap" for this strategy.

The Trustees should also consider all of the risks involved with this strategy and how they may be managed. Sensitivity testing and the results of various scenario or stochastic modelling exercises will assist in understanding the risks. The scheme will also need to have contingency plans in place that will be followed if some "trigger" event occurs.

The scheme may be closed to new business (if it is not already). This will give more certainty of timing.

Based on this the scheme may be able to set a fixed date when it will start the amalgamation process and then manage the scheme accordingly.

The trustees will also need to consider the opinions of various stakeholders, including members, unions and the employer as well as the Regulator.

The plan must be compliant with the relevant laws and regulations.

The scheme should invest in low risk assets with predictable investment returns such as cash. This will not only provide more certainty but will also reduce expected investment income, which will help the scheme to reduce reserves.

The Scheme will also need to consider how reserves will be managed to ensure that it has sufficient liquidity to pay claims and expenses.

(Max 6)

[QUESTION 2 TOTAL 24]

Question 3

Question 3 considered an open medical scheme and its 3rd party administrator. These two parties have entered into an administration agreement as well as a managed care agreement.

(i) Describe the statutory capital regimes to which each of Sheltermed and Haven are subject to under the Medical Schemes Act.

This question is based on bookwork and was well answered.

Sheltermed is required to maintain a **minimum** level of **accumulated funds** (i.e. assets in excess of its liabilities) of **25% of gross annual contributions**.

These assets must be invested within the limits imposed by Annexure B of the regulations to the Medical Schemes Act in order to be recognised for the purposes of the solvency calculation.

Gross annual contributions include both **risk and savings** account contributions.

No allowance is made for any offset where risk is transferred to third parties (i.e. reinsurers or managed care organisations).

Where the scheme **fails** to comply with these requirements for a period of **90 days**, the scheme must **notify** the Registrar in writing of such failure, providing **additional information** relating to the nature and causes of such failure, and the course of action being adopted to ensure compliance.

The medical scheme will typically need to submit a **business plan** that meets with the approval of the Council for Medical Schemes.

The scheme will probably be subject to **closer regulatory supervision**, including monthly submission of management accounts, until the problems have been resolved.

There is **no statutory capital requirements** for Haven under the Medical Schemes Act.

[Total 4 max 3]

(ii) List the advantages and disadvantages of subjecting Sheltermed and Haven to risk-based capital requirements compared to the current statutory solvency requirements under the Medical Schemes Act.

This question is based on bookwork and was reasonably well answered

Advantages of risk-based capital

- There is a **closer relationship** between the risks faced by the risk taker and the economic capital that it requires.
    - For example, where the capital requirement is expressed as a percentage of contribution, no allowance is made for any risks unrelated to the amount of the contribution, e.g. credit risk or investment risk.
- It encourages **financially weak institutions** to reduce risk and/or hold more capital.
- It encourages a **greater degree of analysis** by management of the various risks faced by the risk taker.

Disadvantages of risk-based capital

- It is **more complex** to use than a simple percentage (for ShelterMed) or nothing at all (for Haven), and is more difficult to communicate and less easily understood by members and policyholders.
- It does not in itself guarantee that all the risks faced by a particular institution are properly considered, i.e. there is the risk of a "**false sense of security**" if the stakeholders believe that insolvency is no longer possible simply because a risk-based approach is being used to determine the level of required capital.

[Total 3, max 2]

(iii) Discuss all the risks Haven is exposed to as a result of the terms of these agreements, indicating to which agreement each risk relates.

Performance on this question was variable.

Most candidates were able to list the generic risks from core reading and gain some marks but were unable to apply their minds to the specific details s of the two agreements. Many candidates struggled to generate enough points for a 20 mark question.

The structure of the solution below was the one used for marking purposes. Many candidates approached the problem by attending first to one agreement and then the other. This is a logical approach but led to unnecessary duplication.

Both agreements expose Haven to **membership risk**.

The remuneration for both agreements is expressed on a per-member-per-month basis. If average **family sizes** increase, there will be an increase in the number of beneficiaries for which Haven has to provide administration and/or primary health care services, without a concomitant increase in income.

Haven is exposed to **anti-selection** risk under the capitation agreement, where members with a worse claiming profile than for which was budgeted join the affordable option.

Anti-selection risk can present itself in the form of **buy-downs**. This occurs where members on the higher options, with higher claims experience than allowed for in the affordable option's pricing, join the option.

The capitation agreement exposes Haven to **claims risk,** which comprises the variability of **claims frequency,** as well as **average claim size**.

The average claim size represents severity risk (services needed) and price risk.

Haven retains the severity risk, but the price risk is transferred to the providers via the fee-for-service arrangements.

{ Many candidates missed this point, assuming that primary care providers were being remunerated on a capitation basis. }

Insofar as Haven incurs a marginal expense per claim for administration, it is exposed to the risk of **claim frequencies (utilisation)** being different from expected for **all three options** under the **administration agreement**.

As Haven is responsible for payment of the primary claims, it is exposed to the risks of **both claim frequency (utilisation) and average claim size** being different from their expected values for the affordable option under the **capitation agreement**.

Under the capitation agreement, Haven is exposed to the random variation in claims, especially if the affordable option has few members.

The capitation fee is fixed, **not risk adjusted**, and claims are correlated to the **demographic profile** of membership. Haven is therefore exposed to the risk of the following membership characteristics being different than expected for the affordable option under the capitation agreement:

- **Age distribution** of beneficiaries (or average age of beneficiaries): primary claims costs increase with age.

- **Gender distribution** of beneficiaries: primary care claims are higher for women in child-bearing years than for men of the same age; in other words morbidity differs between genders at different ages.

- **Proportion** of beneficiaries suffering from a **chronic condition**: primary care claims are higher for those who suffer from conditions than for those who do not.

- **Chronic condition distribution** of beneficiaries (i.e. the proportion of members suffer from one or more specific chronic conditions): some chronic conditions lead to higher primary care claims than others.

- **Geographic distribution** of beneficiaries: some geographical areas will incur more or more expensive primary claims than others because of different levels of access, different provider behaviour and susceptibility to different diseases.

- **Socio-economic profile distribution** of beneficiaries: poorer beneficiaries may find it more difficult to obtain the necessary means (e.g. transport) to access health care services, and less educated beneficiaries may not be fully aware of the range of primary care services available to them.

As Haven reimburses health care providers on a fee-for-service basis, there is a risk that providers **over-service** members under the capitation agreement.

If the fees negotiated with primary care providers are not the same for each provider within a discipline, there is a claims risk in the possibility that the distribution of services among providers with **differing fee structures** is different to what was expected.

The possibility that **SEP increases** are different to what was expected presents a claims risk under the capitation agreement.

Under the capitation agreement Haven is exposed to claims risk of **changes in the regulated chronic disease list,** if there is no provision for re-negotiating capitation fees if the CDL changes.

Similarly it is exposed to claims risk of **changes in specified treatment standards** insofar these relate to primary health care. For example the standard for treatment of a specific condition may be changed to require more tests, more expensive drugs etc.

Under the capitation agreement, the sub-contracting of optometry and dentistry management presents a claims risk in that the sub-contractors could contract with **sub-optimal providers**, leading to higher claims than expected.

Ambiguity in **contract wording** or definitions of covered conditions present claims risk to Haven under the capitation agreement.

Haven is exposed to **expense risk** under both agreements.

A reduction in the scheme's **total membership** below what was expected will mean that Haven's **fixed expenses** will have to be divided among fewer families.

Similarly, the **fixed expenses** related to the **capitation agreement** are exposed to the membership **volumes of the affordable option**.

The administration fees are differentiated by option. To the extent that there is cross-subsidisation of administration costs between options (i.e. expenses are mismatched with administration fee income), Haven is exposed to the risk of the **option distribution** being different to what was expected.

Haven is responsible for interaction with employers on behalf of the scheme under the administration agreement. This will entail a degree of marginal expenses per employer, regardless of the size of its staff complement. Haven is therefore exposed to the risk of a reduction in **average employer size** below what was expected (for example if many small employer groups join), even if beneficiary volumes do not reduce below what was expected.

Similarly, Haven is responsible for maintaining GP, pharmacy, radiology and pathology networks. Since each provider has to be managed, each added provider will represent a degree of marginal cost to Haven. Again, Haven is exposed to the risk of a reduction in **average number of members per network provider** below what was expected under the capitation agreement, even if beneficiary volumes do not reduce below what was expected.

The capitation agreement also places Haven at risk that the cost of delivering benefits under the capitation agreement will change due to **changes in member or provider behaviour**.

The above may be the case where new providers may need to be added in areas where there are few members in order to ensure access for all members. Therefore fewer members will potentially use these providers than the average for existing providers.

Under the administration contract Haven is exposed to the risk of the **operational process experience** being different to what was expected:

- **New business processes – manual instead of electronic**: The possibility that a different proportion of members than expected join via more costly traditional methods such as manually completed application forms (which have to be captured manually on the system) instead of electronic application forms, presents an expense risk.

- **New business processes – income verification**: The possibility that a different proportion of members than expected join the most affordable option, which requires more intensive income verification expenses to be incurred, presents an expense risk.

- **Communication** with stakeholders: The possibility that a different proportion of stakeholders than expected prefer communication that requires more costly printing and postage instead of electronic communication, presents an expense risk.

- **Claims processes**: The possibility that a different proportion of claims than expected are processed automatically, as opposed to claims that have to be captured manually on the system at a higher cost, presents an expense risk. In addition, a different geographical distribution of stakeholders than expected, leading to a different postage costs than expected, also presents an expense risk.

- **Billing**: The possibility that a different proportion of members than expected pay contributions manually, which is more costly than debit order arrangements, presents an expense risk.

- **Enquiries**: A different volume or complexity of enquiries to what was expected with regards to contact centre calls or correspondence, leading to an unexpected increase in staff appointments to fulfil contractual service level obligations, presents an expense risk (for example as result of unclear marketing material or a failure in quality assurance in a claims process resulting in many queries).

Haven is exposed to **general business risks** under both agreements as detailed below.

Key person risks – the risk to the business that it may incur financial losses that result from the death or extended incapacity of an important member of staff. For example if one employee has a unique and hard to replace set of skills and knowledge that is vital to the operation of Haven.

Under the **capitation agreement**, it is exposed to **third party failure of the network providers** with which it contracted, i.e. network providers failing to provide services as agreed.

Similarly, it is exposed to the third party risk related to the **optometry and dentist network management provider** not providing the services as agreed.

Unless there are limits on such items there is a risk that there are more **out-of-network visits** than allowed for in the pricing of the capitation fee.

In addition, under the **administration agreement** Haven is exposed to **third party risk** with regards to all services it obtains from third parties, e.g. legal advice, banking, etc.

Haven is exposed to the risk of higher claims than expected due to **fraudulent activities** by staff, members and/or providers under the **capitation agreement**, e.g. providers claiming for "ghost visits" or members allowing their membership cards to be used by uncovered friends or relatives.

The **administration agreement** also exposes Haven to fraud risk in that it is responsible for internal audit. There is an expense risk in that **different levels of fraudulent activity than was expected** needs to be investigated, resulting in increased costs.

There is also **credit risk** where payments to providers are made in advance or where billing occurs in arrears.

Haven is exposed to the risk of **misadministration** and **not reaching the appropriate service levels** detailed in service levels agreements through error or inefficient processes under both agreements, e.g. the risk that claims are not paid according to the benefit structure or that claim payments are unduly delayed. An administrator will typically have to pay **penalties** in such cases.

It is also exposed to the risk of loss of business to **competition** from other administrators under the administration agreement and from other managed care organisations under the capitation agreement. Sheltermed could decide to contract with different entities when its contracts with Haven expire or if Haven is in material breach of the terms of the agreements, which will reduce Haven's revenue and profit.

Haven's administration agreement exposes it to **data risks**, such as the loss of data in a disaster, non-compliance with the Protection of Personal Information Act (POPI), or inaccurate or unreliable data provided to the scheme pricing for pricing and reserving.

Inaccurate or unreliable data also expose Haven itself to the risk of **inappropriate pricing** under the capitation agreement.

In the case of rapid membership growth, Haven is exposed to the risk that its infrastructure cannot cope with the high business volumes hence a lack of **scalability of infrastructure** presents a risk.

Haven is exposed to **environmental risks** under both agreements:

- Further **regulatory changes** present risks, e.g. more onerous accreditation standards for administrators and managed care organisations, or in the worst case, Haven losing its accreditation

- Bonus point: **Haven is a Managed Care Organisation** for the purposes of the capitation agreement.

- Under the administration agreement, **pressure from regulators to reduce non-healthcare costs** as a percentage of contributions presents a risk. Similarly, pressure to reduce the profits under risk transfer arrangements presents a risk under the capitation agreement.

- The **prevalence of different diseases or epidemics** that affect demand for primary health care services presents a risk under the capitation agreement. (Burden of disease).

Additionally, the possibility of adverse experience related to any of the risks mentioned above also introduces **reputational risk** to Haven under both agreements.

Many of the mentioned risks also contain **upside risk**, e.g. there is a possibility that the average family size decreases, which will result in a reduction in beneficiaries under administration without a concomitant reduction in administration income on a per-member-per-month basis.

Because there is no requirement for Haven to hold capital in terms of the cap arrangement it may run into **cash flow problems** if claim payments are higher than expected. In the worst-case scenario it would become insolvent.

[Max 20]

[QUESTION 3 TOTAL 25]