

Subject SA1

CMP Upgrade 2024/25

CMP Upgrade

ActEd often produces a free CMP Upgrade, which provides details of changes to the Syllabus, Core Reading and ActEd materials. This year, however, due to the large number of changes to the Course Notes and Assignments, it is not practical to produce a full upgrade.

This document *outlines* the most significant changes so that you are aware of the main differences between the 2024 study material and that for the 2025 exams. However, given the large number of detailed changes to the course, we strongly recommend that you use the 2025 study materials for the 2025 exams.

We offer a full set of up-to-date Course Notes / CMP at a significantly reduced price if you have previously bought the full-price Course Notes / CMP respectively in this subject. Please see our 2025 *Student Brochure* for more details.

We only accept the current version of assignments for marking, *ie* those published for the sessions leading to the 2025 exams. If you wish to submit your scripts for marking but only have an old version, then you can order the current assignments free of charge if you have purchased the same assignments in the same subject in a previous year, and have purchased marking for the 2025 session.

0 Retaker discounts

When ordering *retaker-price material*, please tick the relevant box when using the e-store.

Students have the choice of purchasing the full CMP (printed or eBook) or just the Course Notes (printed).

Further information on retaker discounts can be found at:

acted.co.uk/paper_reduced_prices.html

1 Changes to the Syllabus

This section contains all the *non-trivial* changes to the syllabus objectives.

An additional bullet point has been added to Objective 2.1 as follows:

2.1 Explain the relevance of legislation to health and care insurance business, in relation to:

- consumer protection
- equality legislation
- data regulations.

2 Changes to the Core Reading and ActEd material

This section contains a brief outline of the most significant changes to the Core Reading and ActEd text. However, given the large number of changes made to the course this year, it does not mention every change.

Chapter 2

Section 2

The first paragraph has been updated as follows:

This insurance product is known by different names, such as dread disease insurance, serious illness insurance, crisis cash, living assurance, trauma insurance and critical illness insurance or critical illness cover. In general, they provide coverage for the insured in the event they are diagnosed with a specified medical condition.

Chapter 3

Section 2

The following paragraph of Core Reading has been added at the end of Section 2.1:

In many Asian markets, the terms 'hospital cash' or 'Hospital & Surgical (H&S) plan' are used. These are cash plans that pay, in the case of the former, a defined amount per day for every day the policyholder is in hospital and, in the case of the latter, a fixed amount subject to a tiered surgical table which will typically define medical and surgical admissions. The term 'medical' is used to differentiate admissions not for surgery from admissions for surgery.

Chapter 4

Section 1

Changes have been made in Section 1.3 regarding the use of microinsurance in the developed world.

Section 2

Changes have been made in Section 2.4 regarding the extent to which insurers and the State are competing or complementing.

Chapter 5

A number of changes have been made to this chapter. The most significant changes are that a lot of material has been deleted from Section 1.8, the bullet point list in Section 2.3 has been extended, and there have been both additions and deletions to Section 4.1.

Chapter 6

Section 3

The following paragraph of Core Reading has been added at the end of Section 3.1 (which has been renamed 'Third party administrators'):

In some markets Third Party Administrators (TPAs) can select and manage a panel of (primary or secondary) healthcare providers as well. This is common in some Asian markets.

Section 4

Changes have been made in Section 4.1 regarding healthspan, in Section 4.4 regarding the Affordable Care Act, and in Section 4.6 regarding the impact of pandemics.

Section 5

The following paragraph of Core Reading has been added to Section 5.1:

Worldwide, both developed and developing countries are facing the double burden of increasing communicable and non-communicable disease. However, developing countries are potentially most vulnerable to this double burden due to geographic, demographic and socio-economic factors.

Chapter 7

Section 3

A new Section 3.5 has been added covering pre-existing conditions.

Chapter 8

Section 2

A new bullet point has been added to Section 2.3 covering network management.

Section 3

The first paragraph of Core Reading has been extended to cover reinsurer expertise.

Section 7

The following paragraph of Core Reading has been added.

In relation to health and care insurers, consumers may also pay attention to aspects such as inclusivity (eg the insurer's position on underwriting or providing benefits for mental health conditions) or the insurer's investment in the local community (eg funding or support of local community health programmes).

Chapter 10

Section 3

A new Section 3.5 has been added covering data regulations.

Section 4

Section 4.2 has been updated with regards to the reforms of UK solvency regulation.

Chapter 11

Section 0

This section has been updated with regards to the reforms of UK solvency regulation.

Chapter 12

Section 2

Section 2.2 has been updated with regards to the reforms of the risk margin.

Chapter 13

Section 1

This section has been updated with regards to the reforms of UK solvency regulation.

Chapter 14

All sections have been extensively rewritten.

Chapter 27

The definitions have been updated for: budget policies, chronic illnesses, claims paid / claims incurred, general practitioner, health maintenance organisation, major medical expenses.

Changes to the X Assignments

Overall

All changes to the assignments are listed below.

Assignment X3

In Question X3.1, part (ii) has been updated as follows:

- (ii) Describe, with reasons, the ideal features of the accounting procedures. [11]

In the solution to X3.1 part (ii), the second point after the first bullet point list has been updated as follows:

This will allow comparisons to be made between companies ... [½]

... and to assess trends within a company. [½]

Also in the solution to X3.1 part (ii), the first point in the fourth bullet point list has been updated as follows:

- be consistent with any other desired accounting principles, for example: [½]
 - have the right balance between prudence and fair value [½]
 - use a going concern or wind-up basis as appropriate [½]
 - recognise profit in the period in which it is accrued [½]

Assignment X4

Part (ii) of Question X4.1 has been deleted. The paragraph immediately above part (ii) has also been deleted. The question now has 33 marks in total.

For Question X4.3, the marks available for part (i) have been reduced from 6 to 5, and the marks available for part (ii) have been reduced from 7 to 6. The question now has 28 marks in total.

Question X4.4 has been updated as follows:

A small proprietary health and care insurance company that is subject to the Solvency II regime sells a range of critical illness and pre-funded long-term care insurance policies. It plans to launch its first income protection insurance product during the coming year. All the products are sold only by financial advisers.

The company has a weak capital position on both a regulatory and an economic basis.

- (i) Describe why the company needs capital. [9]
- (ii) Suggest possible methods of improving the capital position in time for the product launch (that do not involve reinsurance), commenting on any issues that would limit their appropriateness. [7]
- (iii) Explain how the company could use different forms of reinsurance for existing and new business. [11]

[Total 27]

Replacement pages are attached covering the solution to the new part (ii) for Question X4.4.

Changes to the Mock Exam

Overall

There have been no changes to the Mock Exam questions.

The changes to the solutions are listed below.

Solution 2

A number of changes have been made to the solution of part (iii)(b). Replacement pages are attached.

5 Other tuition services

In addition to the CMP, you might find the following services helpful with your study.

5.1 Study material

We also offer the following study material in Subject SA1:

- ASET (ActEd Solutions with Exam Technique) for 2022 (2 papers)
- Mock Exam and AMP (Additional Mock Pack).

For further details on ActEd's study materials, please refer to the *Products* pages on the ActEd website at ActEd.co.uk.

5.2 Tutorials

We offer the following online tutorials in Subject SA1:

- a set of Regular Tutorials (lasting a total of two days) or a Block Tutorial (lasting two full days)
- a mini Online Classroom.

For further details on ActEd's tutorials, please refer to our latest *Tuition Bulletin*, which is available from the ActEd website at ActEd.co.uk.

5.3 Marking

You can have your attempts at any of our assignments or mock exams marked by ActEd. When marking your scripts, we aim to provide specific advice to improve your chances of success in the exam and to return your scripts as quickly as possible.

For further details on ActEd's marking services, please refer to the *2025 Student Brochure*, which is available from the ActEd website at ActEd.co.uk.

5.4 Feedback on the study material

ActEd is always pleased to receive feedback from students about any aspect of our study programmes. Please let us know if you have any specific comments (eg about certain sections of the notes or particular questions) or general suggestions about how we can improve the study material. We will incorporate as many of your suggestions as we can when we update the course material each year.

If you have any comments on this course, please send them by email to SA1@bpp.com.

All study material produced by ActEd is copyright and is sold for the exclusive use of the purchaser. The copyright is owned by Institute and Faculty Education Limited, a subsidiary of the Institute and Faculty of Actuaries.

Unless prior authority is granted by ActEd, you may not hire out, lend, give out, sell, store or transmit electronically or photocopy any part of the study material.

You must take care of your study material to ensure that it is not used or copied by anybody else.

Legal action will be taken if these terms are infringed. In addition, we may seek to take disciplinary action through the Institute and Faculty of Actuaries or through your employer.

These conditions remain in force after you have finished using the course.

... and are not important because the company is well-financed and the policies are short-term [½]
[Maximum 7]

Solution X4.4

Capital management is covered in Chapter 16 of the Subject SA1 Course Notes.

(i) Why the company needs capital

To meet regulatory requirements

The company must ensure it has sufficient capital to meet its policyholder liabilities as they fall due, under a wide range of possible scenarios. [1]

A risk margin plus at least the MCR must be held for all classes of business. [½]

The company will want to hold enough capital to comfortably cover the SCR to avoid regulatory intervention. [1]

To write new business (including attracting new business)

Writing new business normally results in a capital strain, since the sum of the technical provisions and solvency capital is usually more prudent than the pricing basis. [1]

We would expect that the best estimate liability would be negative for its new business if it is written on a profitable basis. [½]

Once the risk margin and SCR are added to the best estimate liability, we would expect a capital strain. [½]

Holding sufficient capital to avoid regulatory intervention is especially important for this company as its sole distribution is through financial advisers, who attach great importance to a company's financial strength. [1]

Although the risk margin and SCR will be released over time, this might well be insufficient to support the planned levels of new business growth. [1]

To maintain investment freedom

The main investment principles are to:

- match assets to liabilities [½]
- invest to maximise overall return (income and capital). [½]

The extent to which the first may be departed from to pursue the second depends on the level of capital available and the desired level of risk. [½]

More capital is needed to cover the SCR if a risky investment strategy is chosen. [½]

So, more capital means a riskier investment strategy may be pursued, resulting in higher expected returns. [½]

To protect against adverse experience

A higher level of free capital will afford the company greater protection against all kinds of adverse experience. [½]

This will reduce the need for reinsurance of morbidity and longevity risks ... [½]

... and also help absorb the impact in other areas, such as expense overruns. [½]

To support strategic objectives

The company would require capital if it wishes to acquire:

- another insurer [½]
- or develop a new distribution channel (eg a tied agent) [½]
- a financial services company (eg a bank). [½]

To provide internal working capital

The company would require capital to support:

- product development costs (eg for the new income protection insurance), such as systems changes and marketing [½]
- temporary special offers [½]
- absorption of exceptional costs (eg of compliance reviews) that the company does not want to pass on to policyholders for competitive reasons. [½]

[Maximum 9]

(ii) Methods of improving the capital position

The company could improve its capital position by making its existing products more profitable ... [½]

... for example by increasing premiums for new business ... [½]

... or by reducing expenses through improved efficiency. [½]

However, these retained profits are unlikely to raise significant capital in the short time before the product launch ... [½]

... and new business volumes and persistency might deteriorate (eg due to the higher premiums or if cost cutting leads to falling customer service standards). [½]

Markers, please give the above marks for other alternative ways of improving profitability of the existing products and their limitations.

A lower risk investment strategy would reduce the solvency capital requirement (SCR) and hence improve the capital position. [½]

For example, the company could match more closely by term (or invest in bonds with a higher credit rating). [½]

However, this might result in lower expected returns. [½]

Improved risk management could also lead to a lower SCR ... [½]

... for example by using derivatives to protect against a fall in the value of any equities backing the pre-funded long-term care business ... [½]

... but this would also lead to extra costs. [½]

The sale of the new product will provide diversification to the existing products reducing the SCR. [½]

However, the diversification benefits will be small as the contracts are all exposed to similar risks (morbidity, expenses) and more than offset from the increased risk from having more policies in force. [½]

The company could sell a block of existing business to a competitor, ... [½]

... but then the company would lose economies of scale ... [½]

... and would be passing profits to a competitor. [½]

The company could raise capital through a rights issue, ... [½]

... but the shareholders may be unwilling to inject further capital if they are concerned about the ongoing viability of the company. [½]

The company could instead raise capital by issuing subordinated debt, ... [½]

... or could securitise a block of existing business ... [½]

... but the company may need to provide a high return on these if investors are concerned about the possibility of default given the current weak capital position. [½]

A small company might not have sufficient resources to simultaneously complete the product launch project and the capital raising project ... [1]

... particularly as there isn't much time if the capital needs to be in place before the launch in the coming year. [½]

[Maximum 7]

(iii) Use of reinsurance

Managing insurance risk (existing and new business)

The company might seek reinsurance for its long-term care portfolio, if it is worried about the longevity risk. [½]

Reinsurers might be willing to take on this risk if they have not already written a significant amount of annuity reinsurance, as it would provide diversification from any mortality risk. [½]

However, longevity risk can't be diversified away by taking on more and more portfolios, so there will be limited capacity in the market. Since this insurer is small, this might not be an issue. [1]

It might seek reinsurance for its critical illness insurance portfolio, if it is worried about the impact of individual large claims, or an accumulation of a large number of claims, on its solvency position. [1]

Original terms (OT) reinsurance involves a sharing of all risks between the direct writer and the reinsurer. [½]

Risk premium (RP) reinsurance is often based on the sum at risk and so would specifically target the morbidity risk. This would therefore usually be the more suitable arrangement for protection products, unless reserves are small. [1]

Either of these arrangements could be used to reduce the morbidity risk on the critical illness insurance policies, original terms possibly being more suitable, given the low reserves. [1]

Reinsurance can be proportional (the risk passed to the reinsurer is specified as a percentage of claims) or non-proportional (the reinsurer pays the excess over a given retention limit). [1]

Proportional reinsurance is useful to limit the exposure whilst building up credible experience for a new product. Non-proportional is useful to reduce volatility of claims experience. [1]

This is especially important due to the company's weak capital position. For this reason a fairly low retention might be chosen. [1]

Catastrophe XL cover will be wanted to protect against large losses from a single event on the critical illness insurance portfolio, especially if there is any group business. However, the cost of this cover can be high, reducing its practicality. [1]

Reinsurance can be used to reduce risk-based capital requirements, such as the Solvency II SCR ... [1]

... although there will be some offset to the reduced insurance component due to the higher counterparty risk exposure. [½]

Overall, the use of traditional reinsurance will improve the capital position as a result of reducing risk within the portfolio. [½]

Direct capital management

The company also needs to consider the extent to which reinsurance can be used to reduce new business strain. [½]

Financing commission is available with both OT and RP reinsurance. This would help improve the capital position. [½]

In the past, financial reinsurance arrangements have been used in some jurisdictions to improve the regulatory balance sheet by crystallising the value of future expected profits. However, the effectiveness of such arrangements is much reduced (or eliminated) under Solvency II or under an economic capital balance sheet. [1]

New product

If treaties are entered into, then reinsurers are likely to be willing to provide technical assistance. [½]

This will be useful for pricing the new income protection insurance, since the company won't have any relevant past experience on which to base its calculations. [½]

The reinsurer should also be able to help with product design. [½]

Also, claims volatility is likely to be high initially on a small volume of business. [½]

Other possible areas of assistance with the income protection insurance include:

- helping establish the underwriting process [½]
- systems design. [½]

It is unlikely that all new business would fall within the terms of a reinsurance treaty, so facultative reinsurance might be used for some cases (eg very large sums assured or cases acceptable only on non-standard terms). [½]

General consideration

All external reinsurance comes at an expected cost, so this should be weighed against the benefits before proceeding. [½]

[Maximum 11]

All study material produced by ActEd is copyright and is sold for the exclusive use of the purchaser. The copyright is owned by Institute and Faculty Education Limited, a subsidiary of the Institute and Faculty of Actuaries.

Unless prior authority is granted by ActEd, you may not hire out, lend, give out, sell, store or transmit electronically or photocopy any part of the study material.

You must take care of your study material to ensure that it is not used or copied by anybody else.

Legal action will be taken if these terms are infringed. In addition, we may seek to take disciplinary action through the Institute and Faculty of Actuaries or through your employer.

These conditions remain in force after you have finished using the course.

Underwriting and claims control standards may need to be changed. Staff in these departments will need to be trained to be able to deal with any new claim triggers. Claims staff will need knowledge of both sets of definitions and will need to be able to identify which triggers apply to which policies. [1]

The changes will hopefully increase sales volumes and improve persistency. Expected claim levels may change and there may be a change in the mix of business if the new definitions appeal to different types of customer. [1]

There will be expense incurred in implementing the changes. [½]

There may also be some capital implications. [½]

Reinsurance arrangements may be affected and may need to be reviewed, eg reinsurers may change their risk premium rates as a result. [½]

On individual business, although existing customers should be unaffected, there may be an increased level of lapse and re-entry, as some customers may prefer the new definitions. This may be within the same insurer or from one insurer to another. [1]

The people switching will tend to be those in better health, and so we might expect to observe an increased effect of selective lapsing on claims experience for a short while. [½]

Similarly, existing customers may be upset if they have had a claim declined that would have been accepted on the new definition, and so such claims may need revisiting. [½]

Indeed, the insurer may be under pressure to change the definitions for existing business too, in which case there will be financial and administrative implications. [½]

Also, the insurer will need to ensure that it is treating all its customers fairly (eg not reducing benefits for any policyholders). [½]

On group business, if the new definitions are adopted, existing customers will be directly impacted as these will affect coverage from renewal (ie from the next year or two). For these cases it will be vital that both the rationale for the changes and the details of the new definitions are explained fully to customers. [1]

The pricing of new products will need to reflect the change in definitions, and so an assessment of the impact these will have on assumptions – such as claims, persistency, expenses, and new business volumes and mix – will need to be made. [1]

Each insurer should also reassess the margins it uses in its pricing (eg in the risk discount rate) and solvency basis. Hopefully, improved definitions should lead to a reduction in experience uncertainty, and so there can be lower allowance for risk (eg leading to lower premiums and solvency capital requirements). [1]

The effects of the above may be significant for an insurer that writes only CI business and is recently established. [½]

Insurers may develop new product types as a result of the changes. [½]

For example, having more certainty over future claim levels might lead more insurers to offer products with guaranteed (rather than only reviewable) premiums. [½]

Any analysis of historic experience, eg of claim rates trends, will need to allow for the effect and timing of the definition changes. [½]

[Maximum 10]

(iii) Impact of changing claim definition

(a) BEL assumptions

The BEL assumptions should reflect the future expected experience and so, if a change in future experience of the business is expected as a result of the changes in definitions, this should be reflected in the BEL basis. [1]

It may be necessary for the insurer to use different assumptions for business using the new claim definitions than for business using the old definitions. [½]

Claims experience will be the main assumption to change. The impact will depend on how the definitions have changed in terms of generosity of cover, and also the impact of other changes that influence claims, such as underwriting and claims control. [1]

The insurer may need to allow for any one-off additional claims that may be paid on existing business if previously declined claims now become valid. [½]

The insurer might decide to reduce its lapse assumption for new business, eg due to clearer definitions, ... [½]

... but increase its lapse assumption on existing business, eg due to people switching (as mentioned above). [½]

Other assumptions in the BEL may also need to be changed and, in particular, the expenses of changing the definitions should be allowed for. [½]

If the persistency experience and sales volumes are assumed to be better (or worse) in future, the per-policy expenses may be lower (or higher) to reflect the change in the in-force business volumes. [1]

Future expenses of handling claims should also be reduced, if disputes are fewer. [½]

The impact of selective lapsing may need to be reflected in the CI incidence and mortality assumptions. [½]

[Maximum 5]

(b) Calculation of IFRS 17 profit

The changes to the Solvency II best estimate liability assumptions may follow through to the insurer updating the IFRS 17 assumptions used to calculate the fulfilment cashflows as part of the General Measurement Model (GMM) element of IFRS 17. [½]

However, the insurer does not have to set the assumptions in the same way as under Solvency II and so it is possible that the assumptions could vary. However, they should both represent best estimate experience. [½]

For its existing business, if the experience is expected to worsen, and more claims will be paid, this would lead to an increase in the IFRS 17 best estimate of the present value of future cashflows. [½]

The risk adjustment element of the fulfilment cashflows may also increase if the insurer views there to be greater uncertainty around the future experience. [½]

As this is a change in expected experience, it will not lead to a profit being made until the actual experience emerges. So, the increase in the fulfilment cashflows will be offset by a reduction in the contractual service margin (CSM). [½]

The lower CSM leads to lower releases of CSM in the future, and so the changes to the fulfilment cashflows now lead to lower profits in the future. [½]

The contractual service margin represents the 'future profit' and is changed as the profit is expected to change. [½]

If the CSM is insufficient to offset the required increase in the fulfilment cashflows, a loss will be recognised at that time. [½]

It is possible that the experience could be expected to improve, for example if lapse experience improves as a result of this change. [½]

This would lead to the fulfilment cashflows reducing (as premiums are due to be paid for longer), but this would be offset by increasing the CSM. [½]

In future years, if the actual experience is better than expected, a profit will be generated (as the BEL/RA is released). [½]

For new business, the GMM would be established with the revised assumptions. If this meant that a loss was expected this would be incurred on day 1. [½]

The insurer will need to take care, as if the changes lead to any new business being expected to be loss-making, it will need to be accounted for separately. [½]

The losses on the business cannot be offset by other profitable business it may write in the future. [½]

However, the insurer would be expected to reprice its business for the change to the definitions, meaning that any expected deterioration in experience should be covered by a corresponding increase in premium income. [½]

[Maximum 5]

All study material produced by ActEd is copyright and is sold for the exclusive use of the purchaser. The copyright is owned by Institute and Faculty Education Limited, a subsidiary of the Institute and Faculty of Actuaries.

Unless prior authority is granted by ActEd, you may not hire out, lend, give out, sell, store or transmit electronically or photocopy any part of the study material.

You must take care of your study material to ensure that it is not used or copied by anybody else.

Legal action will be taken if these terms are infringed. In addition, we may seek to take disciplinary action through the Institute and Faculty of Actuaries or through your employer.

These conditions remain in force after you have finished using the course.