Continuous Mortality Investigation

WORKING PAPER 19

Per Policy Mortality Investigation
(including revised Coding Guide)

CONTENTS

Executive Summary

Working Paper 13 was issued by the Mortality Committee in April 2005. This effectively comprised a Coding Guide revised to reflect the proposed change to a per-policy basis for the mortality investigations. This Working Paper:

- summarises the responses received,
- explains the changes made as a result of the consultation exercise,
- sets out a revised Coding Guide for the CMI Mortality and Critical Illness investigations, and
- sets out a number of areas for further consideration.

Offices supplying per-policy data for Mortality and/or Critical Illness are requested to use the attached version of the Coding Guide for submissions at their earliest convenience. In particular, the CMI will cease to accept scheduled data for the Mortality investigations after the 2006 investigation year.

Key changes to the previous Coding Guide to arise from the consultation process are:

1 **Interaction with other CMI investigations.** The data requirements for Mortality and Critical Illness are so similar that it has been agreed to move towards common data requirements for these investigations. The additional data fields and guidance required for the Critical Illness investigation have been included within the revised Coding Guide. Offices will remain free to use the existing Critical Illness Coding Guide for the foreseeable future.

There is also a large overlap with the in force data requirements for Income Protection, although the claims data is obviously quite different. The possibility of converging the Coding Guide for individual Income Protection business is being considered further.

2 **Impaired lives.** The Impaired Lives section of the Coding Guide in Working Paper 13 had not been amended from that currently in use. The difficulty for offices in supplying such data considerably limits its credibility and use. The Mortality Committee has agreed that this needs to be considered further but does not wish to defer the main move to per-policy submission further. It has therefore decided to leave the current codes unchanged to continue capturing data from those offices that currently provide it. Possibilities for future development include using the type of rating (e.g. medical) rather than the underlying reason for the rating (e.g. high blood pressure) and discussing standardisation of the codes for impairments with reinsurance data.

3 Extending the CMI Analyses. One respondent asked whether the CMI is planning to undertake lapse analysis on the industry data. This was not one of the intentions behind Working Paper 13, but the CMI has decided that it should be considered in due course, through consultation with member offices. The possibility of analysing experience under Waiver of Premium benefits may also be considered.

CMI Working Paper 19 - Per Policy Mortality Investigation

1 Introduction

Working Paper 13 was issued by the Mortality Committee in April 2005, with comments requested by 30 June. Working Paper 13 effectively comprised a Coding Guide revised to reflect the proposed change to a per-policy basis for the mortality investigations. This was sent out with a Covering Letter, the body of which is incorporated in Appendix A. The letter concluded by asking for responses to 7 questions.

The Working Paper was distributed to all Actuarial Function Holders, CMI data contacts and CMI results contacts. Comments were also requested from the Critical Illness and Income Protection Committees.

The purpose of this note is to summarise the responses received, to explain the changes made as a result of the consultation exercise and to set out a revised Coding Guide for the CMI Mortality investigations.

2 Responses

18 responses to Working Paper 13 were received. This is a higher-than-normal response, which probably reflects that the distribution of the Working Paper was specifically targeted. 14 of the responses were from CMI member offices, 1 from the CI Committee, 1 from a member of the IP Committee, 1 from a non-member and 1 from an academic. Of the responses from member offices, it would appear that 6 had gone through the data requirements in detail, the remainder offering less detailed comments.

The Mortality Committee would like to thank all those who took the time to respond.

Unfortunately a number of major data contributors were not able to respond within the deadline, and this has resulted in some delay to this initiative.

3 Key Issues

The key issues arising from the consultation exercise are considered below.

A summary of responses to the specific questions asked in Working Paper 13 and the more detailed comments are contained in the Appendices. A revised Coding Guide has been produced and is included as Appendix G.

3.1 Timescales

The responses to Question 6 (see Appendix B) indicated that a few offices would be able to supply 2004 data on a per-policy basis, but most would move in subsequent years. The move to per-policy data collection only from 2008 (for investigation year 2007) appears to be feasible.

The need to consolidate the Coding Guide for offices wishing to use it for data submissions soon has necessitated deferring consideration of some issues raised by the consultation exercise.

3.2 Interaction with other CMI investigations

Working Paper 13 made reference to Critical Illness and Income Protection benefits (e.g. under "Benefit Type" in Table 1) creating the impression that this was intended to be an all-encompassing data submission, rather than restricted to mortality only. This issue also resulted in a number of detailed comments (e.g. 'deferred period' needs to be added).

The Critical Illness Committee pointed out that most - but not all - of their data requirements were met by the Guide and felt it would be sensible to move towards common data requirements, with additional items for each investigation as required. There is also a large overlap with the in force data requirements for Income Protection, although the claims data is obviously quite different.

The move towards common data requirements for Mortality and Critical Illness has been agreed within the CMI. The revised Coding Guide has been reviewed by the Critical Illness Committee and the additional data fields and guidance required for the Critical Illness investigation have been included. Offices are still free to use the existing Coding Guide for Critical Illness for the foreseeable future where this is more convenient..

The Income Protection Committee was planning to review its data requirements in 2006 anyway, as these are out-of-date in some respects. It will now consider the possibility of converging its Coding Guide for individual Income Protection business but cannot yet commit to a definite deadline for this, due to other priorities.

3.3 Need to collect all data

This issue is related to 3.2 above. The intention behind Working Paper 13 was that the data would encompass all business – indeed in 1.1, data was specifically requested even for those policies where there is no death cover. This would have allowed the CMI to validate data submissions against FSA Returns to ensure data is allocated to the correct investigation and to gauge market coverage.

However, collecting all data introduces a potential risk into the investigation - that the CMI inadvertently includes or excludes business inappropriately - thereby creating an inconsistency between the exposure and claims. (See comments D3, D4, D11 and D18 in Appendix D and comment E3 in Appendix E.) The CMI has agreed that these risks outweigh the potential benefits of validating submissions against FSA Returns.

As a result, the request for "all data" has now been amended and the CMI is happy for offices to exclude categories of business where appropriate.

It was also the intention that the CMI would allocate data to investigations as deemed appropriate. This was also not clear to all respondents – for example, one queried the omission of "Investigation Code" from the data requirements.

3.4 ABI New Business Codes

Working Paper 13 proposed the inclusion of the ABI New Business Code within the data submission. Only one office commented explicitly on this field, saying that they have a number of products which have been withdrawn and may well not have an ABI New Business Code. Whilst these codes were developed by the ABI for new business reporting, they have also now been 'adopted' by the FSA for statutory reporting (see PS05/02). This suggests that offices will need to apply codes for all in force business for FSA reporting, rather than just new business.

The CMI therefore remains keen to use these codes for data reconciliation. It is our intention that the codes are applied consistently between the ABI, the FSA and the CMI; however this does mean that the CMI is not well placed to provide guidance on completion of these codes to offices.

Collecting the ABI New Business Code is probably of greater significance than was recognised when Working Paper 13 was written. Respondents suggested a number of other data items they would like to see included, some of which – as detailed in Appendix E – can be derived from the ABI New Business Codes (see comments E4, E5 and E6). The ABI New Business Codes also have distribution channel categories that differ from those proposed in Working Paper 13 (see comment D32). The CMI is therefore keen that offices include this field within their data wherever possible.

3.5 Impaired lives

None of the respondents who appeared to have studied the Coding Guide in detail will be able to provide such data. This was unsurprising given the current situation, where a subset of offices contributes data for impaired lives.

One possibility mentioned by respondents was to include the type of rating (e.g. medical) rather than the underlying reason for the rating (e.g. high blood pressure). Another approach would be to discuss standardising the codes for impairments with reinsurers, even if this route is not pursued more widely (see responses to Question 4 in Appendix B).

This is likely to be a long-term initiative that would only gradually be adopted for new business. In the meantime, the Mortality Committee has decided to leave the current codes unchanged to continue capturing data from those offices that currently provide it.

3.6 Additional data items

There were suggestions for a number of data fields to be added to the Coding Guide. These are detailed in Appendix D which also contains the Mortality Committee's thoughts on each of these additional fields. In addition, Appendix E considers possible additional items arising from the review of the Society of Actuaries' data requirements.

As a result, the following fields have been added to the Coding Guide: Client identifier, Type of Entry, Initial benefit amount, Type of increment/decrement and previous investigation number.

In addition, further consideration will be given to Cause of Death, Marital Status and Income in due course.

3.7 Extending the CMI Analyses

One respondent asked whether the CMI is planning to undertake lapse analysis on the industry data. This was not one of the intentions behind Working Paper 13, although it could be possible given the new Coding Guide. The CMI Executive Committee has discussed this briefly and decided that it should be considered properly, but that the current work should not be delayed in the meantime. No decision will be taken without appropriate consultation with member offices.

The question also arose of investigating claims experience under Waiver of Premium benefits. This will be considered when The Income Protection Committee have decided whether to converge their data requirements with those set out in the attached Coding Guide.

4 Next Steps

The CMI requests that offices supply per-policy data for Mortality at the earliest opportunity using the attached version of the Coding Guide. In particular, the CMI will cease to accept scheduled data for the Mortality investigations after the 2006 investigation year.

This Coding Guide will undoubtedly require further clarification to be issued as individual offices begin to submit data using this guide. Details of further guidance and the latest version of the Coding Guide will be available on the CMI pages of the profession's website.

Critical Illness data submissions will continue to be accepted using the current Critical Illness Coding Guide for the foreseeable future, but offices submitting both Mortality and Critical Illness data are encouraged to update their Critical Illness data to the latest combined Coding Guide when they amend their Mortality submission.

The CMI always welcomes feedback from member offices, but would be particularly grateful for views on the various issues outlined in this Working Paper for further consideration, including:

- Data submission for Income Protection;
- Extension of CMI analyses to lapses and Waiver of Premium benefits;
- Impairment codes and other underwriting factors; and
- Inclusion of further data items.

This does not constitute a formal consultation exercise, but may influence the priority with which the remaining issues are addressed and the direction taken.

Appendix A – Covering note to Working Paper 13

This memo is being sent to all actuarial function holders, CMI data contacts and report recipients.

The CMI has now completed its deliberations on switching its data collection for the life office mortality investigations from a scheduled basis to a per-policy basis. This will bring these investigations into line with the other CMI investigations and has a number of advantages over the existing method:

- It will allow more detailed and accurate analyses to be carried out.
- A better analysis of amounts data will be possible and the CMI will be better able to track select periods.
- Policy data can also be aggregated in different ways allowing the possibility of new investigations being carried out on the data already held.
- Data and analyses for additional risk factors can be easily accommodated, for example by sales channels.

Direct writing offices, when surveyed in 2002, were generally positive regarding their ability, both in terms of systems and resources, to provide per-policy data. Following further deliberations and taking into account the survey results as well as the need to keep up with the insurance industry's data requirements, the CMI has now decided to collect per-policy data starting with the 2004 data collection. The 2004 data will be collected from September to December 2005.

Offices that are unable to provide per-policy data in the short term will be able to continue to submit scheduled data for the rest of the 2003-2006 quadrennium. However, starting with the 2007 data collection, only per-policy data will be accepted by the CMI. Thus offices have at least two years in which to build and introduce any new systems that may be needed.

Data collection on a per-policy basis is expected to result in a significant increase in the amount of data submitted by individual offices and may therefore impact on trends in the CMI experience. In order to track this effect, offices will be requested to split out the business previously included in their scheduled submissions. This will allow the CMI to assess the impact of data changes on the CMI experience.

A new coding guide for per-policy data collection, Working Paper 13, has been produced and is enclosed with this letter. It will greatly assist the CMI if both direct writing offices and reinsurance offices could review this coding guide and provide comments to the CMI on the questions listed below.

Direct writing offices will also be supplying data in various formats and standards to their reinsurers. Therefore, the CMI is consulting both direct writing and reinsurance offices as to whether a single data standard could be used for both purposes. If this could be done, there would be significant benefits for everybody.

1. Are offices able to meet the requirements in the Coding Guide?
2. Are the data requirements set out in the Coding Guide clear and appropriate?
3. What additional guidance is needed in the Coding Guide?
4. Would direct offices and reinsurers consider a single industry data standard to be of value and achievable? Are the CMI data requirements set out in the Coding Guide consistent with reinsurers' data requirements?
5. Are offices able and willing to provide the first part of the postcode for policyholders?
6. Are the timescales in switching to per-policy data collection and for the 2004 data collection appropriate?
7. Are offices able to split their first per-policy data submission between business on which they have previously submitted data on a scheduled basis and business on which data is being submitted for the first time?

Please provide comments by 30 June 2005 to:

CMI
Cheapside House
138 Cheapside
London
EC2V 6BW

Alternatively, these can be emailed to mortality@cmib.org.uk

Queries relating to the attached coding guide and on any other aspect of the change in data collection should in the first instance be addressed to Rajeev Shah at the CMI.

Appendix B – Responses to specific questions

The Covering letter to Working Paper 13 contained a number of specific questions on which feedback was requested (see Appendix A). The responses to these questions are considered below.

Q1. Are offices able to meet the requirements in the Coding Guide?
The majority of offices who responded believe they could meet most of the requirements, although it should be noted that a number of offices who currently contribute substantial data volumes were unable to respond to Working Paper 13 due to other priorities.

The main areas of uncertainty seemed to be around:

- Impairment Codes. Of those offices who appear to have considered the Coding Guide in detail, this area caused the most difficulty, probably as few offices retain such detailed information on their mainframe administration systems. Further, there is no standard format to such codes in current use. There was also a suggestion that the current codes (which had not been revised from the current Coding Guide) might be out-of-date and some of the detailed comments reflected this. Further consideration in this area has been deferred, with the existing format being retained till then (see section 4.6).
- Joint Lives. A number of offices commented on issues here. One cannot submit Joint Life data because their system does not identify which life died, another allows lives to be added and removed but only holds the current status.
- Dates of Claim. Working Paper 13 requested 4 claim dates – similar to the Critical Illness data requirements – and many offices are unable to supply all these dates. This mirrors the CMI's experience on Critical Illness. The CMI is keen to collect those dates that offices can provide accurately.

Appendix C summarises the data fields which offices may not be able to supply and on which respondents raised specific issues.

The Critical Illness Committee suggested that, as the data requirements have increased, it would be beneficial to highlight 'mandatory fields' to avoid offices being deterred from submitting data by the effort required. This has been adopted in the revised Coding Guide.

Q2. Are the data requirements set out in the Coding Guide clear and appropriate?
The majority of respondents felt that the Coding Guide was clear, but support continued development as submission gets under way and issues arise. Some respondents requested clarification on definitions of some data items whilst others felt such clarification would be required when they addressed the data requirements in earnest.

Whilst the CMI will clarify issues as they arise and issue further guidance where appropriate, it is also important that the CMI gets the Coding Guide as accurate as possible at outset, so that:

- offices who move to the per-policy basis early are not contributing data inconsistent with that of offices who switch basis at a later date;
- work undertaken within offices to provide per-policy data does not need to be re-visited unnecessarily; and
- the new systems developed within the CMI do not require significant revision.

The CMI intends including the revised Coding Guide on its website and keeping this version updated regularly as issues are resolved.

One particular point raised by several respondents was the need for further guidance on amounts for 'Family Income Benefit' cases (where the sum insured is payable as an income benefit, rather than a lump sum). This has been incorporated in the revised Coding Guide.

One reinsurer made a number of comments relating to the impairment coding but, as noted in section 4.6, few offices may be able to provide this data so these have not yet been considered in detail.

Q3. What additional guidance is needed in the Coding Guide?
Offices were generally happy with the Coding Guide; however a number of issues were raised which we have tried to address in the revised guide. These issues are considered in Appendix D.

There were also a number of suggestions for additional data items, although these tended to come from reinsurers rather than the offices who would have to provide the data! These additional items are considered in Appendix E.

There was also a helpful suggestion that the Society of Actuaries' data requirements were reviewed to ensure completeness. These requirements are available at:
http://www.soa.org/ccm/content/areas-of-practice/life-insurance/experience-studies/2002-04-ind-life-exp-study-data-req/
These have been considered and a summary is contained in Appendix F.

Q4. Would direct offices and reinsurers consider a single industry data standard to be of value? Are the CMI data requirements set out in the Coding Guide consistent with reinsurers' data requirements?
Both direct offices and reinsurers welcomed the concept of a single industry standard but expressed some scepticism over whether it could be achieved (one respondent described it as a "laudable ideal"). One reinsurer noted that reinsurers have previously discussed a standardised data format without success.

A number of respondents pointed out that additional data is required for reinsurance purposes and therefore the CMI per-policy data would at best represent a subset of such a reinsurance dataset. Such items include reinsurance information (reinsurance premium, sum reinsured, etc), more details on extra premiums and items covered by the Data Protection Act (name, address, full postcode).

One reinsurer commented on the favourable cost implications of a standard data format, but one insurer commented on the unfavourable implications for them! Another expressed similar concerns as follows "A single standard would clearly be more efficient, but it is unlikely that all parties will have exactly the same needs. This could lead to any standard format having an unnecessarily large number of required data fields in an attempt to accommodate everyone's requirements." Another insurer noted that they are currently meeting reinsurers' requirements so would not wish to further develop these systems.

As the responses did not provide a clear answer as to whether this goal is worth pursuing and in view of the need to confirm the data requirements for those offices ready to start submitting per-policy data, the Mortality Committee has deferred further consideration of this. One possibility is that the Committee will, in due course, pursue this in particular areas, such as Impaired Lives and Cause of Death.

Q5. Are offices able and willing to provide the first part of the postcode for policyholders?

Generally, offices said they are willing to provide the first part of the postcode, although some would not be able to do so immediately. One office had been advised by their Data Protection Officer that they should not do this, whereas several others had clearly checked this and been advised it was acceptable. One office said it would be unable to complete this field.

Unfortunately there was an error in the draft Coding Guide which stated "The CMI is registered under the Data Protection Act." This is not the case as previously the CMI has received guidance from the Data Protection Registrar that it did not need to be registered as it was not requesting data that could allow an individual to be recognised. The CMI is seeking further guidance on whether the request for the first part of the postcode affects this position.

A small number of respondents mentioned practical issues, including:

- Where the office no longer has a valid address, it may use one of its administration centres as a default. Such defaults should be excluded by the office.
- The required data is presumably for the life insured, not the policyholder. This may not be held on business protection/life-of-another policies.

These are now addressed in the revised Coding Guide.

Q6. Are the timescales in switching to per-policy data collection and for the 2004 data collection appropriate?

A few offices indicated they would be able to start providing per-policy data for the 2004 investigation, but most respondents said they would switch for 2005, 2006 or 2007.

This means the proposal to accept only per-policy data starting with the 2007 submission is achievable.

The CMI will be very happy to accept data using the revised Coding Guide henceforth. The systems to process such data are now in development and until these are completed, the CMI will re-format offices' data into the old, scheduled format in order to provide results within normal timescales.

Q7. Are offices able to split their first per-policy data submission between business on which they have previously submitted data on a scheduled basis and business on which data is being submitted for the first time?

A varied response: some offices indicated they would be able to split their first per-policy data submission in this way, some that they would not, some suggested approximations might be possible whilst others that further investigation is required to assess whether it is feasible.

The CMI is keen that offices provide this wherever possible. One of the intentions behind the adoption of per-policy submission is to increase the volume of data submitted. If we are successful in this regard then there is the possibility that mortality experience will be affected and this field will help considerably in allowing analysis of the impact of the changes in data on experience and trends in experience.

Appendix C – Data Fields that may not be obtainable

A number of offices mentioned fields that they would not or might not be able to provide. In total there appeared to be 6 responses to Working Paper 13 from data contributors who had gone through the data requirements in detail.

The table below shows how many times fields were mentioned by offices as likely to cause difficulty:

Field	Number unable to provide	Comments
Territory	1	1 office suggested they although they do not capture territory in a robust manner, they would be able to exclude non-UK policies (the issue appeared to be with segregating Irish business from other non-UK business)
Medical type code	4	2 respondents noted they currently code this as "combined" as they cannot segregate policies. This approach continues to be acceptable.
Date of policy proposal	3	One office questioned the value of this field, another queried if this was the date the proposal was signed or the date it was submitted
Date benefit first brought into force during the year	1	The office who thought they could not provide this also asked how it is defined and how does it differ to the date of commencement?
Impairment code	5	It was not clear whether the 1 office not included here could actually provide this data! 2 offices commented that they do hold the type of rating (e.g. medical, occupational) but it was not clear whether these are coded consistently
ABI New Business Code	1	This office commented that they have a number of products which have been withdrawn and may well not have an ABI New Business Code. This is considered in section 3.4
Benefit code for riders / flexible benefit policies	1	This office commented that they may not be able to distinguish increments from the original policy
Distribution channel code	1	This appeared to be an issue for "historic" business, rather than products/systems still being used. See also comment D33
Location	2	Again, this appeared to be an issue for "historic" business. See also the response to question 5
Date of amount review	1	
Type of exit	1	This office commented that they may not be aware of the first death on a joint life second death policy
Dates of claim	3	WP13 requested date of death, date of notification of death, date of admission and date of settlement. 3 offices commented that they would be unable to supply all 4 fields, without necessarily specifying which ones they could or couldn't provide. Indeed one office stated that this would vary according to the system the data is being extracted from

Additional guidance has now been incorporated into the revised Coding Guide where appropriate in the light of this feedback. The principal exception is "Date of policy proposal" which the Mortality Committee has decided to drop from the data requirements altogether.

Appendix D – Detailed comments on Coding Guide

A number of responses to Working Paper 13 included detailed comments on the draft Coding Guide, in response to questions 1, 2 and 3. These are considered below, together with the next step agreed by the Mortality Committee.

Ref	Comment	Notes	Next Steps
D1	Requirements are for a file containing a separate record for each benefit. Although the admin system holds data in the format via the risk benefit structure the data currently extracted for our experience analysis only concentrates on main benefit.	Such issues will need to be considered with the office concerned. This is unlikely to present a major issue as the CMI will generally be interested in the main benefit	Liaise with office concerned
D2	We would have problems with single and joint lives: it is possible for a second life to be added to or removed from a contract during its lifetime and so a policy record would only hold the latest state	• This is an issue as we will be attempting to calculate exposure accurately • A policy may therefore show as Single Life at 1/1/x and as Joint Life at 1/1/x+1 • We could request the date of change but this may get very complicated if there are multiple changes to a policy during a year (e.g. a change in the benefit amount too). It is also unknown whether this field would be available from offices • We could also seek data more frequently than annually, but this would have significant repercussions for offices and the CMI • Although the issue has been raised with regard to SL/JL, it is likely that there are other instances of this. With hindsight it is also clear that the change to an exact calculation of exposure was not spelt out in the consultation document. Thus few such issues may have surfaced at this stage	The occurrence of this particular event is thought to be relatively rare, and therefore not a major concern. However there may be other more significant examples that need to be addressed (see also comment D38). The revised Coding Guide seeks records for both the pre-alteration benefit and the post-alteration benefit to resolve this issue.

Ref	Comment	Notes	Next Steps
D3	We have deliberately excluded some products in the past, e.g. life contracts on our own staff which were part of our pension scheme. Who would be deciding the exclusions now?	This comment raises a wider issue. If the CMI collects all data, then it must also collect any fields that it requires in order to exclude policies that may not fit within the investigation. For example, the coding guide in WP13 did not identify policies with exclusions and these could not therefore be removed from the investigation	See 3.3. The revised Coding Guide assumes that we will allow offices to exclude blocks of business where they wish.
D4	We cannot supply Joint Life data as we do not record which life the claim applies to	This appears to be an unavoidable loss of data. However it also raises another possible issue regarding the proposal to collect all data, as there would be no reason to exclude the in force business (the issue lies only with claims). This raises a risk that the CMI could introduce an inconsistency between the exposure and claims (see comment D11 for another example of this)	As above
D5	Rating Details – reinsurers required more details of ratings in order to check correctness of premium paying. This can include rating multiples, amount of extra premium, length of period of rating, rating details for 2 lives if appropriate, and exclusions of certain benefits.	It was not the CMI's intention that the 2 datasets be identical. The expectation was that the CMI data would form a subset of the data required by reinsurers	None (see responses to Q4 in Appendix B)
D6	Our colleagues in Germany encountered some particular problems with annuitants' data pool. Often companies did not correctly record second deaths under joint life policies and deaths during a guaranteed period. CMI might want to draw companies' attention to how such data should be coded.	We believe that the Coding Guide is clear in this regard but would welcome further comment.	None

Ref	Comment	Notes	Next Steps
D7	Some additional guidance would be useful on appropriate cut-off dates in order to allow for processing delays. Currently as an office we tend to allow a 6 month period for the processing of claims before analysing data. I would assume that a similar process is followed for production of this data (e.g. 2004 experience data is based on policy data extracted from systems on 30/6/2005 i.e. allowing 6 months lag after period end (31/12/04). Clarity on this point would be useful.	Guidance is included in the version of the Coding Guide currently in use, but this was omitted from WP13	Included in revised Coding Guide
D8	We would like to allow automatic increments to policies to be shown as a separate row of data. Without this it is extremely difficult for reinsurers to validate records for policies with an "indexation option", where under an Original Terms treaty, reinsurers' premiums and commissions for the increment are calculated as though it were a new benefit but no further underwriting takes place.	This is an issue if we pursue consistency between CMI data and reinsurance submissions, but not otherwise	The CMI's preference is for automatic increments to be included within the one record, but we should be able to follow this approach if offices submit data on this basis.
D9	Were it not for the limitations imposed by the Data Protection Act, the addition of fields showing the names of the insured lives would of course be useful to improve the accuracy of aggregation of benefits for each insured life, both across policies provided in the data by each individual insurer and across all insurers. In the absence of such data, the inclusion of a "Client ID" used to identify unique insured lives within the data provided by each individual insurer would surely be the bare minimum required in order to carry out an experience analysis on a lives basis.	The CMI would probably need to register under the DPA (and insurers might need to highlight that data is passed to the CMI on proposal forms) if the life insured's name was requested. Indeed the CMI will be seeking clarification in relation to the proposed addition of half of the postcode (see Q5). Client ID is considered as an additional data item in Appendix E	Client ID is included in the revised Coding Guide. The request for postcode has not been amended.

Ref	Comment	Notes	Next Steps
D10	The proposal contains no data fields explicitly used to define the way in which benefit amounts change under either decreasing term assurances or benefits which pay an income following a death or critical illness claim (i.e. "Family Income Benefits"). These would be required for reinsurance data and would also be useful for the CMI's experience analysis by allowing a more accurate calculation of the exposure on an amounts basis over the course of each year.	Seeking to accurately map the benefit over the course of the year would add considerable complications to the analysis, as it is possible for the benefit to change on a number of occasions during a year.	Fields have now been added to better understand regular changes in benefit and to permit reconciliation. Some approximation will still apply (e.g. whether sum insured on mortgage cases reduces annually or monthly). One-off changes should be captured by means of 2 records, as for other alterations.
D11	Advice should be given on how to calculate the benefit amount in respect of Family Income Benefits, particularly with regard to whether or not they should be valued using an interest rate to discount the present value of income payable following a claim	The choice here seems to be between: • using the annual benefit, and keeping the data separate from other amounts data • using a commuted value. This issue is not addressed in the CI Coding Guide either. Where offices have queried this, they have been requested to use the commuted value, but others may use the annual benefit without the issue having been considered explicitly. Using the commuted value is the simplest route for the CMI, as the business can then be treated as a decreasing lump sum benefit, but it is not known whether this is feasible for all offices. The essential requirement is that claims and in force are treated consistently. This is another example of the risk associated with collecting all data (see comment D4)	See section 4.8 of the revised Coding Guide.
D12	For joint life annuities, should the second life's benefit commencement date be left blank until the death of the main life?	The CMI would like the policy commencement date to remain as the start of the original annuity and the benefit commencement date to show the start of the contingent annuity. The latter would only be submitted after the death of the first life.	Clarified in revised Coding Guide.

Ref	Comment	Notes	Next Steps
D13	Benefit identifier: are non-automatic annuity benefit increments required to be separated out, given they are not underwritten? If so, this could potentially present us with some difficulties given the current format of our data. Occasionally a policyholder will augment their annuity with an additional single premium. The annuity rate for this augmentation will only be based on age and sex, i.e. there is no medical underwriting.	Even though no medical underwriting is involved, a separate record is preferred, however if this is an occasional occurrence then there should be no issue with including them within the original record.	Respond to the office concerned. Clarified in revised Coding Guide
D14	Does the benefit code for riders / flexible benefit policies data field include guaranteed payment periods on annuities?	No. The intention is that guaranteed payment periods are ignored. If, for example, death occurs in the third year of a policy with a 5-year guarantee period then it should be recorded as a death at that point, even though the benefit will continue to be paid till the end of the 5 years. This clearly carries a risk that the life office may not be notified of the death or might not record the death on their systems.	Clarified in revised Coding Guide.
D15	When submitting the data as a text file, it is not clear how 'blank fields' should be recorded. Are these 'single character' fields?	The field widths for fixed format data submissions were not included in WP13	Respond to the office concerned. Included in revised Coding Guide
D16	Clarification on when you consider a claim to be settled (and therefore want the claim details reporting). In particular for claims that are gone-away and where the claim results in the benefit lapsing (e.g. annuities in payment).	Question not entirely clear	Liaise with office concerned and clarify in Coding Guide if required
D17	I can foresee it would be useful to accompany new data submissions with a document that indicates our interpretation of the guide in connection with [our] policies.	This would be greatly appreciated by the CMI and would facilitate any handover of responsibilities within the office	None
D18	Section 4.5. Is it the intention that the requirements for two lives can be extrapolated for policies for greater numbers of lives? Or are such policies to be excluded? The coding guide could perhaps make this clear.	The Committee believes that policies on more than 2 lives are rare, so has agreed that such policies are explicitly excluded.	Revised Coding Guide excludes such cases.

Ref	Comment	Notes	Next Steps
D19	Are the 'Investigation Numbers' unchanged or is the intention to collect global data and allocate it to particular investigations based on the product code?	The intention is to use the product information to allocate policies to particular investigations. This has the benefit that investigations can be amalgamated or separated as appropriate within the CMI without offices needing to alter their data submissions. Initially the CMI is also asking offices to advise under which investigation business was previously submitted	Clarified in revised Coding Guide
D20	Would Reassurers be contributing data? If so, would that duplicate the direct office's data where it was ceding reassurance? A single set of results is appropriate where life cover is ceded as a proportion of the total cover. It is less appropriate when only large amounts or large excesses are reassured.	It remains the intention that reinsurers will not contribute data to avoid duplication	Clarified in revised Coding Guide
D21	We understand that one of the aims of the revisions is to capture an increased proportion of offices' data. It will then be allocated to investigations by the CMI. This is to be supported as otherwise investigations can become redundant or there can be long delays before new investigations are fully up-and-running. However this could result in the results of an investigation being published when an office would not wish to have contributed its data to that investigation, for example because it has a dominant market position.	The CMI will monitor the composition of the investigations whilst doing its utmost to preserve confidentiality. Where it sees potential issues it will bring this to the attention of the relevant office(s) if it intends publishing results that risk any breach of confidentiality. It is unlikely that results will be released for new sub-sets of the data without appropriate consultation.	Ongoing
D22	In 1.1, any pre-Stakeholder group product appears to be out of scope. Is this intended?	This comment was indeed erroneous, as it would preclude the current Life Office Pensioners investigation	Clarified in revised Coding Guide.
D23	In 4.5, reference is made to both lives being subject to a covered event on a First Event policy. The office may not always be aware of this being the case and even if it is, it is unlikely to have recorded the event on any system, making provision of this information very difficult	Offices are requested to record the type of exit as death for both lives if this is known. If the office is only aware of one of the lives dying then clearly the other life should not be coded as a death	Clarified in revised Coding Guide.

Ref	Comment	Notes	Next Steps
D24	In 5.1, does it need to be clarified that records for policies that have gone into and out of force should be provided alongside year-end in-force data?	Accepted.	Clarified in revised Coding Guide
D25	5.9 refers to "the underwriting carried out in respect of that benefit". Where multiple benefits are effected simultaneously, we would expect underwriting to be undertaken at a policy level, not a benefit level	Accepted.	Clarified in revised Coding Guide
D26	Also relating to Medical Type Code. We are unconvinced of the relevance of a life having been medically examined. For example this may be done because of the size of benefit automatically triggering an exam or because of a disclosure on the proposal form requiring further investigation, yet the experience of these two groups could differ markedly. We also feel this is a data item that is unlikely to be available on offices' mainstream administration systems and therefore is difficult to capture.	The Mortality Committee has retained this field, but notes that offices have the option to code this as "U" (undifferentiated) where this not recorded.	None.
D27	In 5.12, "Date of policy proposal" does not appear to be defined. We assume it is the date that the proposal form is completed?	It was not clear in WP13 whether this is the date the form is completed, the date it is signed, or the date it is submitted if the field is retained	The Mortality Committee agreed that this field should be dropped
D28	In 5.14, we did not understand the reference to "non-annuity business".	The reference should have been to "annuity business"	Reference removed in revised Coding Guide
D29	We were unsure why offices need to submit the "Date of benefit first brought into force during the year", as the CMI could generate it. We would not expect offices to hold this on their system and so would need to generate it specifically for their data submission.	This field does not appear to have been properly understood. It relates in particular to the situation where cases are lapsed and then reinstated	Clarified in revised Coding Guide
D30	5.16 refers to "maturity", but presumably "expiry" is equally applicable?	Accepted.	Amended in revised Coding Guide

Ref	Comment	Notes	Next Steps
D31	In 5.25 and other places there are references to the "main benefit". We do not think this concept exists for a menu protection product, where there are a number of possible types of cover, any of which can be regarded as the main benefit.	Accepted.	Amended in revised Coding Guide
D32	Under "Distribution Channel code" (5.26) we note that Multi-tied agent has been introduced but that "Tied agent" has not specifically been refined to "Single Tie". How would pre-depolarisation business, "tied" business be coded?	The categories used for this field have been reviewed and a consistent coding to the ABI New Business Codes adopted [which uses IFA/Whole of Market, Limited Range, Single tie, Non-intermediated, Bancassurance and Basic Advice (but see 3.4)]	Amended in revised Coding Guide.
D33	We also note that D denotes "Direct Marketing" whereas the Critical Illness Coding Guide uses this for "Direct Sales", which we think is potentially confusing. Presumably we should agree a common approach here?	See D32 above	See D32 above
D34	In 5.27, we assume that "policyholder" should in fact refer to "life insured"	Accepted	Amended in revised Coding Guide
D35	Also in 5.27, we doubt whether offices will retain the postcode at date of commencement on systems and suggest this is amended to the latest advised postcode. Even this may not be available on life of another cases (including Business Protection)	Accepted	Amended in revised Coding Guide
D36	We were surprised in 5.28 that benefit amount should be rounded to the nearer penny, as pound should be sufficiently accurate.	It is noted that the Critical Illness investigation uses nearer £. CMI will accept exact amounts (including pence) or nearer £, but analyses will always use nearer £	Amended in revised Coding Guide
D37	For FIB policies, along with Income Protection and Waiver benefits, it should be specified whether annual or monthly amounts are required.	See D11 re FIB. The intention was that IP and Waiver information would not be used, but this is raised in 3.2 and 3.7	Revised Coding Guide assumes this is not required for FIB. The position for IP and Waiver will be considered if either is progressed using this Coding Guide.

Ref	Comment	Notes	Next Steps
D38	We were unsure why the date of amount review is required in 5.30. This may not be held on offices' systems	This field was included with the intention of accurately calculating exposure on an amounts basis. It is noted that this may not be possible if the benefit amount can change more than once in a year	Clarified in revised Coding Guide
D39	In 5.31, there are numerous other types of benefit increment, for example RPI subject to a maximum of 10%. We are not sure of the value of collecting this field.	This field was included for the purpose of helping with data reconciliation. Since there are numerous possible caps for the rate of increase it is not proposed to code each of these separately. However it is proposed that we introduce a new code for (any) capped RPI	Amended in revised Coding Guide.
D40	In 5.32, date of exit may need further definition. For example, most insurance policies contain a 'Days of Grace' provision, so should this be the date that the benefit actually went off risk, when the days of grace expire, or when the exit is processed? If it is not the last, then we do not see why the date should "**always** fall during the year for which data is being submitted"	Intention was that the date that the office processes the change is the key date for CMI purposes	Clarified in revised Coding Guide
D41	Under 5.33, we wonder whether the situation where a benefit ceases because of a claim under another benefit should be given a separate code? This would mean that lapses are not over-stated if the CMI starts reporting on lapse experience.	Accepted	Amended in revised Coding Guide
D42	Four claim dates are requested in 5.34 to 5.37. We note our earlier comment that these do not incorporate Critical Illness claims. We also note that 5.34 may need to be clarified in respect of Terminal Illness claims where we presume that it is the Date of Diagnosis that is required here. Finally, experience with the Critical Illness would suggest that most offices are unable to supply all four dates. You may therefore gain from promoting your preferred date. For Critical Illness, Date of Diagnosis was taken to be the most appropriate date.	Agreed that all 4 dates will often not be available. Suggest that 'Date of claim' (death or diagnosis of Terminal Illness) is the preferred date that we should be seeking if at all possible	Clarified in revised Coding Guide.

As noted earlier, a number of detailed responses were received relating to the impairment coding as follows:

- Coding of one impairment gives some information, but further codes would be more useful. This would then enable overweight and hypertension to be identified separately (which in view of the percentage of overweight cases appears worthwhile)
- Usage of the words “moderate” or “slight” in the hypertension section can lead to different interpretations.
- It isn’t clear, but are companies to code impairments at ordinary rates? It has an advantage in the subsequent analysis if this is requested.
- More detail is needed in the tumour section to identify specific sites.
- Overweight – I’m not sure it will work if people use a range of standard tables. Additionally the translation from the approach used to the “percentage weight over standard” isn’t necessarily automatic from the table used. E.g. consider usage of a table driven by height and providing a range of “standard acceptance” between, say, 100-169lbs. Is the % threshold taken from the mid-point of the range? Alternatively if the approach used is “BMI”, is it the excess point where the BMI is overweight i.e. 25 BMI or some other consideration?

These responses have not been considered individually at this stage but the overall development of agreed impairment codes is considered in section 3.5. The Mortality Committee has agreed that we will retain the current codes until resources permit a proper review which is likely to involve medical underwriters (perhaps by forming a separate Working Party).

Appendix E – Possible additional data items

As noted under Q3 (in Appendix B), a number of suggestions for additional data items were included within responses to Working Paper 13. These have been considered by the Mortality Committee and the next steps are shown below.

Ref	Field	Comments	Next Steps
E1	Cause of Death	• This was mentioned in a number of responses • It would clearly add value to our understanding of mortality • The CMI used to run a separate Cause of Death investigation which ceased due to lack of support • It is not known how many offices hold CoD on their mainframe systems. If they do not, it is likely to be too difficult for larger data contributors to determine this field	This would be highly valuable but we will need to seek feedback from key data contributors on the feasibility of including Cause of Death as a non-mandatory data item. Thought will also be required as to how this is categorised. The Mortality Committee will pursue this further in due course.
E2	Underwriting Rating	• Suggested by one reinsurer who commented that "This would be helpful for analysing the quality of underwriting" • Would allow an office to gauge if its underwriting loadings were levied at an appropriate level in aggregate • Particularly valuable if can be analysed by type of impairment • Unfortunately, ratings can be applied in a number of forms – % loading to premium, per mil loading to premium, loadings to q, etc – which complicates the submission	This potentially widens the scope of the work considerably. The benefit is also unclear without some indication of the underlying impairment or the reason for the loading (see 3.5). The Mortality Committee intends to consider this further in due course.

Ref	Field	Comments	Next Steps
E3	Guaranteed Insurability Option (GIO) indicator	• GIOs allow a policyholder to effect further cover, usually on specified events such as marriage, house purchase, etc • This is a valuable option if a life is no longer in good health, but would rarely be exercised otherwise • As a result, mortality experience may be very heavy • It is not clear how policies effected under GIOs should be treated from the current Coding Guide, one possibility is that they would be included within Investigation 07 [Permanent (whole life and endowment) assurances without any medical selection whatever] even though that it is not the intention. Temporary Assurances do not appear to be covered.	Policies taken out via a GIO have been included as a separate code under "Type of Entry" in the revised Coding Guide. This should maintain the homogeneity of • the bulk of the data, that has been subject to some medical selection, • new policies effected without any medical selection, and • policies effected under GIOs (which may be analysed separately when there are credible data volumes). If offices are unable to include such an indicator, then they are asked to exclude any policies effected under a GIO.
E4	Type of benefit (level/increasing/decreasing)	• Until 1/1/1989, separate investigations existed for level and decreasing temporary assurances (02 and 03 respectively). Some offices still submit data separately under these codes • For term assurances only, separate ABI New Business Codes apply to level and decreasing temporary assurances, so this could be used. We assume that increasing cover is included within level • Inclusion of this field may also assist in data reconciliation of amounts	This has been incorporated in the revised Coding Guide by means of an additional field "Type of increment/decrement"

Ref	Field	Comments	Next Steps
E5	Mortgage/non-mortgage indicator	• This field is not well-defined. Some products are particularly associated with mortgage business (i.e. mortgage endowments and mortgage protection term assurances), but people effecting mortgages may also take out other products • The ABI New Business Codes split business between mortgage and non-mortgage (but they recognise that some offices will not capture the actual reason for purchase, in which case a broad product-type categorisation can be used as an approximation) • A broad indication of experience should be possible from product codes	See section 3.4 re ABI New Business Codes. The Committee has agreed it will try to use these codes and product codes to provide an indication of experience for mortgage/non-mortgage.
E6	Guaranteed/reviewable indicator	• This issue appears to be more relevant to the Critical Illness and Income Protection investigations than Mortality • For CI and IP (but not term assurances), separate ABI New Business Codes apply to guaranteed and reviewable premiums • It is not obvious that this factor will influence experience (but could do so, e.g. experience could deteriorate as a result of anti-selective lapses after a review, if significant premium increases are required)	Again, the Committee has agreed it will try to use the ABI New Business Codes and product codes to provide an indication of experience for guaranteed/reviewable.
E7	Initial sum insured	• If it is expected that analysis will be undertaken using "amount" as a risk factor, then initial benefit is probably a more appropriate variable than current benefit • It may also be useful to include this field for data reconciliation purposes, especially where offices allow policyholders to alter the sum assured	This field has been added to the revised Coding Guide as a non-mandatory field

Ref	Field	Comments	Next Steps
E8	Occupation (class)	• Occupation Classes (as used for IP) are rare for mortality business • Occupation is clearly a key risk factor, but it is unlikely that the CMI would be able to develop an analysis without a common coding approach that is in widespread use • This might be an area where collaboration with reinsurers would be useful (see Q4 in Appendix B) • However it is not a field that offices are likely to maintain up-to-date	Further consideration deferred
E9	Client ID, to identify duplicate policies within an office	Agreed. This field serves a useful purpose	This field has been added to the revised Coding Guide as a non-mandatory field.

Appendix F – Comparable/additional data items collected by the Society of Actuaries

The Society of Actuaries' Coding Guide was reviewed to determine whether they collect any data the CMI might also be interested in collecting. These are considered below, together with the next step agreed by the Committee. Fields that are thought to reflect features of the US market that are not prevalent in the UK (e.g. categories of non-smokers) have not been included below.

Ref	Field	Comments	Proposed Next Steps
F1	Data Type	• Policy year or calendar year data is permitted – this field indicates which type each data-set is • CMI has not encountered problems through calendar year submissions, so there seems no rationale to change	None
F2	Age Basis / Age at Issue / Duration	• Age at commencement (with definition), duration and dates of birth and commencement are all requested • Presumably this is to help offices provide data even when they are not able to supply date of birth and/or date of commencement • Again, this has not been a significant problem for the CMI, so there seems no rationale to change	None
F3	Marital status	• Marital status at outset is requested. • A relationship between marital status and mortality has been postulated. • It is debateable whether marital status **at outset** is relevant or **current** marital status (but the latter is unlikely to be obtainable) • Availability would need to be assessed by asking some key data contributors, but it is sometimes asked on proposal forms now	No change proposed at this stage
F4	Termination Data	• Considerable extra data is required here, some of which relates to policy year data • Cause of death is included (see E1). ICD codes are used to categorise this	To be discussed in conjunction with E1

Ref	Field	Comments	Proposed Next Steps
F5	Premium class	As well as collecting standard rates data, underwriting loadings are collected, grouped into various categories (e.g. "slightly substandard" meaning a rating of under +175%)	To be discussed in conjunction with E2
F6	Substandard reason code	This categorises non-standard risks according to the reason for the loading, e.g. medical, aviation, etc	See section 3.5. This will be considered further, but no change has yet been made to the current Coding Guide
F7	Reinsurance Status	• This appears to categorise business according to whether an extra premium is levied due to the case being reinsured • This does not seem to be relevant to the UK	None
F8	Plan	• This categorises business into different product types • Effectively it achieves a similar aim as the ABI New Business Codes but the Mortality Committee would make the decision as to what categories are used • Avoids the issue of the CMI having to interpret non-categorised product codes.	None
F9	Policy Conversion / GIO Exercise	This not only identifies policies effected under GIOs but also those arising from conversion	See E3 regarding GIOs. Policies arising from conversion should not be included within CMI data.
F10	Residence	• Residence details comprise both ZIP and state (at outset) • Collecting county or region would avoid any DPA issues for the CMI, but this may not be as straightforward for offices to supply • The 5-digit ZIP code is collected. This is a fragment of the full 9-digit code	None (but see Question 5 in Appendix B).
F11	Policy Form Code	• Offices assign a plan code to each policy, uniquely identifying generations of products where the features change • This may be more relevant to persistency studies than mortality studies	None.

Ref	Field	Comments	Proposed Next Steps
F12	Large amounts	• Offices are asked to apply a code according to the benefit amount (e.g. $50,000-$99,000) • This amount includes amounts in force and applied for at other companies, which is probably a better risk factor than the benefit on a particular policy • There seems little benefit in asking offices to code a grouping compared to collecting the actual benefit amount • It is not clear to the CMI whether UK offices hold the total insured amount on their systems, even if this is sought at proposal stage	None
F13	Purpose of Insurance	• Categorised between personal, business, etc • Business is a small part of UK market • More relevant split in UK is mortgage/non-mortgage – see E5	None
F14	Income at issue	• This is likely to be a useful differentiator of mortality experience (though household income might be better?) • Often now captured on proposal forms for advised sales	Not added at this stage, to be considered further
F15	Waiver of premium (WoP) and Accidental Death Benefits (ADB) data	• A number of data fields relate to WoP and ADB riders • ADB is not sold in significant volumes in the UK • WoP is regularly added to insurance policies, but claims experience is not currently investigated by the CMI	No change at this stage. Possibility of investigating WoP as an additional CMI investigation will be considered further
F16	Policy changes data	• Term conversion, term extension and paid-up details are all requested • This data is extensive • These are not thought to be particularly relevant to the UK	None
F17	Amounts data	• Initial and current benefit amounts are requested • The claim amount is also requested where this is less than the sum insured	Claims where the full benefit is not paid are not thought to be common in the UK. These will be considered further as individual cases arise.
F18	Aviation data	• Extensive data relating to aviation is requested, e.g. type of flying, annual flying hours, type of aircraft, etc • This is not thought appropriate for the UK	None
F19	Other Underwriting Data	Data requested includes occupation, hazardous sports, driving violations and blood pressure	To be discussed in conjunction with section 3.5.

Ref	Field	Comments	Proposed Next Steps
F20	Individual Life Persistency Study data	• A considerable amount of data is requested for this study, e.g. premium, premium mode, policy ownership, years experience of the intermediary, etc • A detailed analysis of UK requirements would be required if a corresponding persistency study was proposed for the UK	See section 3.7