This is the 5th Affidavit
of Richard Border in this case
and was made on October 14, 2015

Court File No. 98-CV-141369 CP00

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

DIANNA LOUISE PARSONS, MICHAEL HERBERT CRUICKSHANKS, DAVID TULL, MARTIN HENRY GRIFFEN, ANNA KARDISH, ELSIE KOTYK, Executrix of the Estate of Harry Kotyk, deceased and ELSIE KOTYK, personally

Plaintiffs

and

THE CANADIAN RED CROSS SOCIETY, HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO and THE ATTORNEY GENERAL OF CANADA

Defendants

and

HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF ALBERTA
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF SASKATCHEWAN,
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF MANITOBA,
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF NEW BRUNSWICK
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF PRINCE EDWARD ISLAND,
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF NOVA SCOTIA
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF NEWFOUNDLAND,
THE GOVERNMENT OF THE NORTHWEST TERRITORIES,
THE GOVERNMENT OF NUNAVUT and THE GOVERNMENT OF THE YUKON TERRITORY

Intervenors

Proceeding under the *Class Proceedings Act, 1992*

Court File No. 98-CV-146405

B E T W E E N:

JAMES KREPPNER, BARRY ISAAC, NORMAN LANDRY, as Executor of the Estate of the late SERGE LANDRY, PETER FELSING, DONALD MILLIGAN, ALLAN GRUHLKE, JIM LOVE and PAULINE FOURNIER as Executrix of the Estate of the late PIERRE FOURNIER

Plaintiffs

and

THE CANADIAN RED CROSS SOCIETY, THE ATTORNEY GENERAL OF CANADA and HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO

Defendants

and

HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF ALBERTA,
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF SASKATCHEWAN,
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF MANITOBA,
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF NEW BRUNSWICK,
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF PRINCE EDWARD ISLAND
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF NOVA SCOTIA
HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF NEWFOUNDLAND,
THE GOVERNMENT OF THE NORTHWEST TERRITORIES,
THE GOVERNMENT OF NUNAVUT AND THE GOVERNMENT OF THE YUKON TERRITORY

Intervenors

Proceeding under the *Class Proceedings Act, 1992*

No. C965349
Vancouver Registry

In the Supreme Court of British Columbia

Between:

Anita Endean, as representative plaintiff

Plaintiff

and:

**The Canadian Red Cross Society
Her Majesty the Queen in Right of the Province of
British Columbia, and The Attorney General of Canada**

Defendants

and:

**Prince George Regional Hospital, Dr. William Galliford,
Dr. Robert Hart Dykes, Dr. Peter Houghton, Dr. John Doe,
Her Majesty the Queen in Right of Canada, and
Her Majesty the Queen in Right of the Province of
British Columbia**

Third Parties

Proceeding under the *Class Proceedings Act*, R.S.B.C. 1996, C. 50

CANADA
PROVINCE OF QUÉBEC
DISTRICT OF MONTRÉAL

NO : 500-06-000016-960

SUPERIOR COURT
Class action

DOMINIQUE HONHON

Plaintiff

-vs-

THE ATTORNEY GENERAL OF CANADA
THE ATTORNEY GENERAL OF QUÉBEC
THE CANADIAN RED CROSS SOCIETY

Defendants

-and-

MICHEL SAVONITTO, in the capacity of the Joint Committee member for the province of Québec

PETITIONER

-and-

FONDS D'AIDE AUX RECOURS COLLECTIFS

-and-

LE CURATEUR PUBLIC DU QUÉBEC

Mis-en-cause

CANADA
PROVINCE OF QUÉBEC
DISTRICT OF MONTRÉAL

NO : 500-06-000068-987

SUPERIOR COURT
Class action

DAVID PAGE

Plaintiff

-vs-

THE ATTORNEY GENERAL OF CANADA
THE ATTORNEY GENERAL OF QUÉBEC
THE CANADIAN RED CROSS SOCIETY

Defendants

-and-

FONDS D'AIDE AUX RECOURS COLLECTIFS

-and-

LE CURATEUR PUBLIC DU QUÉBEC

Mis-en-cause

AFFIDAVIT

I, RICHARD BORDER, of 980-475 West Georgia Street, Vancouver, British Columbia SWEAR (OR AFFIRM) THAT:

1. I am a Principal and Shareholder of Eckler Ltd. ("Eckler").

2. Attached hereto and marked as **Exhibit "A"** is a true copy of the Actuarial Report to the Joint Committee, entitled *"Proposed Allocation of the 2013 Sufficiency Assessment Actuarially Unallocated Assets 1986-1990 Hepatitis C Trust".*

3. The Eckler actuarial personnel involved in the review of the data and the development of the actuarial model which provides a basis for the opinions expressed are myself, Wendy Harrison, Dong Chen and Kevin Chen. The opinions are those of Wendy Harrison and me and we are the authors of the report.

4. There have been no material changes to the curriculum vitaes appended to my fourth affidavit, sworn on March 11, 2015.

SWORN (OR AFFIRMED) BEFORE ME)
at Vancouver, British Columbia, on)
October 14, 2015.)
)
)
)
)
)
A Commissioner for taking)
Affidavits for British Columbia)

RICHARD BORDER

SHARON D. MATTHEWS, QC
BARRISTER & SOLICITOR
856 Homer Street, 4th Floor
Vancouver, BC V6B 2W5
Tel: 604-689-7555 Fax: 604-689-7554

This is Exhibit" A "referred to in the
affidavit of Richard Border
sworn before me at Vancouver, BC
this 14 day of October 2015

A Commissioner for taking Affidavits
for British Columbia

Eckler
CONSULTANTS + ACTUARIES

Actuarial Report to the Joint Committee

Proposed Allocation of the 2013 Sufficiency Assessment Actuarially Unallocated Assets

1986-1990 Hepatitis C Trust

Prepared by:

Richard Border, FIA, FCIA Wendy Harrison, FSA, FCIA

Vancouver, B.C.
October 14, 2015

CONTENTS

1 INTRODUCTION

1. Our assessment of the financial sufficiency of the 1986-1990 Hepatitis C Trust as at December 31, 2013 was documented in our report (2013 Sufficiency Report) dated March 11, 2015.

2. Our 2013 Sufficiency Report concluded that, after allowing for an appropriate level of Required Capital, there was Excess Capital, or actuarially unallocated assets, of $236,341,000. As set out in Section 2, an additional sufficiency liability in respect of level 2 claimants who are reclassified as level 3 claimants equal to $29,421,000 million, should be reflected in the financial position of the Trust. This reduces the Excess Capital to $206,920,000.

3. The Settlement Approval Orders give the Courts discretion to allocate the actuarially unallocated assets "for the benefit of class members and family class members", referred to in this report as "Allocation Benefits". The Joint Committee has defined an extensive list of specific potential Allocation Benefits, to be funded by the Excess Capital, or actuarially unallocated assets.

4. We were asked by the Joint Committee to calculate the cost of these potential Allocation Benefits. Our calculations showed that, even before considering an appropriate level of Required Capital, not all these Allocation Benefits could be funded by the revised Excess Capital of $206,920,000.

5. The Joint Committee has therefore identified a priority subset of Allocation Benefits, which in aggregate can be funded by the Excess Capital, and which are being recommended to the Courts.

6. This report provides actuarial analysis of both the priority Allocation Benefits recommended by the Joint Committee and the other Allocation Benefits that were considered, but not recommended at this time.

2 SUMMARY OF 2013 SUFFICIENCY REPORT RESULTS

7. As noted above, our 2013 Sufficiency Report concluded that, after allowing for an appropriate level of Required Capital, there was Excess Capital, or actuarially unallocated assets, of $236,341,000.

8. In the calculations for our 2013 Sufficiency Report, we assumed that the level 3 lump sum of $30,000 (1999 dollars) will be paid when a claimant moves to level 3 from a medical model perspective (provided they do not waive it in favour of loss of income or loss of services). It has since come to our attention that a level 2 claimant who meets the protocol for treatment (whether or not treatment is taken) is reclassified as a level 3 claimant under the terms of the Plans and is therefore eligible for the $30,000 at that point, despite not moving to level 3 from a medical model perspective. While this change may at first appear to be merely an acceleration of the level 3 lump sum, it in fact leads to a reasonably large increase in the liability as, under the medical model, not all level 2 claimants are expected to actually progress to level 3. Further, due to the relatively minor side effects, it is expected that many more level 2 claimants will be treated than in the past. We have calculated the increase in the sufficiency liability arising from this to be $29,421,000[1].

[1] The corresponding best estimate liability is $32,935,000. Perhaps counterintuitively, the increase in the best estimate liability is larger than on the more conservative sufficiency basis. This is due to the fact that, in the context of the medical model, the best estimate basis assumes fewer claimants will progress to level 3 than the sufficiency basis does (in other words, more claimants remain at level 2). Hence, on the best estimate basis, the cost of paying the benefit while still at level 2 according to the medical model is relatively higher.

9. A summary of the financial position of the Trust as at December 31, 2013, modified to reflect the additional liability for level 2 claimants reclassified as level 3 described above, is as follows:

Financial Position as at December 31, 2013 Prior to Allocation Benefits		
	Best Estimate ($,000's)	**Sufficiency ($,000's)**
Assets		
Invested Fund[1]	1,028,048	1,028,048
Provincial/Territorial Notional Fund[2]	162,152	162,152
Total Assets	**1,190,199**	**1,190,199**
Liabilities		
Transfused	375,482	480,167
Hemophiliac	225,153	265,957
HIV Program	950	970
Expenses	53,455	55,552
Total Liabilities Per 2013 Sufficiency Report	**655,040**	**802,646**
Excess of Assets over Liabilities	535,160	387,554
Required Capital	n/a	151,213
Excess Capital Per 2013 Sufficiency Report	**n/a**	**236,341**
Additional Liability for level 2 claimants reclassified as level 3 due to meeting treatment protocol	32,935	29,421
Restated Total Liabilities	**687,975**	**832,067**
Restated Excess of Assets over Liabilities	502,224	358,133
Restated Excess Capital	**n/a**	**206,920**

10. The foregoing table indicates that, as at December 31, 2013 the assets exceed the restated sufficiency liabilities by about $358,133,000.

11. After allowing for the Required Capital buffer of $151,213,000, which is unchanged by the additional liability for level 2 claimants reclassified as level, the restated Excess Capital is $206,920,000.

12. This is the amount that is available to fund Allocation Benefits for class members and family class members.

13. The settlement is funded by invested funds, mainly contributed by the Federal Government in terms of the settlement, as well as ongoing payments by the Provinces and Territories (PT), equal to

[1] In our 2013 Sufficiency Report, we referred to both "invested assets" and an "invested fund". These two terms are synonymous and for this report we have used the phrase "Invested Fund".

[2] In our 2013 Sufficiency Report, we referred to both a PT "notional fund" and a PT 'notional asset". These two terms are synonymous and for this report we have used the phrase "Notional Fund".

3/11ths of the emerging costs. The overall PT liability is capped at 3/11ths of the original settlement, increased with interest at the rate on three-month treasury bills, less the PT share of costs to date. As at December 31, 2013, this capped PT liability, which equates to the maximum funds available from the PT, was $162,152,000. This figure can be regarded as the PT Notional Fund.

14. It is illustrative to break down the sufficiency result between the portion covered by the Invested Fund and the portion covered by the remaining PT Notional Fund.

HCV Trust Fund as at December 31, 2013[1]			
$000	**Total Fund**	**Invested Fund**	**PT Notional Fund**
Assets	1,190,199	1,028,048	162,152
Sufficiency Liabilities[2]	802,646	583,743	218,903
Additional Liability for level 2 claimants reclassified as level 3 due to meeting treatment protocol[2]	29,421	21,397	8,024
Restated Excess of Assets over Sufficiency Liabilities	358,133	422,908	(64,775)
Reallocation of cost from the PT Notional Fund to the Invested Fund	-	(64,775)	64,775
Restated Excess of Assets over Sufficiency Liabilities after reallocation of cost	358,133	358,133	0
Required Capital	151,213	151,213	0
Restated Excess Capital	206,920	206,920	0

15. We note that:

- The PT Notional Fund is less than 3/11 of the total Sufficiency Liabilities.
- Based on the sufficiency assumptions, our model projects that the PT Notional Fund will be exhausted by 2026.
- The PT shortfall thus emerging has been charged against the Invested Fund. This reflects our expectation that once the PT Notional Fund is exhausted, the full amount of payments will be charged to the Invested Fund (as opposed to reducing the compensation amounts payable).
- Consistent with this we have allocated the full amount of the Required Capital against the Invested Fund.
- The Excess Capital, which is the amount by which the assets exceed the sum of the Sufficiency Liabilities plus a provision to protect the class members from future major adverse experience or catastrophe (the Required Capital), is therefore associated with the Invested Fund only; there is no Excess Capital in the PT Notional Fund.

[1] In some cases in this table and elsewhere in this report, amounts may appear not to add up to the total shown. This occurs because amounts have been rounded to thousands or millions for presentation.

[2] Allocated 8/11 to the Invested Fund and 3/11 to the PT Notional Fund.

- From an actuarial perspective, the assets identified as Excess Capital are actuarially unallocated assets.

16. We understand that the Joint Committee recommends that the Allocation Benefits be funded from the Excess Capital in the Invested Fund. Therefore, the time at which the PT Notional Fund would be exhausted does not change as a result of the Allocation Benefits. The fact that PT Notional Fund is less than 3/11ths of the total liability does not affect the amount of actuarially unallocated assets.

3 APPROACH TO OUR CALCULATIONS

17. We have calculated the cost of the specific Allocation Benefits with an effective date of December 31, 2013. The costs consist of two pieces. Firstly, a retroactive component that represents the cost of back dating the Allocation Benefits to the settlement date; this is our estimate of the costs that would have been paid by December 31, 2013 had the Allocation Benefit always been in place. No interest is paid on retroactive payments. Secondly, a future cost that represents the cost of payments after December 31, 2013 and is essentially the increase in the December 31, 2013 liability arising as a result of the Allocation Benefit.

18. The future liability costs have been calculated using the methods and assumptions employed in our 2013 Sufficiency Assessment, as outlined in our 2013 Sufficiency Report. We have not repeated a description of the methods and assumptions in this report. Where additional assumptions are required, we have described them in our outline of the calculations in Appendices A and D.

19. In our 2013 Sufficiency Report, we set out both Best Estimate and Sufficiency liabilities. As the label suggests, Best Estimate liabilities are calculated using best estimate assumptions, while the Sufficiency liabilities are calculated using assumptions that include, where appropriate, margins for adverse deviations. As the Excess Capital that is being used to fund the priority Allocation Benefits is calculated on a Sufficiency basis, for consistency, our estimates of the cost of the Allocation Benefits set out in this report have also been calculated on a Sufficiency basis.

20. While the 2013 Sufficiency Report assumptions include margins for adverse deviations, not every assumption in the Sufficiency calculations has a margin added, and in many cases the Sufficiency assumption and the Best Estimate assumption is the same. We have taken a similar approach to setting any new assumptions needed to calculate the liabilities arising from the Allocation Benefits and have only added margins where we believe they are required. This is consistent with the original 2013 assumption setting process that was carried out in conjunction with Morneau Sheppell.

21. The retroactive costs can in theory be calculated directly from the actual payment history. However, in some cases the necessary data were not available given the time constraint imposed on the preparation of this report. As a result, exact costs could not be calculated, and we made estimates of the actual retroactive cost, taking into account the available data. We have not added any margins for adverse deviations in these circumstances.

4 PRIORITY ALLOCATION BENEFITS

22. The table below contains the costs of the Allocation Benefits that the Joint Committee is putting forward for approval. The details on each specific Allocation Benefit are included in Appendix A. A more detailed breakdown of these items between Transfused and Hemophiliacs is included in Appendix B.

23. Each Allocation Benefit has two cost components. The retroactive cost is the cost of paying the Allocation Benefit to claimants who have qualified in the past for the Allocation Benefit in question[1]. The future cost is the cost of payments that are expected to fall due in the future, either to claimants who are currently receiving payments for the head of damage in question, or for claimants who are expected to qualify for such payments in the future.

24. In addition to calculating the cost of the Allocation Benefits, we have recalculated the Required Capital that would be needed if these Allocation Benefits are approved. The Required Capital is calculated using the same method employed in the 2013 Sufficiency Report. The approach takes into account the risks that the Trust faces as a whole, and sets aside capital to protect the claimants from these risks. Retroactive payments do not have a need for Required Capital and so we have calculated the increase in Required Capital based on the future liability increase only. Further, not all risks increase as a result of the Allocation Benefits in question. For example, investment risk is calculated based on the total assets, which do not change as a result of the Allocation Benefits and so the Required Capital to protect against investment risk does not change. The consequence of this is that the Required Capital associated with the Allocation Benefits, expressed as a percentage of the increase in the future liability, is less than the Required Capital percent in our 2013 Sufficiency Report. The dollar amount of the total increase in Required Capital is set out in the table below. More detail is provided in Appendix C.

25. The Joint Committee has obtained from the administrator an estimate of the administration cost associated with providing the Allocation Benefits in question and we have included these costs in this report. We have not reviewed these administration costs for reasonableness.

26. The total cost of the priority Allocation Benefits, including the increase in Required Capital is close to, but less than, the restated Excess Capital of $206,920,000.

[1] In some cases, the Joint Committee has not recommended retroactive payments.

Cost of Priority Allocation Benefits				
$000	**Retro Cost**	**Future Cost**	**Admin Expense**	**Total Cost**
Late claims protocol (CAP3)	-	32,399	51	32,450
Do not deduct other sources of income from income loss	14,644	12,895	143	27,682
Compensate for lost pension benefits at 10% of pre-tax loss of income (loss of income capped at $200,000 prior to 2014, indexed thereafter)	12,072	7,715	-	19,787
Increase hours cap on loss of services to 22 hours	13,546	21,014	196	34,756
Increase maximum benefit payable for Cost of Care by $10,000 in 1999 dollars	121	505	2	629
Increase cap on Funeral Expenses to $10,000 in 1999 dollars	1,066	984	43	2,093
$200 in 2014 dollars per diem for family member out of pocket expenses		1,957	-	1,957
Increase payments on death to children over 21 and parents by $5,000 in 1999 dollars	11,197	10,965	287	22,449
Increase all regular lump sum payments by 10%	40,701	10,565	126	51,392
Additional expense associated with the administration of Estates of class members	-	-	61	61
Increase in Required Capital	-	-	-	12,167
Total Cost of Allocation Benefits	**93,347**	**99,000**	**909**	**205,422**
Restated Excess Capital				**206,920**
Remaining Excess Capital				**1,498**

5 ADDITIONAL POTENTIAL ALLOCATION BENEFITS

27. In addition to the priority Allocation Benefits discussed in section 4 above, the Joint Committee considered a number of other Allocation Benefits. These Allocation Benefits were deemed to be of lower priority than those selected, but would be considered again should an increase in the Excess Capital emerge in the future.

28. For completeness we have included a discussion of the additional Allocation Benefits in Appendix D.

6 OPINION

29. In our opinion,

(a) after allowing for the priority Allocation Benefits the Trust funds are sufficient to meet the liabilities of the Trust,

(b) the claimant data on which the calculations are based are sufficient and reliable for the purposes of the calculations,

(c) the assumptions are appropriate for the purposes of the calculations, and

(d) the methods employed in the calculations are appropriate for the purposes of the calculations.

30. This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada.

31. To the best of our knowledge, there are no material subsequent events that would affect the results and recommendations of this report.

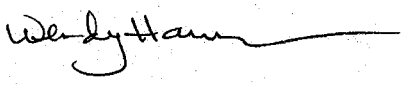
32. On behalf of the Eckler actuarial personnel who worked on this report, we certify that we are aware that our duties are:

(a) to provide opinion evidence that is fair, objective and non-partisan and related only to matters within our area of expertise; and

(b) to assist the Courts and provide such additional assistance as the Courts may reasonably require to determine a matter in issue.

33. We are aware that the foregoing duties prevail over any obligation we may owe to any party on whose behalf we are engaged and we are aware that we are not to be an advocate for any party. We confirm that the report conforms with the above-noted duties. We further confirm that if called upon to give oral or written testimony, we will give such testimony in conformity with these duties.

Richard A. Border
Fellow of the Canadian Institute of Actuaries[1]
Fellow of the Institute and Faculty of Actuaries



Wendy F. Harrison
Fellow of the Canadian Institute of Actuaries
Fellow of the Society of Actuaries

[1] Canadian Institute of Actuaries is the Primary Regulator.

APPENDIX A – DETAIL ON PRIORITY ALLOCATION BENEFITS

A.1 Late Claims Protocol 3

34. We reported the liability for Late Claims Protocol 3 (CAP3) as a sensitivity in our 2013 Sufficiency Report. At that time, we assumed that 120 transfused and 10 hemophiliac claims will be made and approved under CAP3 after December 31, 2013, and that none of these claims will be DB9s. Taking into account the unknown alive and DA9 sensitivity results in our 2013 Sufficiency Report, we calculated the resulting CAP3 liability to be $29,018,000.

35. We have reviewed the number of inquiries that have been made under CAP3 as of May 25th, 2015 and they are consistent with our original assumptions. As a result we see no reason to revise the assumed number of CAP3 claims.

36. Taking into account the priority Allocation Benefits recommended, and assuming 120 transfused and 10 hemophiliac claims, the revised CAP3 liability is $32,399,000.

A.2 Do Not Deduct Other Sources of Income When Calculating the Net Income Loss After Disability

37. Currently, when calculating Loss of Income (LOI) or Loss of Support (LOS) a claimant's income is taken net of any "other" sources of income. In other words, their compensation to be paid is reduced to the extent that they have other sources of income. These other sources of income include Canada Pension Plan (CPP) disability, disability insurance, Employment Insurance (EI) and the Multi-Provincial and Territorial Assistance Program (MPTAP). The Joint Committee believes it would be more appropriate to not deduct these other sources of income when calculating a member's loss.

Loss of Income

38. We have analyzed the data for payments in 2012 to 2014 (relating to loss of income in 2011 to 2013) to estimate the impact of no longer deducting these other sources of income when calculating the net income after HCV disability for LOI as follows:

	Actual/ Sufficiency	No Deduction for Other Income	Increase
Total LOI Claims incurred 2011 to 2013 ($)	18,049,615	20,179,784	11.8%
Total with outliers capped at $200,000 annual loss ($)	14,025,951	16,028,307	14.3%
Transfused sufficiency assumption ($)	43,000	49,139	
Hemo sufficiency assumption ($)	53,000	60,566	

39. In calculating the sufficiency liability in our 2013 Sufficiency Report, we assumed:

- The actual loss of income in the most recent year prior to the valuation would continue to those currently receiving loss of income (with anticipated future indexing), dependent on the claimant's health state (for claimants who are assumed to clear the virus, an allowance is made for recovery and return to work); and
- The Transfused and Hemo sufficiency assumptions for loss of income (in the table above) would be paid to claimants going on to loss of income in the future.

40. In calculating the increase in the sufficiency liability arising from no longer deducting these other sources of income when calculating the net income after HCV disability for LOI we applied a consistent approach. Thus,

- We calculated the actual change in loss of income for those currently on loss of income in the most recent year prior to the valuation and assumed it would continue, dependent on health state; and
- For future claimants we increased the assumed LOI amount by the average increase in the capped loss of income of 14.3%, where the capped loss is $200,000 annually. We used the capped data, as in our opinion, the proportion of claims related to very high incomes is unlikely to continue at the

historically observed rate (to date there have been an unexpected number of claims from high income people in comparison to what would be anticipated based on Canadian income distribution).

41. Using these revised LOI assumptions in our model, we calculate the increase in the liability for future payments to be as shown below:

($000)	Transfused	Hemo	Total
2013 Sufficiency LOI liability	30,588	30,199	60,787
Future cost of not deducting other sources of income in calculating LOI	2,949	4,269	7,218

42. These results are calculated assuming that the pre-claim income does not include any other sources of income such as MPTAP, EI, CPP disability and any other disability income. If they were included, the increase in the liability would be larger than is shown here.

43. The administrator provided us with sufficient information to calculate the associated retroactive payments accurately for the losses incurred in the three years 2011 to 2013[1], but not for years prior to that. For the purpose of these calculations, we have assumed that LOI payments for years prior to 2011 would increase by the same order of magnitude as the future payments. However, in this case it is appropriate to take into account the increase in the uncapped payments to correctly allow for the increases to any high paid claimants (i.e. claimants above the $200,000 cap). This approach results in the following retroactive payments:

($000)	Transfused	Hemo	Total
LOI payments for losses to December 31, 2013	46,983	40,984	87,967
Approximate retroactive payments	5,606	5,390	10,997

44. In carrying out these calculations, we have assumed that the current limitation[2] on LOI stays in place (we made the same assumption in our 2013 Sufficiency Report). The trust has already had four claims with pre-claim gross income over $300,000, including one LOI claim for a person who was earning over $2 million. It is statistically unlikely that another very large loss of income claim will be submitted,[3] but in the event that one does, it could have a material impact on the Trust. For that reason, we have been instructed by the Joint Committee to assume that the current cap on LOI benefits will continue.

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1 Losses incurred in 2013 are paid in 2014.

2 The Plans incorporate holdbacks and limitations on the loss of income which are subject to alleviation by the Courts, including limits on the percentage of pre-claim gross income and the absolute dollars of pre-claim gross income that will be used in the calculation of income loss payments. By 2008, those holdbacks and limitations had been removed and the holdbacks repaid with interest except the limitation on annual pre-claim gross income which is used in the calculation of a loss of income claim. That limitation had been lifted from $70,000 (1999 dollars) to a maximum of $2.3 million (1999 dollars) with the proviso that any claim calculated on pre-claim gross income in excess of $300,000 (1999 dollars) required express approval from the Court with jurisdiction prior to its payment.

3 Statistics Canada data shows that based on 2010 earnings, only 1% of the population earn over about $201,000 annually, 0.1% of the population earn over $685,000 and 0.01% over $2.57 million.

Loss of Support

45. A similar approach to that used for LOI was used in calculating the increase in the LOS liability.

46. We have taken into account the data for payments in 2012 to 2014 (relating to loss of income in 2011 to 2013). Based on this analysis, we obtain the following estimate of the impact of no longer deducting other sources of income, such as CPP, disability insurance and EI when calculating the net income after disability for LOS:

	Actual/ Sufficiency	No Deduction for Other Income	Increase
Total LOS Claims incurred 2011 to 2013 ($)	6,459,296	7,200,452	11.5%
Transfused sufficiency assumption ($)	34,000	37,901	
Hemo sufficiency assumption ($)	36,000	40,131	

47. In calculating the sufficiency liability in our 2013 Sufficiency Report, we assumed:

- The actual LOS in the most recent year prior to the valuation would continue to those currently receiving LOS (with anticipated future indexing), dependent on the claimant's health state; and
- The Transfused and Hemo sufficiency assumptions for LOS in the table above would be paid to claimants going on to LOS in the future (for those currently on LOI, future LOS is at 70% of their current LOI).

48. In calculating the increase in the sufficiency liability arising from no longer deducting these other sources of income when calculating the net income after HCV disability for LOS we applied a consistent approach. Thus,

- We calculated the actual change in LOS for those currently on LOS in the most recent year prior to the valuation and assumed it would continue, dependent on health state; and
- For future claimants we increased the assumed LOS amount by the average increase in the loss of support of 11.5%.

49. On this basis we estimate the increase in the liability for future payments to be as shown below:

($000)	Transfused	Hemo	Total
2013 Sufficiency LOS liability	16,833	33,762	50,596
Future cost of not deducting other sources of income in calculating LOS	1,600	4,077	5,677

50. As for LOI, the administrator provided us with sufficient information to calculate the associated LOS retroactive payments accurately for losses in the three years 2011 to 2013, but not for years prior to that. For the purpose of these calculations, we have assumed that LOS payments for losses incurred in years prior to

2011 would increase by the same order of magnitude as the future payments. This approach results in the following retroactive payments:

($000)	Transfused	Hemo	Total
LOS payments for losses to December 31, 2013	11,987	19,573	31,560
Approximate retroactive payments	1,364	2,283	3,647

A.3 Compensation for Diminished Pension Due to Disability

51. Claimants who are unable to work lose not only employment income, but also may lose access to pension benefits. Currently the settlement does not compensate claimants for the loss of this future retirement income.

52. The range of pension arrangements offered by employers is vast and as a result, it is difficult to come up with a broad brush estimate of the cost of compensating claimants for their diminished pension due to HCV. Rather than attempt to directly compensate claimants, i.e. take the individual's specific pension arrangement into account and calculate how that individual's pension has been affected by disability, and then replace the "lost" pension, it is more practical, in the context of this global settlement, to use the cost of providing pension benefits as a proxy for the claimant's loss.

53. If this route is followed, the wide range of costs still presents a challenge. For example some employees will have no pension benefits, others will have defined contribution arrangements, often at quite low rates of contribution (e.g. less than 10% of pay), while others will have defined benefit plans where the costs may range from 17% to 23% of pay. As a very rough rule of thumb, we believe that a reasonable level of retirement income (relative to the pre-retirement income) can be achieved with a contribution of 20% of pay. On average, claimants are probably receiving pensions funded at half that rate, so we suggest 10% of pay per year as a proxy for compensation for diminished pension due to disability. The Allocation Benefit could be structured to take into account the actual retirement arrangement that the claimant was participating in prior to HCV onset (focusing on the cost of that arrangement, rather than the benefits promised or targeted), or could be a simpler modification that does not vary by claimant. Consideration should be given to whether interest should be added retroactively.

54. In addition to lost pension benefits, claimants who are not working lose CPP benefits for the years they do not work. Employees and employers contribute equally to CPP at a rate of 4.95% each on income up to the Yearly Maximum Pensionable Earnings (YMPE = $53,600 in 2015). Claimants are compensated for their loss of income, so in theory they can save 4.95% (or the after tax equivalent) that they would have paid as their CPP contributions in order to provide a replacement retirement income related to the employee share of the lost CPP. Thus, only the employer share of the lost CPP needs to be compensated for. As the employer contribution is 4.95% up to the YMPE the CPP contribution as a percentage of total pay is less than 4.95% for anyone earning more than the YMPE and on average the CPP contribution expressed as a percentage of total pay must be less than 4.95%. Based on the income levels of current claimants we estimate that 4% is a reasonable equivalent rate.

55. To give a sense for the magnitude of compensating members for lost pension benefits we have applied 14% (10% for occupational pension and 4% for CPP) to the LOI liability and past LOI payments adjusted to reflect that the rate should be applied to a pre-tax or gross income.

56. While we have suggested a 14% of gross loss of income would be a reasonable allowance, the Joint Committee has decided to limit this Allocation Benefit to 10% of gross loss of income (capped at $200,000 prior to 2014 and indexed thereafter) in order to ensure that the overall cost of the priority Allocation Benefits is less than the Excess Capital. The results for both 14% and 10% are shown below:

($000)	Transfused	Hemo	Total
Sufficiency LOI liability on a gross basis	45,903	50,665	96,568
Past LOI payment grossed up for tax	81,383	75,427	156,810
Prospective cost at 14%	6,426	7,093	13,520
Retroactive cost at 14%	11,394	10,560	21,953
Sufficiency LOI liability on a gross basis capped at $200,000	41,505	35,647	77,152
Past LOI payment grossed up for tax capped at $200,000	71,602	49,118	120,720
Prospective cost at 10% (loss of income capped at $200,000)	4,150	3,565	7,715
Retroactive cost at 10% (loss of income capped at $200,000)	7,160	4,912	12,072

A.4 Capping of Loss of Services (SRV) Hours at 22 Hours per Week

57. Based on feedback from class members and the Administrator's data, the Joint Committee believes that the 20 hour per week cap on lost services is too low, leaving claimants out of pocket when replacing the actual hours of services in the home lost. An increase of the cap to 25, 30 or 40 hours was contemplated, but taking into account the optimum allocation of the Excess Capital, an increase to a 22 hour cap was selected. The impact of increasing the cap beyond this is shown in Appendix D.

58. We have analyzed the data for payments in 2012 to 2014 (relating to loss of services in 2011 to 2013). The data included not only the actual compensation amounts paid based on the current cap of 20 hours, but also the actual number of hours worked both before and after disability due to HCV. This enabled us to estimate the impact of an increase to a 22 hour cap for SRV as follows:

	Actual/ Sufficiency	Increase to a 22 hour cap	Increase
Total SRV Claims incurred 2011 to 2013 ($)	27,229,048	29,659,826	8.9%
Sufficiency assumption ($)	16,000	17,428	

59. In calculating the sufficiency liability in our 2013 Sufficiency Report, we assumed:

- The actual loss of service in the most recent year prior to the valuation would continue to those currently receiving loss of service (with anticipated future indexing), dependent on the claimant's health state (for claimants who are assumed to clear the virus, an allowance is made for recovery and return to work); and
- The sufficiency assumptions for loss of service (in the table above) would be paid to claimants going on to loss of service in the future.

60. In calculating the increase in the sufficiency liability arising from increase to a 22 hour cap for SRV we applied a consistent approach. Thus,

- We calculated the actual change in loss of service for those currently on loss of service in the most recent year prior to the valuation and assumed it would continue, dependent on health state; and
- For future claimants we increased the assumed SRV amount by the average increase of 8.9%.

61. Using these revised SRV assumptions in our model, we calculate the increase in the liability for future payments to be as shown below:

($000)	Transfused	Hemo	Total
2013 Sufficiency SRV liability	141,272	96,013	237,285
Future cost of increasing the hours cap to 22 hours per week	12,509	8,505	21,014

62. The administrator provided us with sufficient information to calculate the associated retroactive payments accurately for losses in the three years 2011 to 2013, but not for years prior to that. For the purpose of these calculations, we have assumed that SRV payments for losses incurred in years prior to 2011 would increase by the same order of magnitude as the future payments. This gives an estimate of the retroactive cost of increasing the cap to 22 hours of $8,973 for transfuseds and $4,573 for hemophiliacs.

A.5 Capping Cost of Care Claims at $60,000, Increase of $10,000 (1999 Dollars)

63. Currently compensation for cost of care is limited to $50,000 (1999 dollars) per year. The Administrator estimated that about 10% to 15% of claimants incur actual cost in excess of this and are therefore negatively impacted by this limit.

64. We were asked to calculate the cost of lifting the $50,000 (1999 dollars) by $10,000. We were provided with all the historic data on cost of care claims, which allowed us to analyse the year by year effect of lifting the cap. Based on the most recent three years' experience (the pattern of claims has changed over time), we assumed that increasing the cap would increase overall payments by 1%. While about 10% to 15% of claimants would have benefited from an increase in the cap, most of these only exceeded the cap by a small amount, hence the 1% assumption we have used.

65. Based on the 1% increase assumption, we calculate the future cost of increasing the cap to be $505,000 and, based on all the historic data, the retroactive impact would be $121,000.

A.6 Provide $200 (2014 Dollars) Per Diem to Family Members for Out of Pocket Expenses

66. Currently out of pocket expenses are covered only for class members, not for family class members. We were asked to calculate the impact of an additional $200 (2014 dollars) per diem being provided to cover losses associated with family members accompanying claimants to medical appointments on a prospective basis. We have interpreted the per diem to be applied per visit, rather than per day per visit (some visits may take more than a day if a claimant is traveling from a remote area).

67. Based on out of pocket claims data, we estimate that on average there have been 1.8 medical appointments per year. On the basis of $200 per visit this results in additional future claims of $364 per year per non-cured claimants. For non-cured claimants we assumed $1,800 for Transfused and $2,600 for Hemophiliacs per year would be claimed. The $364 (2014 dollars) per year extra therefore represents an increase of 20.2% for Transfused and 14.0% for Hemophiliacs.

68. In our 2013 Sufficiency Report, for cured claimants we assumed a one-time Out-of Pocket payment of $2,400 for Transfused and $10,000 for Hemophiliacs. Applying the same increase percentage as for the non-cured we get an additional family claim amount of $485 and $1,400 respectively.

69. Re-running our model with these revised assumptions, we calculate the following:

($000)	Transfused	Hemo	Total
Sufficiency Out of Pocket Liability	6,538	4,682	11,220
Cost of additional $200 (2014 dollars) per diem	1,303	654	1,957

A.7 Cap on Funeral Expenses Increased to $10,000 (1999 Dollars)

70. We were asked to estimate the impact of lifting the $5,000 (1999 dollars) cap on funeral expenses to $10,000 (1999 dollars), as well as the impact of no longer deducting the CPP death benefit (equal to $2,500) from the reimbursable funeral expense. For this analysis we were provided with data that showed the full funeral cost before application of the $5,000 cap, so we could directly calculate the impact of the above changes.

71. We estimate that increasing the cap to $10,000 would result in additional retroactive payments of about $1.1 million and removing the CPP deduction would result in a further retroactive payment of about $1.3 million. This represents an increase of 31% for increasing the cap, relative to the cumulative actual payments of $3.5 million, and combined, represent a 68% increase.

72. If we indexed all the past payments to 2014 dollars, the percentage increase above become 32% and 60% respectively.

73. Applying the same percentage increase on the indexed basis to projected future funeral expense claims, we estimate the cost of lifting the cap to $10,000 to be $1.0 million. We estimated the future cost of removing the CPP deduction to be an additional $0.9 million.

74. Taking into account the amount of Excess Capital, the Joint Committee has prioritized the increase in the cap on funeral expenses by $10,000 (1999 dollars), while continuing to deduct the CPP death benefit from the reimbursable funeral expense. The cost is therefore about $1.1 million for retroactive payments and $1.0 million for future payments.

A.8 Increase Family Claim Payments on Death to Children over 21 and to Parents by $5,000 (1999 Dollars)

75. Currently children over 21 and parents are paid $5,000 (1999 dollars) on the death of a claimant. We were asked to calculate the cost of increasing each of these payments by $5,000 (1999 dollars).

76. The administrator provided us with a summary of the past payments made to children over 21 and to parents. An increase of $5,000 (in 1999 dollars) represents a doubling of these two benefits, so the retroactive cost of this Allocation Benefit is equal to the payments made to date to children over 21 and to parents.

77. To calculate the cost for future claims, we assumed that the family profile for the future claims would be the same as the family profile of claims made in the past. In other words, we calculated the ratio of the retroactive cost for each category (i.e. children over 21, parents) to the total past payments (aggregated across all categories, e.g, spouse, child under 21, etc). We applied these ratios to the loss of care sufficiency assumption and reran our model to obtain the increase in the liability to get the future cost for each category.

78. Our results are as follows:[1]

DA9s

	Retroactive			Future		
($000)	**Transfused**	**Hemo**	**Total**	**Transfused**	**Hemo**	**Total**
Child over 21	6,881	805	7,686	7,201	1,591	8,792
Parent	556	675	1,231	582	1,335	1,916

DB9s

	Retroactive			Future		
($000)	**Transfused**	**Hemo**	**Total**	**Transfused**	**Hemo**	**Total**
Child over 21	1,488	284	1,773	224	7	232
Parent	93	414	507	14	11	25

[1] DA9 refers to deaths before January 1, 1999 and DB9 refers to deaths after this date.

A.9 Increase Lump Sum Payments by 10%

79. We were asked to calculate the cost of increasing the lump sums payable by 10%. For retroactive payments, we tabulated the actual payments by level, and increased these actual costs by 10%. For future costs, we increased the lumpsum amounts by 10% and reran our valuation. The payments affected, and the resultant costs are as follows:

Lump sum payments on disease progression

($000)	Retroactive cost			Future cost		
Payment in 1999 dollars	**Transfused**	**Hemo**	**Total**	**Transfused**	**Hemo**	**Total**
Level 1 $ 10,000	4,146	1,089	5,236	308	27	335
Level 2 $ 20,000	6,849	1,907	8,756	504	54	558
Level 3 $ 30,000	6,069	2,153	8,223	1,219	217	1,436
Level 4 $ 65,000	5,201	1,878	7,079	2,008	815	2,823
Level 6 $100,000	5,242	1,694	6,936	3,371	1,712	5,083

Optional lump sum payments

($000)	Retroactive cost			Future cost		
Payment in 1999 dollars	**Transfused**	**Hemo**	**Total**	**Transfused**	**Hemo**	**Total**
4.08(2) Alive HIV Co-Infected Option $50,000	0	228	228	0	20	20
5.01(1) DB9 Estate $50,000	519	458	978	87	13	101
5.01(4) DB9 HIV Co-infected option $72,000	0	1,042	1,042	0	0	0
5.01(2) DB9 Option $120,000	1,185	1,038	2,223	194	16	210

A.10 Estate Administration

80. The Joint Committee has estimated that the administration costs arising from the additional administration of estates is $61,000. These are the costs associated with the Administrator managing the receipt of estate documents, issuing and mailing cheques, as well as managing returned mail and obtaining current contact information for family members of the deceased.

APPENDIX B – SUMMARY OF COST OF PRIORITY ALLOCATION BENEFITS

$000's	Retroactive Cost			Future Cost			Total Cost		
	Trans	Hemo	Total	Trans	Hemo	Total	Trans	Hemo	Total
Late claims protocol (CAP3)	N/A	N/A	N/A	28,605	3,794	32,399	28,605	3,794	32,399
Do not deduct other sources of income from income loss	6,970	7,674	14,644	4,549	8,346	12,895	11,519	16,020	27,539
Compensate for lost pension benefits at 10% of pre-tax loss of income (loss of income capped at $200,000 prior to 2014 and indexed thereafter)	7,160	4,912	12,072	4,150	3,565	7,715	11,310	8,477	19,787
Increase hours cap on loss of services to 22 hours	8,973	4,573	13,546	12,509	8,505	21,014	21,482	13,078	34,561
Increase maximum benefit payable for Cost of Care by $10,000 in 1999 dollars			121	325	180	505			627
Increase cap on Funeral Expenses to $10,000 in 1999 dollars			1,066	690	294	984			2,050
$200 in 2014 dollars per diem for family member out of pocket expenses	N/A	N/A	N/A	1,303	654	1,957	1,303	654	1,957
Increase payments on death to children over 21 and parents by $5,000 in 1999 dollars	9,018	2,179	11,197	8,021	2,944	10,965	17,039	5,123	22,162
Increase all lump sum payments by 10%	29,212	11,489	40,701	7,691	2,874	10,565	36,903	14,363	51,266
Total			93,347	67,843	31,156	99,000			192,347

APPENDIX C – REQUIRED CAPITAL ON PRIORITY ALLOCATION BENEFITS

81. In our 2013 Sufficiency Report, we developed a Hepatitis C specific framework to systematically assess the sources of risk not covered in the sufficiency liability and calculate an appropriate "Required Capital" for the Hepatitis C fund, in order to protect the claimants from future major adverse experience or catastrophe. This "Required Capital" represents the amount of assets, over and above those needed to meet the liabilities, that is to be used for the protection, and benefit, of claimants. We have continued that framework in this report. Specifically, we have updated the elements of Required Capital to reflect the priority Allocation Benefits.

82. Our approach takes into account any existing margins for adverse deviation in the actual liability calculation; to the extent there are margins for adverse deviation in the actual liability calculation, the impact is to reduce the additional Required Capital. Conversely, if there is no margin in the actual liability (i.e. it is a "best estimate" liability), the Required Capital would be higher. This approach prevents inappropriate duplication (between the actual liability and the Required Capital) in providing for uncertainty.

83. The approach takes into account the risks that the Trust faces as a whole, and sets aside capital to protect the claimants from these risks. Retroactive payments do not have a need for Required Capital and so we have calculated the increase in Required Capital based on the future liability increase only. Further, not all risks increase as a result of the priority Allocation Benefits in question. For example, investment risk is calculated based on the total assets, which do not change as a result of the priority Allocation Benefits and so the Required Capital to protect against investment risk does not change. The consequence of this is that the Required Capital associated with the priority Allocation Benefits, expressed as a percentage of the increase in the future liability, is less than the Required Capital percent in our 2013 Sufficiency Report.

C.1 Investment Risk

84. The investment risk in our 2013 Sufficiency Report was based on the total assets, which are not affected by the increase in liabilities arising from the priority Allocation Benefits. Therefore, there is no increase in the Investment Risk component as a result of the priority Allocation Benefits (the total Investment Risk component remains at $25.4 million as calculated in our 2013 Sufficiency Report).

C.2 Interest Mismatch

85. In our 2013 Sufficiency Report, we calculated the Interest Mismatch component to be $18.6 million, based on the sensitivity of the financial position of the Trust to a 0.5% increase in medium to long-term interest rates. An interest rate increase would be detrimental to the Trust because the duration of the liabilities[1], as measured in the 2013 Sufficiency Assessment, was about 9.5 years (using a 1.05% net discount rate), while the

[1] Duration is the weighted average term of the cash flows associated with an asset or a liability. Since it is the average term, some cash flows will occur earlier, and some later, than the duration.

duration of the interest-sensitive assets was longer, with average duration of about 13.4 years. If interest rates increase, the resulting decrease in liabilities would be less than the decrease in asset value.

86. The duration of the liabilities, excluding the retroactive payments which would be paid out immediately, increases. This would reduce the mismatch, as the duration of the assets is currently greater than the duration of the liabilities. However offsetting this the duration of the assets is likely to increase as well if the retroactive payments are paid out of the short term assets. Furthermore, to the extent that the actual benefits and expenses payable under the HCV arrangement differ from those assumed in the valuation, interest mismatch may exist even if the duration of the assets is set equal to the duration of the liabilities, but it is not possible to quantify this in any meaningful way.

87. Taking into account these factors, we believe that the Mismatch Risk component has not changed materially as a result of the priority Allocation Benefits (the total Mismatch Risk component remains at $18.6 million as calculated in our 2013 Sufficiency Report).

C.3 Efficacy Rate of New HCV Treatments

88. In the interval since the 2010 sufficiency review, there have been dramatic developments in the drugs available to treat HCV. More claimants can be treated by these new drugs, they are tolerated far more easily, and clinical trials indicate cure rates as high as 95%.

89. The impact of incorporating these new drug treatment options into the medical model (and our valuation) resulted in a net reduction of liability. As discussed in our 2013 Sufficiency Report, because the drugs are so new, we believe there is the potential for variability in their effectiveness: this variability could arise from a number of sources: fewer claimants than expected able to be treated, unexpected drug toxicity results in drugs being pulled from market, and/or the actual efficacy (cure) rate is lower than anticipated based on the clinical trials.

90. For the purpose of assessing the cost of the priority Allocation Benefits, we followed the same principal and methodology that we used in the 2013 Sufficiency Report. Specifically, we included a provision for adverse deviation for drug efficacy in our liability calculation by multiplying the best estimate drug efficacy rate by a factor of 80%. Given the newness of these drugs, and the sensitivity of the liability to this assumption, we have calculated an additional buffer (a Required Capital component) for drug efficacy equal to the increase in liabilities if we substituted a factor of 67% for the 80% factor in the liability calculation. The increase in the buffer for drug efficacy due to the priority Allocation Benefits is $2.8 million ($44.8 million in the 2013 Sufficiency Report increased to $47.6 million as a result of the priority Allocation Benefits).

C.4 Transition Probability Parameter Uncertainty

91. As noted in our 2013 Sufficiency Report, the Medical Model Working Group (MMWG) who have defined the medical model used in the liability calculations could not know with certainty what the actual transition

probabilities are, and therefore provided the estimated mean, associated distribution, and 95% confidence intervals for each one. The estimated mean represents the best estimate of the true value of the transition probability, and the 95% confidence interval indicates that the MMWG are 95% confident (statistically) that the true value falls in the range.

92. We modified our liability calculation to use the distribution specified by the MMWG, rather than the mean of the distribution, for seven[1] key disease transition parameters. Using these distributions in the Tree-age software, we carried out stochastic analysis of the impact of medical parameter uncertainty.

93. Based on the results of 1,000 stochastic scenarios, we determined the distribution of liability results, and selected the liability at the 95% quantile threshold. The difference between the 95% quantile liability and the mean liability (which formed the basis for the sufficiency liability) represents the required capital for this risk exposure.

94. The additional difference between the 95% quantile liability for parameter uncertainty and the mean liability as a result of the priority Allocation Benefits is $2.5 million ($28.4 million in the 2013 Sufficiency Report increased to $30.9 million as a result of the priority Allocation Benefits).

C.5 Uncertainty Regarding Other Benefit and Claim Amounts

95. For benefits other than the lump sums, the dollar amount of benefits that will be paid in the future is not known.

96. As set out in our 2013 Sufficiency Report, the Required Capital earmarked an amount for a potential large loss of income claim of $1 million annual loss of income claim payable for 12 years; such a claim would require about $11.3 million in assets. We have maintained the same amount in this report.

97. In our 2013 Sufficiency Report, we considered the impact of our assumption regarding the proportion of deaths (other than deaths at level 6) that are deemed to be HCV related (with the ensuing additional benefits). There is considerable uncertainty around this outcome, as it depends on a number of factors, including the co-morbidities and the interpretation of "death materially contributed to by HCV", and we therefore incorporated a buffer reflecting the increase in liability if the assumed proportion of deaths at levels 2 through 5 that are deemed to be caused by HCV were increased by adding 10% at each level. Using the same principal and methodology, we calculated that the corresponding buffer would increase by $3.9 million as a result of the priority Allocation Benefits (the risk component would increase from $17.4 million in the 2013 Sufficiency Report to $21.3 million).

98. We considered the set of priority Allocation Benefits, taking into account the magnitude of the additional liability as well as the variability in the retroactive payment data associated with these benefits and/or the

[1] The stochastic analysis was restricted to seven parameters to limit the changes needed to Tree-age. The seven specific parameters chosen were those that we understand will have the most significant impact on the results.

uncertainty inherent in our liability calculation. As a proxy for the overall benefit amount uncertainty, we calculated an additional buffer equal to the increase in liability should the number of family members eligible for the enhanced family benefits exceed our sufficiency assumption by 10%. The resulting Required Capital component is $1.1 million.

99. Considering only this subset (one additional large loss of income claim, additional deaths attributed to HCV, and additional family benefits claimants) of the possible variation in benefit and claim amounts, and calculating the impact of a plausible change in average benefit amount or claim rate for each gives a total increase in liability as a result of the priority Allocation Benefits of $5.0 million (the risk component would increase from $28.7 million in the 2013 Sufficiency Report to $33.7 million). We believe this is a reasonable risk amount in respect of benefit uncertainty.

C.6 Actual Size of Unknown Cohort

100. In our 2013 Sufficiency Report, we noted that although the official cut-off date for claimants coming forward was June 30, 2010, there is still some uncertainty regarding the size (and profile) of the unknown cohort: additional claimants may be approved due to unusual circumstances and/or the assumed denial rate could prove to be too high. We therefore incorporated a risk component regarding the actual size of the unknown cohort based on an additional 25 additional unknown alive transfused claimants, multiplied by the corresponding average sufficiency liability. The 25 additional unknowns represented two types of uncertainty: the possibility that the number for claimants coming forward in the future is higher than anticipated (we assumed there were 10 unanticipated claimants) and the risk that the assumed denial rate applied to the claims in process and/or CAP1 and CAP2 claims higher than actual (in which case we assumed an additional 15 claimants would be approved).

101. For the purpose of this report, we have incorporated an additional 5 claimants to reflect the uncertainty around the additional CAP3 claims, and have use the higher average sufficiency liability arising from the balance of the priority Allocation Benefits. The resulting additional buffer is $1.9 million (the risk component would increase from $5.3 million in the 2013 Sufficiency Report to $7.2 million).

C.7 Results of Hepatitis C Specific Approach to Required Capital

102. The results of the Hepatitis C specific approach to calculating required capital are set out in the following table:

Estimated Required Capital on Hepatitis C Specific Approach				
Risk Component ($ millions)		**2013 Sufficiency Report**	**2013 Allocation Benefit Report**	**Increase in Risk Component Due to Allocation Benefits**
Investment Risk		$25.4	$25.4	$0.0
Mismatch Risk		18.6	18.6	0.0
Claimant Risk	Drug Treatment Efficacy	44.8	47.6	2.8
	Parameter Uncertainty	28.4	30.9	2.5
	Benefit Amount Uncertainty	28.7	33.7	5.0
	Cohort Uncertainty	5.3	7.2	1.9
Total Required Capital		151.2	163.4	12.2
Required Capital % of Sufficiency Liability		**18.8%**	**17.5%**	**9.3%**

APPENDIX D – ADDITIONAL POTENTIAL ALLOCATION BENEFITS

103. We calculated the cost of a number of further Allocation Benefits that the Joint Committee considered, but is not currently recommending to the Courts. For completeness we have included a discussion of each of these below:

D.1 Exhaustion of Private Health Care and Drug Plans

104. The Joint Committee was concerned that some claimants could exhaust their Private Health Care and Drug Plans as a result of claims arising from their HCV infection. The Joint Committee considered three options

- Purchase of extended benefits from insurers
- Lump sum compensation
- Take over the existing coverage once it is exhausted, i.e. provide the same benefits as the claimants existing plan as if it had not been exhausted by HCV claims.

105. We undertook a basic analysis of this issue based on the input of the Eckler Benefits practice experts.

106. We obtained input from Andrew Tsoi-A-Sue, an Eckler Principal and head of the Eckler Benefits practice. He relied on his general knowledge of the market, as well as discussions with contacts at GreenShield, IA, Manulife, GWL and Sun Life. These insurers cover approximately 80%-85% of the Canadian market. His comments are summarised below:

- *Overview*

107. The discussions focused on the typical HCV drugs being used at this time including, Galexos (Simeprevir), Sovaldi (Sofosbuvir), Harvoni (Ledispasvir/Sofosbuvir) and Holkira Pak (Ombitasvir/Paritaprevir/Ritonavir and Dasabuvir).

108. The general perception is that these HCV drugs have pushed up total costs by about 1% to 1.5%, with the outlook being another impact of up to 1.5%. Different insurers are differently impacted by the new drugs, and some could have experienced a 4-5% increase in claim costs. Rough estimates are that these drugs might have represented between 0.5% and 1% of drug spend in 2013, rose to 1.5% to 2% in 2014 and the outlook for 2015 is to again rise to maybe 2.5% to 3%.

109. In most top 10 drug lists for clients, none of these drugs showed up in 2013, and then in 2014, Sovaldi showed up, generally up at number three to five. Harvoni is in the top five for the first half of 2015. At least one of the major carriers expects HCV drugs to have a noticeable impact on drug spend over the next ten years.

- *What is the typical annual or lifetime maximum?*

110. For the larger groups that Eckler generally deals with, it's uncommon to have limits on drug coverage. Limits are more common for smaller cases, or for post-retirement plans. Where limits exist they are

typically in the range of $50,000 to $100,000 for total lifetime drug costs. Thus, it is likely that claimants who are in plans with limits will be negatively impacted by HCV drug costs.

- *Has the experience of this drug affected the typical plan's annual or lifetime maximum?*

111. The market has not seen plan sponsors reacting to HCV drugs by changing/limiting/implementing a drug or health plan maximum. It's a relatively new impact, and while potentially there has been some impact on pooling arrangements, which have seen significant changes and are receiving a lot of attention from insurers, employers and consultants, no one reports introducing limits as a result of HCV drug costs at this time.

112. Pooling refers to the practice whereby the employer pays the first portion of the costs, up to the "pooling level" and the insurer pays the balance. The insurer charges a risk premium for the cover they provide and the employer choses the pooling level based on their perception of the risk of paying directly for drug costs and the cost of moving the risk to the insurer (i.e. the risk premium). Pooling levels are currently often in the range of $10,000 to $15,000. As a result of significant increases in drug costs in general, i.e. not just HCV drugs, insurers have been significantly increasing their risk premiums and in response employers have been increasing their pooling levels. Revised pooling levels may be as high as $50,000 to $60,000. Note that at this stage this is an employer issue, and does not impact individual members directly. It is possible that at some stage employers will seek to manage their costs by introducing limits on coverage, but as stated earlier, this does not appear to be happening yet.

- *Anything else in terms of usage, outlook etc.*

113. There is an expectation that a number of new therapies, which are aimed at harder to treat types of HCV, will come to market over the next 12 months. Those drugs will cost even more than the high cost products that are already available on the market. So the expectation is that HCV drug costs will continue to increase.

114. In order to protect clients from these costs, many carriers have developed and are rolling out a Hepatitis C program or a patient management program, or have partnered with a pharmacy provider to manage high cost drugs in general, not just HCV drugs. The patient advocate or manager will help work through things like integration with the manufacturers' patient support program, adherence support, and exclusive dispensing of HCV medications.

Investigation of Further Options

115. At this stage, as it seems as if a large part of the market does not impose maximum lifetime benefits, we have not further investigated the feasibility of the options outlined by the Joint Committee to address this problem for claimants.

116. We would like to point out that the last option considered by the Joint Committee, whereby the fund would take over responsibility to provide continuation of existing coverage once it is exhausted, is problematic from two perspectives. Firstly, it would expose the fund to liabilities that would be difficult to define (essentially

the liability will differ depending on each claimants' plan coverage) and hence it would be extremely difficult to assess the actuarial liability with any degree of confidence. The risk arising from this would be considerable. Secondly, it would be very complex to administer due to the potentially wide range of benefits that would be possible.

D.2 Access to Insurance

117. People who are infected with HCV find it difficult to obtain life, mortgage or travel insurance, as they are either deemed by insurers to be uninsurable, or have a significant loading applied to their insurance premiums. The Joint Committee asked us to investigate the feasibility of establishing an arrangement, similar to the Hepatitis C Insurance Scheme established in Ireland, whereby members could obtain access to these three types of insurance, either through:

- A top-up arrangement, where the difference between the increased premium the claimant is charged by the insurer and "normal" premiums charged a non-HCV infected person is paid by the fund, or
- Full insurance cover is provided by the fund in circumstances where the claimant is deemed uninsurable by insurers.

118. We drew on the expertise of Eckler employees who specialize in consulting to insurance companies and they approached a number of Canadian insurance companies to obtain their views on pricing such cover and gauge their interest in participating in a top-up scheme.

119. In general, insurers in Canada tend to see HCV infected persons as uninsurable and therefore if a top-up arrangement was to be set up they would first have to change their policies in this regard, i.e. be willing to offer insurance to HCV infected people via a "HCV product". For this to be feasible, the insurers would need to be confident that:

- They understood the risks well enough to price an HCV product,
- That the volume of business was large enough to be statistically reliable and
- That the volume of business would be large enough that they could cover the costs of developing and administering a product and meet their required profit margins.

120. Eckler discussed this arrangement with four large insurers and one smaller one. Three of the large insurers indicated that they had no interest in participating in such an arrangement. One large insurer and the smaller insurer did not reject the concept, but indicated that significantly more information and analysis would be required before they would commit themselves to providing such a product. It was not possible to go through this process, given the time constraint imposed on the preparation of this report. We reported this information to the Joint Committee, and the Joint Committee decided not to pursue this as a priority Allocation Benefit at this time.

121. No cost analysis has been carried out regarding the "access to insurance" issue.

D.3 Raise the Age at which LOI/LOS Cease to 67, or Some Other Age

122. Currently LOI and LOS cease at age 65. The Joint Committee considered increasing this cut off age to 67 to reflect possible future changes to the demographics of retirement.

123. The increase in the sufficiency liability for future payments is $5.0 million for Transfused and $6.3 million for Hemophiliacs. This represents an increase in the LOI/LOS/SRV liability of about 2.7% for Transfused and 4.0% for Hemophiliacs.

124. We do not have data that allows us to easily calculate the associated retroactive payments, however, to provide a sense of the potential magnitude of the retroactive payments we have assumed that the LOI/LOS/SRV payments would have been 2.7% and 4.0% higher for Transfused and Hemophiliacs respectively. This would result in retroactive payments of $4.3 million for Transfused and $4.4 million for Hemophiliacs.

D.4 Include Other Sources of Income in the Calculation of the "Three Best Years"

125. Currently other sources of income, including MPTAP, EI, CPP Disability and Disability income are excluded when calculating a claimant's pre-claim income. A potential benefit allocation would be to include these items in pre-claim income. The administrator does not currently have data on other sources of pre-claim income, and due to the low priority assigned to this option we did not attempt to calculate the costs associated with this change any further.

D.5 Eliminate the Income Tax Deduction from Loss of Income

126. Currently when calculating LOI or LOS the after tax loss is taken into account. The Joint Committee asked us to estimate the financial consequences of compensating claimants for their pre-tax loss of income.

Loss of Income

127. Based on the analysis of loss of income data for losses incurred in 2011 to 2013 and assuming that the other sources of income are not deducted when calculating the post-claim loss, we obtain the following approximate impact of eliminating the income tax deduction from loss of income:

	Actual/ Sufficiency	No Deduction for Other Income	Increase
Total LOI Claim incurred 2011 to 2013 ($)	18,049,615	30,375,757	68.3%
Total with outliers capped at $200k ($)	14,025,951	21,629,306	54.2%
Transfused sufficiency assumption ($)	43,000	66,310	
Hemo sufficiency assumption ($)	53,000	81,731	

128. Applying the actual increases to actual losses where these are known and applying the average increases of 54.2% to claims arising in the future, we obtain the following estimate of the increase in the liability for future payments:

($000)	Transfused	Hemo	Total
2013 Sufficiency LOI liability	30,588	30,199	60,787
Cost of not deducting other sources of income and eliminating the income tax deduction in calculating LOI	15,315	20,466	35,781

129. These results are calculated assuming that the pre-claim income does not include the other sources of income referred to in paragraph 37. If they were, the increase in the liability would be larger than is shown here.

130. The administrator provided us with sufficient information to calculate the associated retroactive payments accurately for the losses incurred in the three years 2011 to 2013[1], but not for years prior to that. For the purpose of these calculations, we have assumed that LOI payments for years prior to 2011 would increase by the same order of magnitude as the future payments. However, in this case it is appropriate to take into account the increase in the uncapped payments to correctly allow for the increases to any high paid claimants (i.e. claimants above the $200k cap). This results in the following retroactive payments:

($000)	Transfused	Hemo	Total
LOI payments to December 31, 2013	46,983	40,984	87,967
Approximate retroactive payments (= actual increase for 2011 to 2013 plus 68.3% of past LOI payments prior to that)	32,166	31,466	63,632

Loss of Support

131. Based on the analysis of the 2012 to 2014 loss of support data and assuming that the other sources of income are not deducted when calculating the post-claim loss, we obtain the following approximate impact of eliminating the income tax deduction from loss of support.

	Actual/ Sufficiency	No Deduction for Other Income	Increase
Total LOS incurred 2011 to 2013 ($)	6,459,296	9,960,345	54.2%
Transfused sufficiency assumption ($)	34,000	52,429	
Hemo sufficiency assumption ($)	36,000	55,513	

132. Applying the actual increases to actual losses where these are known and applying the average increases of 54.2% to claims arising in the future, we obtain the following estimate of the increase in the liability for future payments:

($000)	Transfused	Hemo	Total
2013 Sufficiency LOS liability	16,833	33,762	50,596
Cost of not deducting other sources of income and eliminating the income tax deduction in calculating LOS	8,540	22,527	31,067

133. As for LOI, the administrator provided us with sufficient information to calculate the associated retroactive payments accurately for losses in the three years 2011 to 2013, but not for years prior to that. For the purpose of these calculations, we have assumed that LOS payments for losses incurred in years prior to

[1] Losses incurred in 2013 are paid in 2014.

2011 would increase by the same order of magnitude as the future payments. This results in the following retroactive payments:

($000)	Transfused	Hemo	Total
LOS payments to December 31, 2013	11,987	19,573	31,560
Approximate retroactive payments (= actual increase for 2011 to 2013 plus 54.2% of past LOS payments prior to that)	6,381	10,791	17,172

D.6 Compensation for Loss of Extended Benefits on Disability

134. Claimants who are unable to work lose not only employment income, but also may lose access to health and other employment benefits. Currently the settlement does not compensate claimants for the loss of these benefits.

135. There is a great degree of variation in the extended benefits that are provided to employees, as there is no requirement to provide any specific level of benefit. Therefore, the actual benefits will depend on the type of employment and associated market dynamics for the employees in question. In our view it is not practical, nor actuarially desirable (due to the significant unquantifiable additional risk that would be taken on) to attempt to compensate claimants directly for lost extended benefits, i.e. attempt to replicate the payments that would have been made to the claimant had they not become sick and terminated employment. An alternative that would be more practical is to pay the claimants an amount that is equivalent to the average value of the lost benefits. This means that claimants would lose the insurance aspect of their extended benefits, but on average the group as a whole would receive payments of equal value. A proxy for the value of the lost benefits is the cost to the employer of providing extended benefits.

136. The costs to the employer vary in concert with the variety of extended benefit arrangements in the market, so it is difficult to come up with a meaningful estimate of the cost of the benefits. In discussion with the Eckler Benefits experts we estimate that these costs are often in the range of 6% - 9% of gross pay.

137. To get a rough estimate of the liability impact of adding this benefit we suggest that the LOI liability in question be increased by 6% - 9% of pay. To give a sense for the magnitude of compensating members for lost benefits we have applied 6% to the LOI liability and past LOI payments.

($000)	Transfused	Hemo	Total
Sufficiency LOI liability on gross or pre-tax basis	45,903	50,665	96,568
Estimated past LOI payments grossed up for tax	81,383	75,427	156,810
Prospective cost at 6%	2,754	3,040	5,794
Retroactive cost at 6%	4,883	4,526	9,409

D.7 LOI/SRV Starting at Level 3 or 4

138. Currently, claimants at level 3 may waive the $30,000 (1999 dollars) lump sum and claim LOI or SRV instead. Claimants who do not experience a loss of income at level 3 are therefore treated relatively more generously in that they have no income loss and receive $30,000, while level 3 claimants who experience a loss are made whole in this regard, but do not receive any additional payments. Claimants whose loss starts after reaching level 4 receive both the $30,000 and compensation of their actual loss and are thus also relatively better off than those whose income loss starts at level 3. In order to achieve greater equity, the Joint Committee considered removing the election, so that level 3 claimants who experience a loss of income also receive $30,000.

139. There are 94 level 3 claimants who have elected LOI/SRV rather than the $30,000 lump sum and 13 claimants have not yet made the election. Paying the 2014 equivalent to each of these members results in a cost of $4.3 million ((94+13)*40,373.22) in 2014 dollars.

140. The 2013 sufficiency review assumes that 5% of claimants in level 3 are disabled and will waive the $30k lump sum and instead claim the LOI/SRV. If we assume that these claimants will receive the $30,000 lump sum as well as their LOI/SRV, the cost will be:

($000)	Transfused	Hemo	Total
Sufficiency liability for $30,000 lump sum	12,191	2,169	14,360
% of Level 3 assumed to waive $30,000	5%	5%	5%
Liability assuming 100% claim $30,000 lump sum (line 1 / (1-line 2))	12,833	2,283	15,116
Cost of eliminating the waiver	642	114	756

D.8 SRV Capped at $12 Per Hour/20 Hours Per Week

141. The Joint Committee is concerned that the $12 per hour (1999 dollars) is too low relative to the replacement cost of the work the claimant can no longer perform. To assist in assessing the financial impact of increasing this limit we were asked to calculate the cost of increasing the cap by $1 per hour.

142. We estimate that a $1 increase in the rate per hour increases the liability by $11.8 million for Transfused and $8.0 million for Hemophiliacs, or $19.8 million in total. We estimate that a $1 increase in the rate per hour would result in retroactive payments of $8.4 million for Transfused and $4.3 million for Hemophiliacs, or $12.6 million in total (calculated as 1/12 of past payments).

143. The Joint Committee is also concerned that limiting the number of hours that may be compensated to 20 is too low. In addition to the 2 hour per week increase, i.e. raising the cap to 22 hours discussed in Appendix A, we were asked to estimate the cost of increasing the 20 hour per week limit to 25 hours, 30 hours or 40 hours. The table below shows the results:

($m)	Transfused	Hemo	Total
Total SRV sufficiency liability (20 hour cap)	141.3	96.0	237.3
Additional cost of 25 hours per week cap (cap increased by 5 hours per week)	29.4	19.7	49.1
Additional cost of 30 hours per week cap (cap increased by 10 hours per week)	54.0	34.9	88.9
Additional cost of 40 hours per week cap (cap increased by 20 hours per week)	89.7	61.0	150.7

144. As described in paragraph 58, we used data on payments for losses incurred in 2011 to 2013 to calculate the increases shown above. We re-ran our Treeage valuation model to accurately calculate the cost of lifting the cap to 25 and 30 hours and did the same calculation using a simplified proportional approach (by looking at the increase in payments for losses in 2011 to 2013 and proportionally increasing the sufficiency liability). Both approaches gave very similar results; therefore for the 40 hour cap results, we used only the proportional approach. The above table shows the Treeage approach for the 25 hour and 30 hour caps.

145. We have not calculated the retroactive payments resulting from these increases accurately, but estimate that on pro-rata basis the following payments would result.

($m)	Transfused	Hemo	Total
Total Past SRV payment	102.3	49.5	151.8
Retroactive cost of 25 hours per week cap	21.1	10.6	31.7
Retroactive cost of 30 hours per week cap	38.4	19.3	57.7
Retroactive cost of 40 hours per week cap	64.3	32.1	96.4

D.9 Loss of Services to Dependents that Stop at the Non-HCV Life Expectancy of the Deceased

146. In some cases the requirement that the loss of services to dependents stop at the non-HCV life expectancy of the deceased have resulted in hardship to the recipient of the benefit. A number of alternatives are considered by the Joint Committee.

Option 1 - Extending the benefits for the lifetime of the dependent

147. In calculating the cost of this change, we have assumed that the payments will continue for the greater of the expected lifetime of the deceased and the lifetime of the spouse (in other words, we have assumed that if the spouse were to die earlier than the expected death of the deceased that the payments will not be reduced relative to the current arrangement).

148. For payments that are currently being made we have taken into account the actual age of the spouse and the associated life expectancy. Results are as follows:

($000)	Sufficiency Liability	Revised Liability	Cost
Transfused DB9	5,767	7,625	1,858
Transfused DA9	23,080	31,738	8,658
Total Transfused	**28,847**	**39,363**	**10,516**
Hemo DB9	12,675	16,303	3,628
Hemo DA9	12,842	15,255	2,413
Total Hemo	**25,517**	**31,558**	**6,041**

149. For future claims we have assumed that the male spouse is 3 years older than the female and have taken the respective life expectancies into account (2009-2011 Canada Life Table). On this basis we calculate that on average the payments should continue to the claimants age 88 (for the 2013 Sufficiency Review we had assumed payments to age 85). The increase in the liability arising from this change is $30.1 million (including those currently in pay as well as future claims).

150. In addition to this amount, there would be retroactive payments associated with benefits that had previously been stopped. We have not calculated these payments accurately, but have estimated them on a pro-rata basis to be approximately $14.5 million.

Option 2 - Extending the benefits to the dependent's age 65

151. There are currently five cases where the spouse would reach age 65 after the claimant's non-HCV life expectancy was reached. Paying the loss of services for the additional years for these cases results in a liability of $336,000.

152. Future cases of this nature could arise where the spouse is twenty years younger than the claimant (we assume that the non-HCV life expectancy is 85, i.e. 20 years past age 65, so for the spouse to reach age 65 after the claimant reaches age 85, they must be 20 years younger than the claimant). Based on the Stats Canada information that we were able to access, this is sufficiently uncommon that a specific assumption and associated extra liability is not warranted.

153. There are cases where the dependent is a child rather than a spouse. In this case it is more likely that the child will be younger than 65 when the claimant would have reached age 85. For payments to be required to the child's age 65, the child must be disabled in some way. While there is at least one case of this nature in the fund, we believe that it should be sufficiently rare that an explicit assumption and associated liability for this situation is not warranted.

Option 3 - Extending the benefits to the dependant's age 65, but allowing for other sources of income and OAS.

154. This is a limited version of Option 2. We have done no calculations at this stage for the five cases that currently exist, but the cost will be less than Option 2. As for Option 2, we would make no explicit allowance for this option in the liabilities for future claims of this nature.

D.10 Death Due to HCV – DB9s and DA9s

155. DB9 estates must prove causation to qualify for the pre-death losses ($50k). Eighty-two estates have been rejected because they could not prove causation. The Joint Committee considered making retroactive payments to these estates as if causation had been proved.

156. The cost of paying the 82 estates who were rejected because they could not prove causation is $5.5 million (= 82 x $50,000 x 1.345773875).

D.11 Secondarily Infected Definition Is Too Limited

157. Twenty-seven family members who applied for compensation as a secondarily infected person (SIP) were rejected because they were not the spouse or child of a primarily infected claimant. We were asked to calculate the cost of paying these members as SIPs.

158. Sixty-two family members were approved as secondarily infected. In the 2013 sufficiency review, we assumed that a further 7 SIPs will be approved, assuming the same ratio of approved to rejected in the future, we estimate that a further 3 SIPs will be approved if the definition is widened.

159. Based on the sensitivity analysis in our 2013 review, a rough estimate of the cost of adding 30 additional SIPs is $6.3 million.

D.12 Cost of Care Provided to Level 5 Claimants

160. Currently cost of care is paid to level 6 claimants only, while some level 5 claimants have a need for care and are therefore left with the burden of funding the care themselves.

161. We were asked to estimate the impact of providing cost of care to level 5 claimants. We do not have any data on the potential claims that would emerge if this was done, but we carried out a sensitivity analysis to provide some insight into the potential impact. Two assumptions are needed to calculate the liability, the average claim amount per person claiming cost of care and the percentage of level 5 claimants making a claim.

162. For Level 6 we assume that 40% of claimants will claim an amount of $45,000. This is equivalent to $18,000 to each Level 6 claimant. To provide insight into the sensitivity to extending Cost of Care to level 5 we have calculate the effect of providing $10,000 to each person at Level 5 (this is equivalent to paying Cost of Care of $25,000 to 40% of those at Level 5). We calculate that this would increase the liability by $41.8 million.

163. We are not able to calculate the retroactive cost of extending Cost of Care to Level 5, but on the assumption that the relationship between past and future Level 6 payments will apply to Level 5 as well, we estimate that, if future Level 5 Cost of Care is $10k per person, the associated retroactive payments, would be $15.3 million.

D.13 Hemophiliac 23 Election

164. This issue arises in the context of a coinfected claimant who elected the $50,000 lump sum in lieu of other benefits payable under the settlement. In the early years of the Fund, a person who was coinfected had a very short life expectancy, but now, with dramatically improved treatments for both HCV and HIV, the life expectancy has lengthened considerably. The Joint Committee has requested analysis of the cost of allowing these individuals to "re-elect". According to the data, there are 59 claimants (21 alive at level 1, 29 alive at level 2, and 9 DA9s) who made this election. Based on the medical model, the 21 claimants who were at level 1 at the time of their election should not have progressed in the disease, and so the option to "re-elect" would not result in additional benefits being paid. We have also assumed that the DA9s would not be posthumously given the option to re-elect. Therefore, a cost only arises on the 29 claimants at level 2.

165. We ran the Treeage model for those 29 claimants assuming they are still at level 2 at the valuation date. The total liability, including the level 1 and level 2 lump sum, is $6.6 million. This compares to the total paid to them of $2.0 million in 2014 dollars for the $50k option, the cost would thus be $4.6 million if they re-elect the option.

D.14 Family Claims

166. Currently the following amounts are payable to family members on the death of a claimant:

	1999 Dollars
Spouse	25,000
Child under 21	15,000
Child over 21	5,000
Parent	5,000
Sibling	5,000
Grandparent	500
Grandchild	500

167. We have calculated the cost of increasing payments to Child over 21 and Parent by $5,000 (1999 dollars as discussed in Appendix A.

168. We were also asked to perform a sensitivity analysis of the impact of increasing the benefit to each category of family member that is currently compensated, where the amount of the increase is $1,000 in 1999 dollars.

169. The administrator provided us with sufficient information to calculate the associated retroactive payments precisely. We started with the actual indexed payments made for each individual family member in the past, and divided by the original benefit amount in 1999 dollars (as set out in the table above). This gives us

the indexing factor applied to each payment. We then multiplied this set of indexing factors by $1,000, as per the sensitivity test. We added up the cost of an additional benefit of $1,000 indexed for each family member in the same category and got the total retroactive cost for each category.

170. To calculate the cost for future claims, we assumed that the family profile for the future claims would be the same as for those claims made in the past. In other words, we calculated the ratio of the retroactive cost for each category to the total past payments (aggregated across all categories), and then applied above ratios to the future loss of care sufficiency liability to get the future cost for each category.

171. Our results are as follows:

DA9s

172. For future claims:

($000)	Transfused	Hemo	Total
Spouse	366	185	551
Child under 21	60	110	170
Child over 21	1,440	318	1,758
Parent	116	267	383
Sibling	1,014	674	1,688
Grandparent	1	40	41
Grandchild	2,167	379	2,546

173. For retroactive claims:

($000)	Transfused	Hemo	Total
Spouse	350	94	444
Child under 21	57	56	113
Child over 21	1,376	161	1,537
Parent	111	135	246
Sibling	969	341	1,310
Grandparent	1	20	21
Grandchild	2,071	192	2,263

DB9s

174. For future claims:

($000)	Transfused	Hemo	Total
Spouse	15	3	18
Child under 21	5	3	8
Child over 21	45	1	46
Parent	3	2	5
Sibling	37	8	44
Grandparent	-	0	0
Grandchild	65	1	66

175. For retroactive claims:

($000)	Transfused	Hemo	Total
Spouse	102	95	198
Child under 21	34	117	151
Child over 21	298	57	355
Parent	19	83	101
Sibling	243	295	538
Grandparent	-	15	15
Grandchild	431	49	480

176. The above results would appear to indicate that the increases for Child over 21 and Grandchild are relatively large, while other categories, for example Spouse are relatively small. This is partly because a $1,000 increase on a $500 Grandchild benefit represents a very large percentage increase, while a $1,000 increase on a $25,000 Spouse benefit is proportionately a much smaller increase. To aid understanding of the impact on the sufficiency liabilities of each of the above categories, we have recalculated the costs based on a 10% increase in the benefit in each category.

177. Cost of a 10% increase in Family Benefits:

	DA9s			DB9s		
($000)	**Trans**	**Hemo**	**Total**	**Trans**	**Hemo**	**Total**
Spouse	1,791	696	2,487	294	245	539
Child under 21	175	248	423	59	180	239
Child over 21	1,408	240	1,648	171	29	200
Parent	114	201	315	11	42	53
Sibling	992	507	1,499	140	151	291
Grandparent	0	3	3	-	1	1
Grandchild	212	29	240	25	3	27
Total	**4,692**	**1,924**	**6,615**	**699**	**652**	**1,351**

APPENDIX E – SUMMARY OF COST OF ADDITIONAL POTENTIAL ALLOCATION BENEFITS

$000's	Retroactive Cost			Future Cost			Total Cost		
	Trans	Hemo	Total	Trans	Hemo	Total	Trans	Hemo	Total
Pay LOI/LOS to age 67	4,312	4,352	8,664	5,044	6,328	11,372	9,356	10,680	20,036
Pay LOI/LOS gross of income tax and not deduct other sources of income	38,547	42,257	80,804	23,855	42,993	66,848	62,402	85,250	147,652
Compensation for loss of extended benefits (6% of LOI)	4,883	4,526	9,409	2,754	3,040	5,794	7,637	7,565	15,203
LOI/LOS starts at Level 3 – Pay all $30K			4,300	642	114	756			5,056
Loss of SVC increases by $1 per hour	8,373	4,270	12,643	11,773	8,001	19,774	20,146	12,271	32,417
Loss of SVC hours cap increased to 25 hours	21,071	10,673	31,743	29,435	19,681	49,115	50,505	30,353	80,858
Loss of SVC hours cap increased to 30 hours	38,384	19,279	57,663	53,988	34,928	88,917	92,373	54,207	146,579
Loss of SVC hours cap increased to 40 hours	64,324	32,069	96,392	89,738	60,989	150,727	154,062	93,058	247,120
Extending loss of SVC to lifetime of spouse	11,075	3,439	14,514	19,089	11,030	30,118	30,164	14,468	44,632
Extending loss of SVC to spouse's age 65						336			336
Death due to HCV more leniently awarded									5,518
Secondarily Infected definition broadened									6,300

$000's	Retroactive Cost			Future Cost			Total Cost		
	Trans	Hemo	Total	Trans	Hemo	Total	Trans	Hemo	Total
Cost of Care provided to level 5 claimants ($10,000 per year)	11,600	3,662	15,262	28,108	13,736	41,844	39,708	17,398	57,106
Do not deduct CPP death benefits when compensating funeral expenses (assuming cap on funeral expenses raised to $10,000)	n/a	n/a	1,288	n/a	n/a	889	n/a	n/a	2,177
Hemophiliac 23 election									4,649

$000's	Retroactive Cost			Future Cost			Total Cost		
	Trans	Hemo	Total	Trans	Hemo	Total	Trans	Hemo	Total
Increasing payments to family on death by $1,000									
DA9 – Spouse	350	94	444	366	185	551	716	278	995
DA9 – Child under 21	57	56	113	60	110	170	117	166	282
DA9 – Child over 21	1,376	161	1,537	1,440	318	1,758	2,816	479	3,296
DA9 – Parent	111	135	246	116	267	383	227	402	629
DA9 – Sibling	969	341	1,310	1,014	674	1,688	1,983	1,015	2,998
DA9 – Grandparent	1	20	21	1	40	41	2	60	62
DA9 – Grandchild	2,071	192	2,263	2,167	379	2,546	4,238	570	4,809
DB9 – Spouse	102	95	198	15	3	18	117	98	215
DB9 – Child under 21	34	117	151	5	3	8	39	120	160
DB9 – Child over 21	298	57	355	45	1	46	343	58	401
DB9 – Parent	19	83	101	3	2	5	21	85	106
DB9 – Sibling	243	295	538	37	8	44	280	302	582

$000's	Retroactive Cost			Future Cost			Total Cost		
	Trans	Hemo	Total	Trans	Hemo	Total	Trans	Hemo	Total
DB9 – Grandparent	0	15	15	0	0	0	0	15	15
DB9 – Grandchild	431	49	480	65	1	66	497	50	547