

# The Health Insurance Authority

## **Report on Final Proposed Calibrations of the HCCP**

**3 June 2021**

## Glossary

**Authority:** Health Insurance Authority

**ILH:** Irish Life Health

**ARHC:** Age Related Health Credit

**HSE:** Health Service Executive

**ABP:** Age Based Pool

**HUC:** Hospital Utilisation Credit

**COVID/ COVID-19:** Coronavirus

**NFI:** Net Financial Impact

**DoH:** Department of Health

**REF:** Risk Equalisation Fund

**HIA:** Health Insurance Authority

**RES:** Risk Equalisation Scheme

**HCCP:** High Cost Claims Pool

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# 1. Introduction

## 1.1 Background & Scope

The Risk Equalisation Scheme (“RES”) is due to be refreshed from 1 January 2022. As part of this refresh the Department of Health (“DoH”) are looking at measures to try to improve the effectiveness of the RES calibration. Any changes made to the proposed design will be submitted to the European Commission for review and ultimate approval.

Work has previously been done by the Authority to explore the impact of introducing a High Cost Claims Pool (“HCCP”) into the RES. As such this report should be read alongside the following documents “Draft Paper for Department of Health proposing how a High Cost Claims Pool might work” (dated February 2019), “HIA Report on High Cost Claims Pool” (dated April 2019) and “Risk Equalisation Scheme Effectiveness Impact: Assessment of the Introduction of a HCCP and changes to other measures” (dated January 2020), which defined effectiveness using a “R-squared weighted average variance<sup>1</sup>” measure and which set out the following recommendation.

### Recommendation

*The principal aims of the HIA in terms of avoiding risk selection and market segmentation are key in terms of maintaining market stability.*

*Throughout this document we have considered the introduction of a HCCP with the following calibration as our central scenario:*

<b>Claims Excess</b>	€50,000
<b>Quota Share</b>	40%
<b>Claims Cost Ceiling</b>	138%
<b>Stamp Duty</b>	Unchanged

*There is balance between increased effectiveness percentage and the levers available to calibrate the RES. Effectiveness could be increased further by increasing the HCCP pool but this either requires changes to stamp duty or net claims costs which could impact the market in terms of stability.*

*We recommend therefore that the proposed RES should have sufficient flexibility to allow for changes in calibration of all the levers which should be considered each year as credits and stamp duties are set, and as effectiveness is reviewed and monitored. We further recommend that any changes are done on a phased basis to avoid shocks to the system.*

The objective of the report is to estimate the parameters of a HCCP and stamp duty if the HCCP had been introduced in 2021, and to examine the financial impact on the insurers under several scenarios and options for setting RE credits and stamp duty.

The report explores the continued appropriateness of the above recommendation based on the 2020 RES calibration, i.e. the calibration in respect of stamp duties and RE credits in respect of contracts entered into in the period 1 April 2021 – 31 March 2022. As such, the analysis contained within this report has been prepared assuming the HCCP had

<sup>1</sup> The “R-squared weighted average variance” measure considers the change in the square of the deviations (before and after the RES) of the average claims for each insurer to market average claims at each age band relative to the market average claim weighted by claims costs before application of the RES.

been introduced as part of the 2020 RES calibration. Throughout this report we have used '2020 RES calibration' and 'current RES calibration' interchangeably. The report also considers further refinements to the proposed RES calibration based on items previously noted as areas for further development by the Authority and HCCP items identified through the February 2021 public consultation process.

## 1.2 Author of Report

This report was prepared by Brendan McCarthy, FSAI, who is a qualified actuary and advisor to the Authority.

This report has complied with Actuarial Standards of Practice ASP PA 2 General Actuarial Practice in relation to the application of work peer review. A senior actuary in KPMG has peer reviewed the report.

## 1.3 Reliances and Limitations

There are a number of important limitations and assumptions which should be borne in mind when considering the results contained in this report. Some of the key limitations and assumptions are set out below. Other specific assumptions, caveats and limitations are contained elsewhere in the report. All make up an integral part of the report.

This report should be read in full, as any part read in isolation may be misleading. This report has been written on the assumption that readers are technically competent in health insurance matters and the mechanics of the Irish Risk Equalisation Scheme. Third parties reading this report may not have the background information necessary for a full understanding of the report. Clarification should be sought by users of the report for any part of the report that is unclear.

Judgements as to the conclusions drawn in this report should be made only after studying the report in its entirety. We assume that users of this report will seek explanation and/or amplification of any part of the report which is not clear.

This report is delivered subject to the agreed written terms of KPMG's engagement. Our report was designed to meet the agreed requirements of the Authority determined by the Authority's needs at the time.

Any party who chooses to rely on our report (or any part of it) will do so at its own risk. To the fullest extent permitted by law, KPMG will accept no responsibility or liability in respect of our report to any other party.

In general, our report would be for the benefit and information of the addressee only and should not be copied, referred to or disclosed, in whole or in part, without our prior written consent. We note that this report has been written for the purpose of meeting a statutory requirement of the Authority and will be subject to Freedom of Information legislation. We understand the Authority may publish this report in redacted form in due course.

This final written report supersedes all previous oral, draft or interim advice, reports and presentations, and that no reliance will be placed by you on any such oral, draft or interim advice, reports or presentations other than at your own risk.

We disclaim any intention or obligation to update or revise the observations whether as a result of new information, future events or otherwise. Should additional documentation

or other information become available which impacts upon the observations reached in our deliverables, we reserve the right to amend our observations and summary documents accordingly.

Any advice given by KPMG is dependent on all relevant information being provided by you to us.

It is important that where advice has been given, it should not be relied on once a significant period of time has elapsed, without confirming with this firm that the advice remains appropriate.

In providing advice to you, we need to make judgements in a wide variety of areas as to the relevant regulatory standards and the requirements of the regulators. Any advice given by KPMG is subject to the fact that the law and regulations can be ambiguous and open to more than one interpretation. We have not considered your requirements from a legal perspective, as we are not legal experts. Our advice and guidance will be based on, at the time the advice is given, our knowledge of relevant rules and guidance, of industry practices and of the requirements of the regulators.

In making our projections, we have relied on the data, spreadsheets and other information supplied by the Authority and the insurers. We have carried out some data checking, discussed the data checking performed by the Authority and satisfied ourselves that the information presented to us is consistent with other information obtained by us in the course of the work undertaken by us to prepare this report. We have performed overall reasonableness checks on the final figures but are not able to give any warranty on the quality of the data used. We have assumed that the factual material and information provided to us, both in written and verbal form, provides an accurate representation of the Risk Equalisation Fund ("REF"). The accuracy of our results is dependent upon the accuracy and completeness of the underlying data, spreadsheets and other information supplied to us. We note that a number of iterations of data have been received from the insurers following questions in relation to the data provided. As the process is not fully embedded in the insurers' processes it is possible that further refinements may be made which may impact on the results of the analysis prepared.

The process of estimating future RES stamp duty receipts and credit payments is an inherently uncertain exercise due to the random nature of claim occurrences. When projecting future liabilities based on past experience, an element of subjectivity is inevitably introduced. As with any process dependent on projection based techniques, the arising results rely critically on the integrity of the current data, the integrity of recent claims progressions and on the applicability of these claims progressions to likely future developments. We caution therefore that the eventual outcome is likely to vary, perhaps materially, from our projected outcome.

The nature of Hospital Utilisation Credits ("HUC") and the HCCP is such that its future development could be adversely affected by the emergence of different claims development relative to historic experience. In forming our opinions, we have made no allowance for the risk of adverse development of these different claims' developments due to their unquantifiable nature.

Projections of future ultimate claims are also dependent on future contingent events and are affected by many additional factors, including but not limited to:

- Hospital behaviour;

- Insurer behaviour;
- Sickness; and
- Random fluctuations given the relatively limited history and small number of claimants in the HCCP.

We have held discussions with the Authority to understand issues they are aware of that may impact claims experience. A limitation of our analysis is that we have no access to hospitals or insurers to understand if there are underlying trends or if there have been any changes in process or claims activities that may have distorted the historic data or may impact future claims experience.

Our analysis does not make any allowance for the investment income which may be earned on monies held within the REF. Given the negative yield environment this may understate the stamp duty somewhat depending on the level of return the Authority achieves on its investments, as the HUC and High Cost Claims Pool (“HCCP”) runs off over a 3-4 year time period. At this stage the RES is calibrated with the intention that approximately 75% of RE credits are distributed in advance through ARHC. As the distribution of health related HUC and HCCP credits increases over time the impact of investments will become a more material consideration.

Coronavirus (“COVID-19”) is a rapidly developing issue which is having significant effects on global economic activity and has created extensive social disruption. Longer term socio-economic implications and the impact on the projected claims experience remain highly uncertain.

Key drivers of uncertainty include:

- Public, corporate and government responses to COVID-19, and the extent to which these responses impact global supply chains and economic conditions;
- The extent to which the spread of COVID-19, associated government actions and public behaviour may increase or reduce hospitalisations;
- The impact of restrictions arising from the virus on claim incidence, reporting, investigation and the potential for reporting delays due to operational constraints affecting claims reporting, handling and settlement that may not fully manifest for some time dependent on the post-pandemic reversion to normalised levels of business activity in the affected markets; and
- The effectiveness, duration and timing of containment measures in reducing future infection and fatality rates of the virus, the speed and effectiveness of vaccines or treatments and the ability of health systems to cope with potentially large numbers of individuals simultaneously requiring treatment.

In addition to the impact on claims experience, COVID-19 may result in significant business impacts for insurers due to changes in the level of economic activity and investment markets. We have not directly considered such potential wider impacts of COVID-19, unless and only to the extent that such potential impact is specifically described in this report. The effects of COVID-19 may have a material impact on our findings. The level of uncertainty affecting our conclusions and the underlying volatility of the actual outcome is increased because of the emergence and continued uncertainty over the prognosis of COVID-19 and its economic impact.



## 2. Executive Summary

The net claims cost is the claims cost an insurer incurs in respect of an insured life after payment of stamp duty and receipt of RE credits. The current RES sets credits and stamp duty such that the projected net claims cost for age groups 65 and over does not exceed the claims cost ceiling of 133.5% of the market average net claims cost.

ARHC serves to significantly reduce the net claims cost for those over 65 (who typically have larger claims) and HUC serves to provide compensatory payments for members of all ages who experience episodes of hospitalisation and acts as a proxy for health status. However, age and hospitalisation are not the only factors which influence claim amounts and members can experience high-cost claims regardless of age or length of hospitalisation. The aim of the introduction of the HCCP is to allow for more focused compensatory payments to be made to insurers in respect of members with high-cost claims.

The objective of the report is to estimate the parameters of a HCCP if the HCCP had been introduced in 2021, and to examine the financial impact on the insurers under several scenarios and options for setting RE credits and stamp duty. As such, the analysis contained within this report has been prepared assuming the HCCP had been introduced as part of the 2020 RES calibration, i.e. the calibration in respect of stamp duties and RE credits in respect of contracts entered into in the period 1 April 2021 – 31 March 2022. Throughout this report we have used ‘2020 RES calibration’ and ‘current RES calibration’ interchangeably.

The report serves to confirm the proposals consulted on by the Authority and considers further refinements to the proposed RES calibration based on items previously noted as areas for further development by the Authority and HCCP items identified through the February 2021 public consultation process.

The recommendations contained within the report have been developed with due regard to the principal objectives as set out in Section 1A of the Health Insurance Acts<sup>2</sup>.

We have set out below how the remainder of the report has been structured alongside key summary observations in respect of each section:

Section	Section Overview	Key Observations
3	Outlines the data used to further refine the proposed RES calibration.	<p>Because the claims for the HCCP are retrospective it is necessary to estimate what they would be when they are eventually paid out. This was done using historic data, inflated to when the period of hospitalisation would apply for the HCCP claims.</p> <p>Claims data in respect of contracts entered into in 2018 was deemed suitable for calibration purposes. Data for calibration should be inflated for expected inflation and development to ultimate claims.</p>
4	Outlines the approach to calculating the claims excess and the linkages to other RE credits received in respect of insured lives.	Claims excess should incorporate an allowance for ARHC and HUC over the previous 12 months.

<sup>2</sup> “Health Insurance Acts” means The Health Insurance Act, 1994 (S.I. No. 16/1994) and subsequent Health Insurance (Amendment) Acts.

Section	Section Overview	Key Observations
5	Considers the treatment of high cost claims that occur in adjacent contract years.	An assessment of the high cost claim over a rolling period would be more equitable and would ensure that high cost claims which span adjacent contract years would be treated consistently.
6	Considers the definition of claims to be included in the HCCP.	<p>Total claim vs total returned benefit unlikely to materially impact the HCCP.</p> <p>For the purposes of the HCCP, we suggest limiting the amount of high cost claims to those drugs approved by the HSE for use in public hospitals.</p> <p>Other costs, e.g. hospitalisation and procedural costs can vary significantly depending on the underlying provider. An analysis has not been performed at this stage to understand the differences that may exist. We recommend that the Authority perform such an analysis to understand whether standardisation of costs, or indeed upper limits on costs should be incorporated into the HCCP and the level of HCCP credits distributed.</p>
7	Considers the merits of including a monetary cap and inflating the claims threshold in respect of high cost claims to be compensated by the HCCP.	<p>Based on the proposed level of quota share of 40%, a cap is unlikely to materially impact the REF. A cap be considered if the level of quota share was to increase.</p> <p>The claims threshold be indexed to allow for expected claims inflation.</p>
8	Considers the target level of RE credits to be distributed from the REF through health-related credits and the potential levers available to calibrate the HCCP to achieve that aim.	<p>A HCCP calibration with an Excess of €50,000 and a Quota Share<sup>3</sup> of 40% to be a reasonable starting point for the introduction of the HCCP as it is large enough to lead to a more targeted distribution of RE credits (11.5% of total RE credits allocated) but not so large that it is likely to materially disrupt the market.</p> <p>The amount of RE credits distributed through health-related credits should be limited to 50% of the total amount of RE credits expected to be allocated in any calibration year over the lifetime of the next RES. Any changes made to the HCCP calibration would need to be done on a phased basis and carefully managed over time.</p>
9	Sets out the considerations around setting stamp duty in the context of introducing a HCCP.	The conflicting objectives remain with the introduction of a HCCP, and we recommend that the Authority be cognisant of these when setting Stamp Duty, noting there are arguments for and against changing or maintaining stamp duty, or for finding an acceptable middle ground.
10	Sets out the proposed calibration based on the observations and recommendations in Sections 3 – 9.	N/A

<sup>3</sup> “Quota Share” means the percentage level of distribution of a HCCP claim as HCCP credits.

Section	Section Overview	Key Observations
11	Outlines the impact of the proposed HCCP calibration relative to the current RES calibration.	<p>Stamp duty decision materially impacts net claims cost by age.</p> <p>ARHC is reduced as a result of the introduction of a HCCP. The magnitude of the reduction is dependent on the stamp duty decision.</p> <p>The inclusion of a HCCP is expected to result in additional net RES flows to the beneficiary of the RES.</p> <p>The inclusion of a HCCP is expected to materially increase the level of effectiveness of the RES.</p>
12	Considers how the HCCP would be administered in practice.	<p>Information required from insurers to be prescribed.</p> <p>From an administrative and operational perspective, it is likely that the Authority will be making some very large payments to insurers in respect of HCCP claims. Given the volumes involved, we are of the view that all larger claims (in excess of €150k or €200k say) would require details of settlements made by insurers to be furnished to the Authority. We are also of the view that smaller claims should be subject to audit, however given the number of claims involved we suggest this be performed on a random sample basis, with more frequent sampling of larger claims compared to smaller ones.</p> <p>Consistent with the information returns the information provided to the Authority to calibrate the HCCP should be accompanied by an independent accountant's report stating that the returns are in line with the regulations.</p>

We note that a number of iterations of data have been received from the insurers following questions in relation to the data provided. As the process is not fully embedded in the insurers' processes it is possible that further refinements may be made which may impact on the results of the analysis prepared.

Based on the analysis we have performed; we propose the following calibration for the purposes of introducing a HCCP into the RES for contracts entered into from 1 April 2022.

### **Proposed Calibration**

*The principal aims of the Authority in terms of avoiding risk selection and market segmentation are key in terms of maintaining market stability.*

*There is a balance between an increased effectiveness percentage and the levers available to calibrate the RES. Effectiveness could be increased further by increasing the HCCP pool but this either requires changes to stamp duty or net claims costs which could impact the market in terms of stability.*

*We recommend therefore that the proposed RES should have sufficient flexibility to allow for changes in calibration of all the levers which should be considered each year as credits and stamp duties are set, and as effectiveness is reviewed and monitored. We further recommend that any changes are done on a phased basis to avoid any shocks to the system.*

*Based on the analysis performed in this report, we are of the opinion that the most appropriate approach to the introduction of a HCCP would include the following:*

<b>Claimant Excess</b>	<b>€50,000 Threshold plus (Total ARHC for contract year) plus (HUC received in claim quarter and previous 3 quarters). Indexation of Claims Excess in line with expected claims inflation.</b>
<b>Quota Share</b>	<b>40% distribution of Max(Total Claim – Claimant Excess, 0) as HCCP credits</b>
<b>Stamp Duty</b>	<b>The Authority should be cognisant of the conflicting objectives when setting its Stamp Duty recommendation in respect of new contracts entered into in the period 1 April 2022 – 31 March 2023.</b>
<b>Cross Over Periods</b>	<b>High cost claims to be assessed on a rolling 4 quarter period.</b>
<b>Claims Definitions</b>	<b>Returned Benefits with consideration given to restrictions in relation to the cost of certain drugs.</b>
<b>HCCP Cap</b>	<b>None initially. Allowance for the inclusion of a cap to be incorporated as experience emerges over time or as quota share increases.</b>

*For the avoidance of doubt, the HCCP will provide compensation in respect of cumulative claims costs that exceed the claimant excess, and as such may be representative of multiple claims that in isolation do not meet the definition of a high cost claim on a standalone basis.*

### 3. Data Used for Refining the RES

The HCCP calibration relies on historical data received from insurers in respect of high cost claims. As the objective of the report is to estimate the parameters of a HCCP if the HCCP had been introduced as part of the 2020 RES calibration, i.e. in respect of contracts entered into in the period 1 April 2021 – 31 March 2022, the historical data must be adjusted to estimate expected claims levels applicable for the 2020 RES calibration, which is the basis of this report. This section outlines the data received and how it was adjusted for the purposes of calibrating the inclusion of a HCCP.

#### 3.1 Data Received by the Authority

The Authority received detailed monthly claims data from the three open market insurers to help support the calibration of the HCCP and enable further analysis and refinement to be performed. This data included the following:

- Member number
- Age
- Gender
- Level of Cover (level 1, 2,3+)
- Total Claim
- Returned Benefits
- Number of Bed Nights
- Number of Day Cases Nights
- Total ARHC received

The above data was provided in respect of total claims above €10,000 for individual contracts written between 2016 and 2019. The data was provided by contract year, with a further sub split between within contract years to understand how the claims data aligns to the RES calibration, e.g. claims in respect of 2019 contracts were split between policies that incepted 1 January 2019 – 31 March 2019 and 1 April 2019 – 31 December 2019. For each cohort, information in respect of claims paid up to 30 June 2020 was provided.

The data was aggregated across all claims in respect of an individual contract in respect of a 12 month contract period. Thus, where an insured person had multiple health events leading to multiple claims in a contract period, these have not been individually identified in the data provided to the Authority. For the avoidance of doubt, the data provided to the Authority has been aggregated to be the cumulative claims costs that exceed the high-cost claims threshold for each contract period, and as such may be representative of multiple claims that in isolation do not meet the definition of a high cost claim on a standalone basis.

The data provided by the three open market insurers was provided during 2020 to support the calibration of the HCCP. The data was prepared by the insurers on a best endeavours basis and has not been subject to external review or audit. We note that a number of iterations of data have been received from the insurers following questions in relation to the data provided. As the process is not fully embedded in the insurers' processes it is possible that further refinements may be made which may impact on the results of the analysis prepared. If the HCCP is implemented, the Authority will require data from insurers' in relation to their past claims' history for insured lives with high cost

claims on a bi-annual basis with their information returns. Further details are set out in Section 12.1.

### 3.2 Data Modification for Calibration Purposes

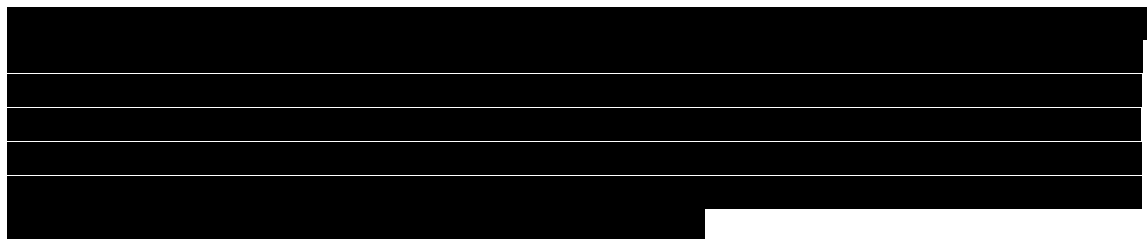
The data received, while comprehensive in nature, requires adjustments to enable it to be used for the purposes of calibrating the HCCP for inclusion in the RES.

- Older data is more developed in terms of run off, i.e. more claims have been notified and settled, but the claims are dated and are likely to be understated when compared to those likely to be incurred when the HCCP is in operation, due to claims inflation. These claims would need to be inflated to align with the claims expected to be incurred when they are eventually paid out, i.e. inflated to when the period of hospitalisation would apply for the HCCP claims.
- Newer data is more representative of current claims cost levels but is less developed and contains significant levels of uncertainty as to the ultimate claim amounts involved. These claims would need to be further developed to estimate the likely level of HCCP claims.

Thus, regardless of the data used, some level of adjustment is required for HCCP calibration purposes.

We have taken the insurer claims data provided to us by the Authority and have estimated the ultimate claims expected to be incurred in respect of each sub-contract year. We have assumed that the claims data in respect of contracts written in the period 1 January 2016 – 29 February 2016 is fully developed and have used this as a basis for estimating the ultimate claims amounts in respect of the other sub-contract years using non-life actuarial techniques. We have performed similar analysis in respect of overnight stays and day-case HUC claims.

The 2019 data was the least developed of the data received, and also contained significant distortions due to COVID-19, as the coverage period in respect of this data was 1 January 2019 – 31 December 2020. This resulted in the level of ultimate claims being materially lower than other years, as hospitalisations were significantly lower in 2020, due to COVID-19 related limitations on access to medical facilities. We have assumed that when the HCCP is first operational (covering hospitalisations over the period 1 April 2022 – 31 March 2024), the effects of COVID-19 on hospitalisation levels will have reversed and reverted to normal levels<sup>4</sup>. As such, we do not consider it appropriate to use the 2019 data for the purposes of the HCCP calibration.



The claims data in respect of contracts entered into in 2017 and 2018 both appear to be sufficiently developed and complete for the purposes of calibrating the HCCP.

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<sup>4</sup> We note that there is a trend of moving towards day cases from overnight stays has been emerging over time).

Notwithstanding, we note that both datasets would require some level of adjustment for claims inflation and ultimate claims development.

For the purposes of further refining the HCCP calibration, we have judgementsally used the claims data in respect of contracts entered into in 2018, as we believe this is the most recent sufficiently developed data (98% developed) for the purposes of our analysis, although equally claims data in respect of contracts entered into in 2017 could have been used. We note that the use of 2017 data is not expected to materially impact the results and conclusions drawn from this report.

We note that we have implicitly used the older data provided to us (from contracts entered into in 2016 and 2017) to estimate the ultimate level of claims associated with the contracts entered into in 2018. The claims data in respect of contracts entered into in 2018 was further developed to allow for any additional claims experience that might emerge (but not yet paid out by the insurers) based on experience observed in the claims data in respect of contracts entered into in 2016 and 2017. The claims associated with these earlier contracts were more developed than the claims data in respect of contracts entered into in 2018. A summary of the claims data in respect of contracts entered into in 2018 is included in Appendix 5.

Additionally, consistent with the expected level of claims inflation underpinning the current RES calibration, we have assumed claims inflation of 4% p.a. for a period of 3.25 years to allow for the expected increase in the cost of the claims emerging from 2018 contracts to when the claims would be paid from the current RES calibration, had the HCCP been introduced. The 3.25 years reflects the time from 31 December 2018 (which is the average exposure point for claims in respect of contracts written in 2018) up to 1 April 2022 (which is the average exposure point for claims from contracts written in the period 1 April 2021 – 31 March 2022) when the HCCP credits would apply.

For the avoidance of doubt, the allowance for claims inflation of 4% p.a. for a period of 3.25 years serves two purposes.

- To allow for claims which are likely to exceed the claims threshold due to inflationary effects expected in the future. For example, claims of €44,016 in 2018 prices would have inflated to €50,000 in real terms for the purposes of the 2020 RES calibration. The adjustment ensures that such claims are considered when determining the level of the HCCP pot.
- By carrying out this calibration exercise, as if claims had occurred in respect of contracts entered into in the period 1 April 2021 – 31 March 2022, the conclusions are expected to be representative of the likely level of claims cost when the HCCP is operational.

We note that while we have used claims data in respect of contracts entered into in 2018 for the analysis in this report, all available data has been considered, and would continue to be considered when calibrating the HCCP. This is to ensure that trends in experience are appropriately allowed for and any outliers, such as the claims data in respect of contracts entered into in 2019 which has been distorted due to COVID-19 are appropriately allowed for. We note that data for claims in respect of contracts entered into in 2020 /2021 is also likely to contain material distortions due to COVID-19 as the effects of the pandemic continue, and as such will need to be carefully evaluated when calibrating the HCCP when introduced into the RES.

## 4. Approach to Calculating the Claims Excess

The HCCP aims to provide credits to insurers in respect of high-cost claims. Given the level of the HCCP claims excess, insurers will have been in receipt of HUC in respect of insured lives before claims become eligible for HCCP payments. Equally, ARHC will have been received in respect of older lives at varying levels depending on the insured lives age, gender and level of cover.

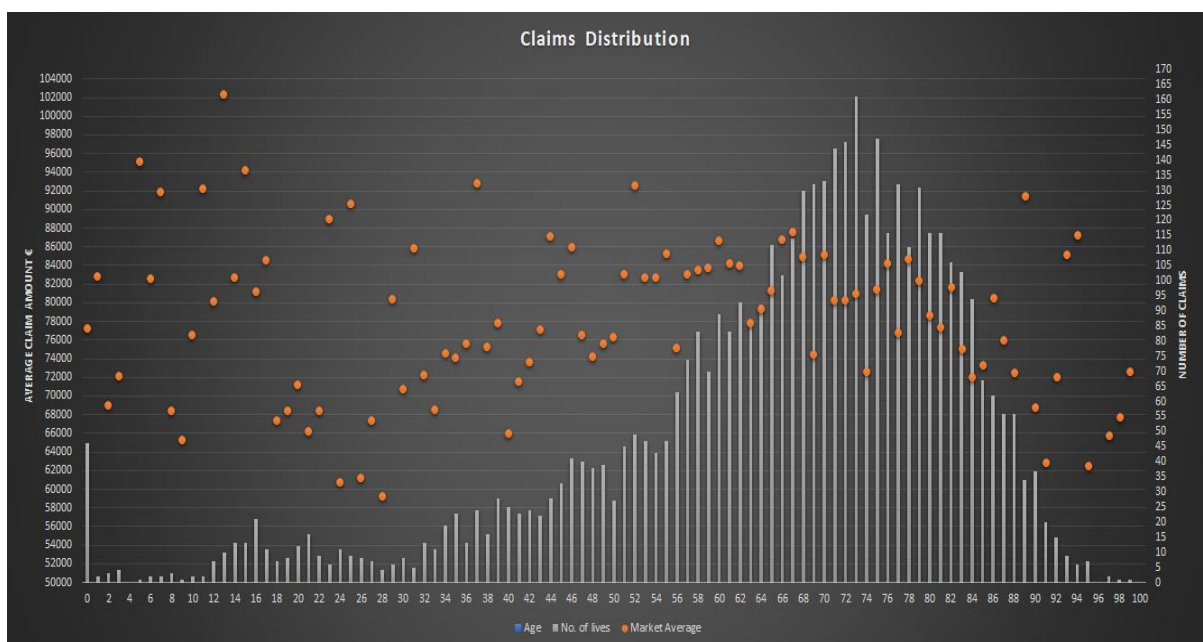
With the introduction of the HCCP, on the basis that ARHC and HUC will remain part of the RES, it is necessary to identify how the HCCP will interact with these existing RE credits, as this will impact on the total level of RE credits received in respect of an insured life. In this section, we separately assess whether or not ARHC and HUC should be offset against the HCCP credits being distributed.

### 4.1 HCCP Interaction with ARHC

In general, the average cost of claims increases with age as the level of utilisation of health services is higher on average for older lives. As such, ARHC is used as a mechanism to deal with affordability issues for older lives as it materially reduces the net claims cost for these lives. In identifying how the HCCP will operate, we need to examine whether or not the receipt of a ARHC is taken into account or not, when identifying the level of a claim that will be covered in the HCCP.

The starting point for assessing whether older lives should receive ARHC in addition to HCCP credits is to identify whether high-cost claims are influenced by age, i.e. to assess whether high cost claims vary with age or not. High-cost claims are significantly higher than the market average and this section considers whether the level of high cost claims increase with age.

We have set out below the distribution of average claims exceeding €50,000 (split by frequency and age) in respect of the claims data in respect of contracts entered into in 2018. We note this analysis has been based on the raw data provided by the insurers and has not been adjusted to allow for claims inflation or future claims development.





The orange dots represent the average claim amount exceeding €50,000 by age. The grey bars represent the frequency of these claims by age. The distribution shows that, on average, the claim amounts in respect of high cost claims is similar across all ages although the intensity or frequency of such claims increases with age (and then reduces down for older ages). In fact, we can see that the highest claims appear to have occurred in respect of younger lives, although we note that the number of claims in respect of younger lives and as such the average claim amounts could be distorted by a small number of very large claims. We note that there was no discernible difference between the patten of claims across the insurers.

This suggests that the cost of claims is not closely related to age although the frequency of claims is. Thus, for similar high-cost claims types, it is reasonable to expect that the claims cost would not differ materially between older and younger lives.

This means that if the ARHC were not taken into account when identifying the level of claims covered by the HCCP, then the level of total RE credits an insurer would receive in respect of an older life (>65) would be higher than they would receive in respect of the same claim in respect of a younger life (<65). This is because the older life would receive an ARHC in addition to the HCCP credit. This is how the Australian RES operates.

In the Australian RES, RE credits are allocated using a combination of an Age Based Pool (ABP) payment and a HCCP payment. RE credits are allocated on a retrospective basis based on actual claims experience. Where an ABP payment is made, a reduction is made to the HCCP payment. As a general rule, however, for claimants with similar claims experience, insurers in Australia receive higher levels of payments in respect of older lives than younger lives and this increases with age. Summary details of the Australian RES are outlined in Appendix 6.

As noted above, the data received by the Authority (presented in the graph above) suggests that while the frequency of high-cost claims increases with age (up to a point) the cost of claims is not closely related to age. We note, however, that we have not performed detailed statistical tests to further validate this assertion.

We are, therefore, of the view that an adjustment should be made to HCCP payments to allow for the fact that age credits will have already been received on older lives (on a prospective basis).

## 4.2 HCCP Interaction with HUC

Insurers receive HUC payments in respect of hospitalisation through existing RES mechanisms. For a high-cost claim some of the HUC payments are received in respect of hospitalisations before the claims become eligible for HCCP, and some are in respect of hospitalisations after the HCCP threshold is reached. Since some of the additional claims' costs are already compensated through HUC payments, the full provision of HCCP credits could result in an element of double counting occurring, if the HUC payments are not taken into account.

We are of the view that an adjustment should be made to HCCP payments to allow for the fact HUC payments will have already been received by an insurer in respect of hospitalisation incurred in respect of a high-cost claim.

### 4.3 Impact of Offsetting ARHC and HUC

One possible approach to offsetting ARHC and HUC is to increase the Excess for a claimant to allow for ARHC and HUC as follows:

$$\text{Claimant Excess} = \text{Threshold plus (Total ARHC for contract year) plus (HUC received in claim quarter and previous 3 quarters)}$$

Based on the above approach, we have set out the impact on an 18 year old and 80 year old male Advanced contract claimant with identical claim experience to show the likely impact of the calibration on the RE credits received.

Age	18	80
Claim Amount (A)	100,000	100,000
Threshold (B)	50,000	50,000
Quota Share (C)	40%	40%
<b>No Credit Offset</b>		
HCCP Eligible Claim (D) = $\text{Max}((A-B) * C, 0)$	20,000	20,000
HUC Received (E)	10,000	10,000
Age Related Health Credit (F)*	0	3,150
Total Credits Received (D+E+F)	30,000	33,150
<b>Credit Offset</b>		
Claimant Excess (G) = $B+E+F$	60,000	63,150
HCCP Eligible Claim (H) = $\text{Max}((A-G) * C, 0)$	16,000	14,740
HUC Received (E)	10,000	10,000
Age Related Health Credit (F)*	0	3,150
Total RE Credits Received (H+E+F)	26,000	27,890

\* For the purposes of the above analysis, ARHC has been assumed to remain constant in line with the ARHC calculated assuming no HCCP as a simplification. The actual ARHC will differ in practice due to the size of the HCCP pot.

We can see that the approach allowing for historical RE credits received reduces the level of the HCCP eligible claim, and therefore the level of RE credits allocated to older lives. This goes some way to aligning the RE credits in respect of HCCP claims regardless of age. However, akin to the Australian RES, there is still some level of allowance for age in the total claim, the level of which is reduced somewhat through a reduction to the HCCP amount credited.

In theory, as age is not considered to be a determining factor in relation to the level of high-cost claims (as evidenced in Section 4.1) one could argue that no allowance for ARHC should be made when determining the overall level of compensation, i.e. the HCCP credit could be calculated and then the full ARHC deducted from this amount subject to a minimum of zero, which would reduce the level of HCCP credit allocated. However, we can see in Section 4.1 that while this is the case the frequency of high cost claims for older lives is higher and such an approach could potentially lead to further market segmentation (as older lives would receive less from the HCCP but are more likely to have a high-cost claim so insurers could be incentivised to charge more for products that are attractive to them) which would conflict with the principal objective of the Health Insurance Acts. As such, we have not considered this further at this stage although we note the Authority may wish to give further considerations of this as an option.

## 4.4 Pros and Cons of Credit Offset Approach

Set out below are a list of pros and cons in relation to offsetting RE credits.

Approach	Pros	Cons
No Credit Offset	<ul style="list-style-type: none"> <li>▪ Reduced net claims costs for younger lives if stamp duty unchanged due to HCCP allocation. Could help with market sustainability and affordability issues.</li> <li>▪ Maximises the level of HCCP being distributed for any given level of Excess / Quota Share.</li> <li>▪ Higher level of effectiveness compared to offsetting RE credits as claims costs across the market are higher on average in respect of older lives.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Largest increase in net claims cost for older lives if stamp duty unchanged as ARHC reduced.</li> <li>▪ High cost claim amounts do not show signs of materially varying by age. Thus, an 18 year old could be expected to have similar costs to that of an 80 year old for treatment of the same high cost claim condition. The intention of the RES is to equalise for risk differences for a given health status. The inclusion of ARHC would result in the 80 year old receiving a higher level of RE credits for the same underlying risk.</li> </ul>
Credit Offset	<ul style="list-style-type: none"> <li>▪ Compensation would already have been provided due to HUC so questionable as to whether HCCP should not be adjusted to allow for HUC payments received.</li> <li>▪ High costs claims can have similar risk characteristics across different ages so questionable as to whether an older life should also benefit from ARHC if underlying risks / claims costs are similar.</li> <li>▪ Australian system includes an allowance to offset for age credits as already allocated elsewhere which links in with above point.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Serves to increase the level of claimant excess and therefore reduces the level of HCCP being distributed for any given level of Excess / Quota Share.</li> <li>▪ Calibration of model more complex due to iterative nature of ARHC calculation as returned benefits net of ARHC allocated to HCCP pot would be an input.</li> </ul>

## 4.5 Conclusion

We are of the view that an adjustment should be made to HCCP payments to allow for any ARHC and HUC payments that will have already been received by an insurer in respect of a high-cost claim. We consider setting the Excess for a particular HCCP claimant as follows as a reasonable approach:

$$\text{Claimant Excess} = \text{Threshold plus (Total ARHC for contract year) plus (HUC received in claim quarter and previous 3 quarters)}$$

The impact of the proposed approach is set out in Section 11 with the impact on the level of the HCCP set out in Appendix 1.

We note that alternative approaches could be used by the Authority, and that the approach adopted could materially impact on the level of credits distributed. We note that not offsetting age and HUC RE credits could be viewed as an upper bound on the level of the HCCP pot and that for a given threshold and quota share, offsetting leads to a reduction in the contribution of the HCCP to the overall size of the RES. The figures presented in this report do not assess the impact of a full ARHC or HUC offset however we note that a full offset of ARHC and HUC could reduce the magnitude of the HCCP contribution to the overall size of the RES by €3.9m and €25.6m respectively.

## 5. Cross Over Periods

Under the recommended HCCP calibration, as set out in the document “*Risk Equalisation Scheme Effectiveness Impact: Assessment of the Introduction of a HCCP and changes to other measures*” and summarised in Section 1.1, the level of HCCP credits allocated are dependent on the amount of the claim and when the claim is incurred relative to the policy renewal date. As such, claims which occur and overlap the policy renewal date are likely to receive lower HCCP credits in aggregate when compared to claims that do not occur near the policy renewal date as the claim would be allocated to two contract periods.

For example, if a insured person had a high-cost claim of €100,000 and the costs incurred in respect of this claim was equally split between contract periods, i.e. €50,000 incurred in the contract period before policy renewal and €50,000 incurred in the contract period after policy renewal, then under that HCCP calibration the insurer would not receive any HCCP credits. If, however the claim was just before the policy renewal then the insurer would receive HCCP credits as outlined in the table in Section 4 for example.

We are of the view that an assessment of the high-cost claim over a rolling period would be more equitable and would ensure that high cost claims which span adjacent contract years would be treated consistently. It may also reduce incentives for the insurers to defer treatments to times when they are likely to receive higher HCCP credits which may not be in the best interests of patients. However, we are also of the view that HCCP credits received in respect of high cost claims should be limited to those incurred in a 12-month period. Thus, we propose that the Authority assesses high cost claims on a rolling 4 quarter period consistent with the approach adopted in Australia.

The impact of the proposed approach is set out in Appendix 1 and Appendix 3.

### 5.1 Pros and Cons of Allowing for Cross Over Periods

Approach	Pros	Cons
No Allowance for Cross Over Periods	<ul style="list-style-type: none"> <li>▪ Lower cost of HCCP.</li> <li>▪ Less complex to calibrate and administer.</li> </ul>	<ul style="list-style-type: none"> <li>▪ High cost claims which span adjacent contract years would not be treated consistently and are likely to receive lower HCCP credits.</li> <li>▪ Lower level of effectiveness as some high cost claims will receive reduced (or no) HCCP credits.</li> <li>▪ Less targeted allocation of resources towards sicker lives.</li> </ul>
Include Allowance for Cross Over Periods	<ul style="list-style-type: none"> <li>▪ An assessment of the high cost claim over a rolling period would be more equitable and would ensure that high cost claims which span adjacent contract years would be treated consistently.</li> <li>▪ Reduce incentives for the insurers to defer treatments to times when they are likely to receive higher HCCP credits which may not be in the best interests of patients.</li> <li>▪ Higher level of RES effectiveness as some high cost claims will receive HCCP credits that they might otherwise not receive.</li> </ul>	<ul style="list-style-type: none"> <li>▪ More complex for the Authority to calibrate and administer.</li> <li>▪ Further reduction in ARHC (as the increased allocation to HCCP reduces the allocation to ARHC) which would increase the net claims cost for older lives all else being equal.</li> </ul>

## 5.2 Conclusion

We recommend that an assessment of the high cost claim over a rolling period should be incorporated into the HCCP after the first calibration year. However, we recommend that HCCP credits received in respect of high cost claims should be limited to those incurred in a 12-month period, assessed on a rolling 4 quarter period basis.

## 6. Definition of Claims to be included in the HCCP

A key element of determining the level of the HCCP pot is determining what types of claims should be included within HCCP payments. The current RES calculates ARHC based on returned benefits, and there is an argument that the claims covered in the HCCP should be calibrated on a consistent basis. There is also an argument that the HCCP should cover all high-cost claims (including the cost of drugs) on the basis that some high cost claims would not be captured in the returned benefits amount.

### 6.1 Claims included in the Current RES

The current RES calculates ARHC based on returned benefits. More specifically:

- The ARHC for Advanced cover contracts are based on the average claim costs for Level 2 products (products that, in the main, provide cover for semi-private accommodation in private hospitals, rather than private accommodation). The ARHC for Advanced cover products are calculated to be the amount necessary so that the net claims cost for age groups 65 and over does not exceed the claims cost ceiling of 133.5% of the average net claims cost for Level 2 contracts;
- The ARHC for Non-Advanced contracts are based on the average claim costs for Non-Advanced products. Due to limited claims volumes, adjusted claim costs for Non-Advanced contracts aged 65 and over are calculated by applying the average ratio of Non-Advanced claims costs to Level 2 claims costs for all ages 65 and over combined. The ARHC for Non-Advanced contracts are calculated to be the amount necessary so that the net claims cost for age groups 65 and over does not exceed the claims cost ceiling of 133.5% of the adjusted average net claims cost for Non-Advanced contracts.

### 6.2 Impact on HCCP on Claims Definition

#### 6.2.1 Returned Benefits vs. Total Claims

As noted in Section 3, the Authority received detailed monthly data from the three open market insurers to help support the calibration of the HCCP. Using the claims data in respect of contracts entered into in 2018 (for the reasons outlined in Section 3), we can see that in aggregate for claims that exceed the threshold for inclusion in the HCCP, there is a small difference between the level of total claims<sup>5</sup> and level of returned benefits<sup>6</sup>. Overall, the ratio is of the order of 98% and there is limited variability due to the level of the excess. For the avoidance of doubt, the intention of the HCCP is to provide compensation in respect of the provision of health services (irrespective of cause), and as such we are of the opinion that ancillary costs such as legal expenses should not be incorporated.

<sup>5</sup> "claim" means an application by, or on behalf of, an insured person to a registered undertaking for the discharge or reimbursement, under the terms of a health insurance contract, of all or part of the fees or charges due to a health services provider in respect of the provision of prescribed health services during a hospital stay or stays, as defined in the Health Insurance Act 1994 (Information Returns) Regulations 2009.

<sup>6</sup> "Returned Benefits" in respect of each settled claim, means the sum of the net provider payments under that claim. The "net provider payment" has the meaning assigned to it by Regulation 4(2) of the Health Insurance Act 1994 (Information Returns) Regulations 2009.

Threshold	€50,000	€45,000	€40,000	€35,000	€30,000
<b><i>Developed Claims above Threshold (uninflated)</i></b>					
Total Developed Claims	€341.8m	€391.5m	€451.6m	€519.5m	€602.1m
Total Developed Returned Benefits	€335.6m	€384.7m	€442.7m	€509.4m	€590.5m
Ratio	98.2%	98.2%	98.0%	98.1%	98.1%

The developed claims figures presented in the table above are based on the actual claims data in respect of contracts entered into in 2018 provided by the three open market insurers developed to allow for expected additional claims from further development. They do not allow for the additional claims which are expected to emerge due to claims inflation – the impact of these additional claims are set out in Appendix 5 for the proposed calibration. Furthermore, the intention is that the HCCP will cover all high cost claims, irrespective of age, gender and level of cover.

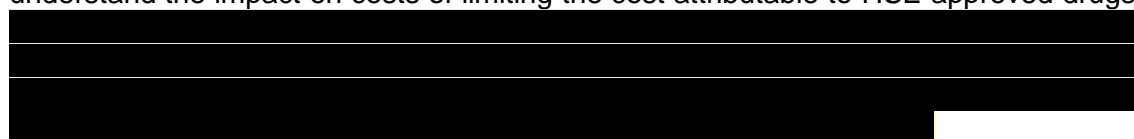
Notwithstanding the fact that total claims exceed returned benefits the difference in the aggregate level of distribution based on the proposed quota share is likely to be relatively small in the context of the overall level of HCCP credits distributed (i.e. 40% \* (€341.8m – €335.6m for the proposed calibration). The same is true for the aggregate level of distribution for the individual insurers, although material differences may manifest themselves at an insured member level.

Additionally, the current RES operates on the basis of Returned Benefits, and for consistency purposes, we are of the view that credits allocated in respect of HCCP claims should be made on a consistent basis. However, we are cognisant of the fact that the HCCP is designed to capture the costs of high cost claims (regardless of setting) and as such we suggest that the Authority discuss the approach with the insurers, noting that both approaches are unlikely to have a material impact on the overall level of HCCP credits distributed.

## 6.2.2 Standardisation of Costs

The Health Service Executive (“HSE”) has a defined list of drugs approved for use in public hospitals. There is an argument that the cost of drugs covered by the HCCP should be limited to that list, as the cost of drugs not currently approved by the HSE are likely to be higher. This is an assertion and we have not been provided with the data to understand the underlying drug costs involved.

The claims presented in Section 6.2.1 above are based on the actual claim costs experienced by the insurers. An analysis has not been performed at this stage to understand the impact on costs of limiting the cost attributable to HSE approved drugs.



We note that limiting the level of compensation to an approved list of drugs may not be in the best interests of the insured lives, as this could potentially result in these drugs not being made available (due to lack of compensation) with the insured not getting the best

course of treatment possible. Thus, for the purposes of the HCCP, we would suggest limiting the amount of high cost claims to those drugs approved by the HSE for use in public hospitals.

Other costs, e.g. hospitalisation and procedural costs can vary significantly depending on the underlying provider. An analysis has not been performed at this stage to understand the differences that may exist. We recommend that the Authority perform such an analysis to understand whether standardisation of costs, or indeed upper limits on costs should be incorporated into the HCCP and the level of HCCP credits distributed.

### 6.2.3 Standardised Benefits & Standardised Costs for HCCP claims

## 6.3 Pros and Cons of Different Claims Definitions

Approach	Pros	Cons
Total Claims	<ul style="list-style-type: none"> <li>▪ Highest level of allocation so targets the costs associated with high cost claims regardless of setting.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not aligned to current RES which is calibrated off returned benefits.</li> </ul>
Returned Benefits	<ul style="list-style-type: none"> <li>▪ Aligned to current RES which is calibrated off returned benefits.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some high-cost claims are not in hospital settings and thus may prove ineffective at compensating those claims.</li> </ul>
Limit Cost of Drugs	<ul style="list-style-type: none"> <li>▪ Transparency over drugs to be used (or costs allocated) based on HSE approved list.</li> <li>▪ Reduces competitive advantage if one provider uses drugs not on the HSE approved list, and markets on that basis.</li> </ul>	<ul style="list-style-type: none"> <li>▪ May be difficult to determine appropriate cost of approved drugs if unapproved drugs are used.</li> <li>▪ Limiting payments to approved drugs (i.e. no payment in respect of unapproved drugs) could result in insurers limiting treatment options.</li> </ul>
Exclusion of Legal costs	<ul style="list-style-type: none"> <li>▪ Reduces exposure of the REF</li> <li>▪ Compensates for health-related expenditure only which is what the RES is trying to do.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Legal intervention may not happen which could result in claims being higher than if challenged.</li> </ul>

## 6.4 Conclusion

We are of the view that credits allocated in respect of HCCP claims should be made on a returned benefits basis. However, we are cognisant of the fact that the HCCP is designed to capture the costs of high cost claims (regardless of setting) and that there may be practical limitations/considerations for the insurers when gathering the data, and as such we recommend that the Authority discusses the approach with the insurers, noting that either approach is unlikely to have a material impact on the overall level of HCCP credits distributed.



## 7. HCCP Cap and Inflationary Pressures

The principal aims of the Authority in terms of avoiding risk selection and market segmentation are key in terms of maintaining market stability. The inclusion of a HCCP in the RES acts as a measure to help reduce the risk of risk selection. This is because the HCCP provides a level of compensation for the largest claims / highest risks and thus should help to reduce incentives for insurers to target less risky and more profitable customers.

In this section, we explore whether the HCCP would benefit from the inclusion of an annual monetary cap at an insured life level, and there are compelling reasons for including or excluding a cap, as set out below:

- **Inclusion:** The introduction of a cap on the level of claims could help to reduce the potential for very large claims emerging as the insurers would not receive compensation as a result of claims that exceeded the cap. As such, insurers should be more incentivised to manage and monitor the claims cost such that claims would not exceed a certain level. If this was the case, this in turn would mean that the level of total claims covered in the HCCP would in theory be lower as a result.
- **Exclusion:** Very high-cost claims, by their very nature, are unpredictable and random in nature. The introduction of a cap is unlikely to mitigate these very large claims emerging. It could also potentially encourage adverse behaviour which may impact on the level of treatment provided to a patient.

### 7.1 Impact of a HCCP Cap – Proposed HCCP calibration

Based on the proposed quota share of 40% we are of the view that insurers would actively be monitoring and managing their largest claims, as they would have considerable exposure to the total claim amount regardless of whether a cap is applied or not. Thus, we are of the view that a cap would have little influence on the total claims experience emerging.

Based on the undeveloped data provided by the insurers (inflated to allow for expected claims inflation when the HCCP would apply), we can see in the table below that very large claims are random in nature and that the majority of claims that the HCCP would provide compensation for are below €100k (80.34% of inflated claims by count and 66.14% of inflated claims by amount in respect of contracts entered into in 2018).

Threshold	Count	Percentage of Total Count	Claims	Percentage of Total Claims	Average Claim
€50k	5,472	100.00%	443,844	100.00%	81,112
€100k	1,076	19.66%	150,292	33.86%	139,676
€150k	304	5.56%	58,311	13.14%	191,811
€200k	84	1.54%	21,207	4.78%	252,468
€250k	29	0.53%	9,213	2.08%	317,685
€300k	11	0.20%	4,316	0.97%	392,331
€350k	6	0.11%	2,710	0.61%	451,747
€400k	3	0.05%	1,556	0.35%	518,508
€450k	3	0.05%	1,556	0.35%	518,508
€500k	2	0.04%	1,075	0.24%	537,289

Due to the low number of claims involved, we expect that there could be considerable volatility in respect of the very largest claims. However, we are of the view that this is unlikely to result in a material exposure to the REF. For example, if the number of claims in excess of €500k tripled to 6 and these claims averaged €1m each, the additional exposure to the REF would be €0.8m (= 4 claims \* €500k \* 40%). This is unlikely to cause a liquidity issue for the REF or materially impact the overall level of claims in the market. This suggests that a cap would not be warranted, and that the exclusion of a cap would not be expected to lead to a significant increase in claims experience in the market.

Additionally, the inclusion of a cap may also conflict with the principal objective of the Act which is to set RE credits such that *“the burden of the costs of health services be shared by insured persons by providing for a cost subsidy between the more healthy and the less healthy, including between the young and the old, and, without prejudice to the generality of that objective, in particular that the less healthy, including the old, have access to health insurance cover by means of risk equalisation credits”*.

## 7.2 Impact of a HCCP Cap – Higher Quota Share

There are a number of compelling arguments for the inclusion of a cap within the HCCP. If the level of quota share was to increase, the insurers could be less incentivised to manage their high cost claims as they would receive an increased level of compensation from the REF. Thus, if the quota share was to increase it is likely that a cap would be required to encourage efficient claims management to help stop claims costs from spiralling out of control.

## 7.3 Impact of a HCCP Cap – Inflationary Considerations

Based on the proposed level of quota share of 40%, we are of the view that the REF is more exposed to the level of claims inflation as this is likely to result in more claims being eligible for payments from the HCCP. We note that as claims inflation increases so does the number of eligible claims and the level of HCCP payments expected from the REF. Set out below are the expected number of additional lives and expected additional payments from the REF for different levels of increase in claims inflation. The figures are based on developed claims data in respect of contracts entered into in 2018.

Inflation	Current Calibration (4%)	Current Calibration +2%	Current Calibration +4%	Current Calibration +6%
Number of Claims	5,472	+720	+1,522	+2,315
HCCP	€93.4*	+€13.3m	+€28.3m	+€44.9m

\* Details of the calculation approach is set out in Appendix 1

A cap on the HCCP payments is unlikely to be effective in such a scenario, and the HCCP pot would be expected to grow over time due to claims inflation unless the claims threshold is also subject to indexation to allow for the effects of claims inflation. Including an allowance for claims inflation in the threshold is likely to be more effective than the inclusion of a cap as it would mitigate the risk somewhat (as the figures presented above would be dampened somewhat), although it is worth noting that the REF would still be exposed to unanticipated inflation (or deflation) which would manifest itself through deficits (or surpluses) in the following year’s RES calibration.

## 7.4 Pros and Cons of HCCP Cap and Indexation of Threshold

Approach	Pros	Cons
Inclusion of Cap	<ul style="list-style-type: none"> <li>▪ Would help to reduce the potential for very large claims emerging as the insurers would not receive compensation as a result of claims that exceeded the cap.</li> <li>▪ Insurers would be more incentivised to manage and monitor the claims cost such that claims would not exceed a certain level.</li> <li>▪ Due to the low number of claims involved, there could be considerable volatility in respect of the very largest claims. The inclusion of a cap reduces exposure to the REF.</li> <li>▪ If the level of quota share was to increase, the insurers would be less incentivised to manage their high cost claims.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Insurers would actively be monitoring and managing their largest claims, as they would have considerable exposure to the total claim amount regardless of whether a cap applied or not. Thus, there is an argument that a cap would have little influence on the total claims experience.</li> <li>▪ The exclusion of a cap is unlikely to result in a material exposure to the REF.</li> <li>▪ The above suggests that a cap would not be warranted, and that the exclusion of a cap would not be expected to lead to a significant increase in claims experience in the market.</li> <li>▪ The inclusion of a cap may also conflict with the principal objective of the Act as less resources are allocated to those that need them the most.</li> </ul>
Indexation of Threshold	<ul style="list-style-type: none"> <li>▪ General claims inflation is likely to lead to a more material exposure. Potential for HCCP pot to increase without allowing for expected claims inflation.</li> <li>▪ Reduced the risk of a deficit arising in the REF.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Judgement involved as to the level of assumed claims inflation. Underestimation could lead to a potential deficit emerging in the REF.</li> <li>▪ Indexing is a measure to try and maintain the proportion of RE credits distributed through HCCP. If the aim is to increase the level of distribution through health credits, the level of indexation of the threshold would need to be tempered.</li> </ul>

## 7.5 Conclusion

Based on the proposed level of quota share of 40%, we are of the view that the REF is more exposed to the level of claims inflation. Rather than include a cap, we recommend that the claims threshold be indexed to allow for expected claims inflation.

We recommend that the inclusion of a cap be considered if the level of quota share was to increase.

## 8. Targeted Health Credit Distribution

The principal objective of the Act is to set RE credits such that *“the burden of the costs of health services be shared by insured persons by providing for a cost subsidy between the more healthy and the less healthy, including between the young and the old, and, without prejudice to the generality of that objective, in particular that the less healthy, including the old, have access to health insurance cover by means of risk equalisation credits”*.

Currently, the RES is calibrated with the intention that approximately 75% of RE credits are distributed as ARHC and approximately 25% as HUC. This section considers whether what an appropriate level of RE credits distributed through health credits should be in light of the principal objective of the Act.

### 8.1 Impact of Increasing Levels of HCCP Distribution on the Market

While older lives have higher claims costs on average, the analysis performed in Section 4.1 provides evidence that age is not always the key determinate of the level of claim likely to be incurred. Allowing for an increased proportion of RE credits distributed based on health status would allow for a more targeted distribution of RE credits to the less healthy regardless of age, gender and level of cover. As such, we are of the view that RE credits allocated in respect of health status should become an increasing proportion of the RE credits distributed over time.

However, we need to be cognisant of the impact of such a decision on the market. We recognise the importance of ARHC as a tool to help meet the principal objectives of the RES. Any material changes to ARHC could potentially have a significant impact on the net claims cost of older lives which in turn could impact on the price of insurance for older lives, the stability of the market and community rating itself.

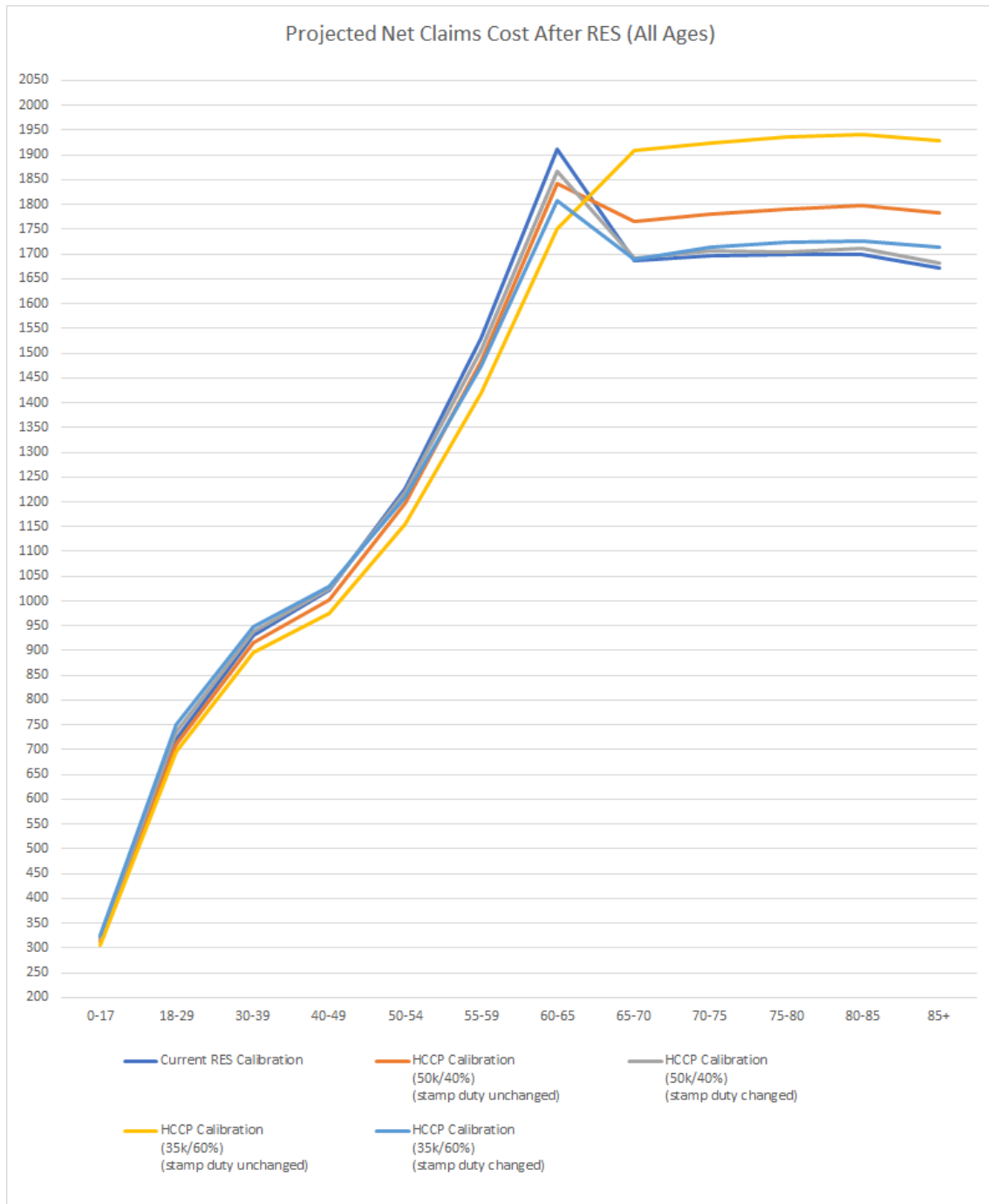
- An increase in the HCCP pot is likely to manifest itself in increased net claims cost for older lives all else being equal. This is because the claims cost ceiling increases in order to maintain stamp duty which reduces ARHC.
- Equally, changing stamp duty (to maintain the claims cost ceiling) is likely to lead to considerable increases in the level of stamp duty required, which in turn could equally disrupt the market and lead to potential market exits at younger ages.

Given the current level of RE credits distributed based on health status of 25%, and the considerations outlined above, we suggest that the Authority considers an upper limit on the amount of RE credits expected to be distributed in any calibration year through health-related credits over the lifetime of the next RES.

We have considered below how such an allocation might be achieved through changes to the HCCP calibration, although note that this could be achieved either through increased HCCP or HUC or as a combination of both. The calibrations outlined below are simply for illustrative purposes to result in approximately 50% of RE credits distributed through health-related credits, as different calibrations of HCCP in terms of excess and quota share could be constructed to give similar results (the impact of different calibrations are set out in Appendix 2). Likewise, changes to HUC in parallel could give similar results. Thus, the scenarios below should not be interpreted to represent a view as to what the calibration should look like towards the end of the lifetime of the RES, as alternative options for distributing RE credits based on health status could equally be chosen.

	Current RES Calibration	HCCP Calibration (50k/40%) (maintain stamp duty)	HCCP Calibration (50k/40%) (change stamp duty)	€35k/60% HCCP Calibration (maintain stamp duty)	€35k/60% HCCP Calibration (change stamp duty)
<b>Stamp Duty</b>					
Advanced Contracts	449	449	474	449	507
Claims Ceiling Cost	133.5%	140.3%	133.5%	150.7%	133.5%
<b>Projected Net Claims Cost After RES by Age Group</b>					
0-17	320	314	321	307	325
18-29	721	712	735	696	751
30-39	930	916	939	896	949
40-49	1,023	1,003	1,025	975	1,029
50-54	1,227	1,197	1,220	1,156	1,210
55-59	1,531	1,483	1,506	1,420	1,475
60-64	1,910	1,842	1,866	1,752	1,807
65-69	1,688	1,765	1,691	1,910	1,688
70-74	1,697	1,780	1,706	1,925	1,713
75-79	1,698	1,790	1,704	1,937	1,723
80-84	1,700	1,798	1,710	1,941	1,727
85+	1,672	1,782	1,683	1,928	1,713
<b>Total Projected RES Flows</b>					
Stamp Duty	764m	764m	806m	764m	862m
ARHC	606m (75%)	515m (64%)	554m (65%)	387m (48%)	490m (54%)
HUC	200m (25%)	200m (25%)	200m (24%)	200m (25%)	200m (22%)
HCCP	0m (0%)	93m (12%)	93m (11%)	215m (27%)	215m (24%)
<b>Effectiveness</b>					
All Ages	30.3%	47.7%	48.0%	60.9%	61.7%
Over 65	31.6%	50.6%	51.0%	63.5%	64.5%
<b>Net Financial Impact</b>					
Irish Life Health					
Laya Healthcare					
Vhi Healthcare					
Total NFI	43m	43m	43m	43m	43m

The approach to setting stamp duties is expected to have an impact on the net claims cost by age (particularly for older lives), regardless of the HCCP calibration chosen. This can be seen in the graph below (which is a graphical representation of the projected net claims cost after RES as set out in the above table).



While increasing the allocation of RE credits being distributed based on health status is a desired objective, the development of the HCCP, claims experience, insurer behaviour and market participation would all need to be closely monitored as the HCCP calibration is changed to ensure that there were no unintended consequences. Thus, any changes made to the HCCP calibration would need to be done on a phased basis and carefully managed over time.

We consider a HCCP calibration with an Excess of €50,000 and a Quota Share of 40% to be a reasonable starting point for the introduction of the HCCP as it is large enough to lead to a more targeted distribution of RE credits (11.5% of total RE credits allocated as set out in the table above) but not so large that it is likely to materially disrupt the market.

We had previously noted in Section 7 that indexing of the threshold could be used as a measure to try and maintain the proportion of RE credits distributed through HCCP. If the aim is to increase the level of distribution through health credits, the level of indexation of the threshold would need to be tempered (or indeed the threshold reduced) or the level of quota share increased.

## 8.2 Pros and Cons of Different Levels of HCCP Distribution

Approach	Pros	Cons
Increase Quota Share	<ul style="list-style-type: none"> <li>▪ As quota share increases the net claims cost for younger lives reduces as they are in receipt of more HCCP credits.</li> <li>▪ Net claims cost is highest for the 60-64 age group. Increased levels of HCCP credits reduce the net costs for this group.</li> <li>▪ Higher allocation of HCCP so more targeted allocation of resources.</li> <li>▪ Increased level of effectiveness as quota share increases.</li> </ul>	<ul style="list-style-type: none"> <li>▪ As quota share increases the net claims cost for older lives increases as the reduction in ARHC exceeds the increase in HCCP credits.</li> <li>▪ Could lead to affordability issues for older lives.</li> <li>▪ Increasing the quota share may lead to insurers not caring as much about claims control which may lead to an increase in the cost of insurance.</li> </ul>
Decrease Quota Share	<ul style="list-style-type: none"> <li>▪ Opposite to increase quota share</li> </ul>	<ul style="list-style-type: none"> <li>▪ Opposite to increase quota share</li> </ul>
Decrease Excess	<ul style="list-style-type: none"> <li>▪ Same effects as per increasing the quota share</li> </ul>	<ul style="list-style-type: none"> <li>▪ Same effects as per increasing the quota share, however decreasing the excess is much less of an issue than increasing the quota share in terms of claims control due to the nature of the high cost claims.</li> <li>▪</li> </ul>
Increase Excess	<ul style="list-style-type: none"> <li>▪ Opposite to decrease excess</li> </ul>	<ul style="list-style-type: none"> <li>▪ Opposite to decrease excess</li> </ul>
Change Stamp Duty	<ul style="list-style-type: none"> <li>▪ Little or no impact on net claims cost across the market by age.</li> <li>▪ Results in targeted allocation to larger pool of riskier lives so resources are allocated based more on health status.</li> </ul>	<ul style="list-style-type: none"> <li>▪ As HCCP pot increases so does stamp duty. Could impact affordability for younger lives although small impact on non-advanced contracts given 35% allocation.</li> </ul>

## 8.3 Conclusion

We consider a HCCP calibration with an Excess of €50,000 and a Quota Share of 40% to be a reasonable starting point for the introduction of the HCCP as it is large enough to lead to a more targeted distribution of RE credits (an additional 11.5% of total RE credits allocated towards health status) but not so large that it is likely to materially disrupt the market, although we note that alternative calibrations would also be equally reasonable as starting points. This conclusion is consistent with the recommendation set out in the document “Risk Equalisation Scheme Effectiveness Impact: Assessment of the Introduction of a HCCP and changes to other measures” which provides further detailed analysis supporting the recommendation.

Any changes made to the HCCP calibration would need to be done on a phased basis and carefully managed over time. We suggest that the Authority considers an upper limit on the amount of RE credits expected to be distributed in any calibration year through health-related credits over the lifetime of the next RES.

## 9. Approach to setting Stamp Duty

The current RES calibration distributes RE credits through ARHC and HUC, such that *“the burden of the costs of health services be shared by insured persons by providing for a cost subsidy between the more healthy and the less healthy, including between the young and the old, and, without prejudice to the generality of that objective, in particular that the less healthy, including the old, have access to health insurance cover by means of risk equalisation credits”*

When setting RE credits for the current calibration, the Authority noted the following in the report *“Report of the Authority to the Minister for Health on an evaluation and analysis of returns from 1 July 2019 to 30 June 2020, including advice on Risk Equalisation Credits”*

*“The Authority is of the opinion that there is a balance to be struck between sustaining community rating by keeping health insurance affordable for older less healthy consumers and maintaining the sustainability of the market by keeping younger healthier consumers in the market. While the claims cost ceiling has increased slightly, the Authority is of the opinion that the credits and stamp duties that it is proposing strike a balance between these conflicting objectives, noting that the expected contraction of the market is expected to have a more pronounced effect on affordability than the calibration of the claims cost ceiling.”*

The conflicting objectives remain, and the remainder of this section considers the impact on the proposed calibration of maintaining or changing stamp duty.

### 9.1 Historical Levels of Stamp Duty

Claims costs generally increase due to inflationary effects, such as medical inflation and ageing of the insured population. To keep pace with the increased claims, the amount of RE credits distributed through the RES should keep pace with the level of claims incurred. From a stamp duty perspective this means that the level of stamp duty should keep pace with the average level of claims cost expected to be incurred in the market. We have outlined below how this has evolved over the lifetime of the current RES.

Calibration Period	01/04/2017 – 31/03/2018	01/04/2018 – 31/03/2019	01/04/2019 – 31/03/2020	01/04/2020 – 31/03/2021	01/04/2021 – 31/03/2022
Projected Surplus	10m	30m	28m	30m	43m
Projected Returned Benefits	2,108m	2,056m	2,066m	2,183m	2,240m
Projected RE Credits	729m	768m	780m	830m	805m
Projected Stamp Duty	719m	738m	752m	800m	762m
Projected Membership	2,021,404	2,057,304	2,138,576	2,223,907	2,103,982
Stamp Duty – Advanced Contracts (A)	444	444	444	449	449
Average Returned Benefit – Advanced (B)	1,288	1236	1210	1214	1307
Ratio (A/B)	34.5%	35.9%	36.7%	37.0%	34.4%



For the current RES calibration i.e. in respect of contracts entered into in the period 1 April 2021 – 31 March 2022, the level of stamp duty as a percentage of the average returned benefit reduced reflecting the Authority's view of the likely impact of the COVID-19 pandemic. When setting stamp duty and credit levels for the current RES calibration (which are considered when setting stamp duty in general for any RES calibration), the Authority considered a number of other factors such as:

- The projected surplus available in the REF. For the current RES calibration, the surplus reflects a reduction in hospitalisation rates due to COVID-19 for 2020.
- The expected economic environment and the impact the level of stamp duty is expected to have on the insured population, noting that the level of stamp duty has an impact on the overall cost of insurance. When setting the level of stamp duty the Authority was cognisant of the likely economic fallout that COVID-19 would have on membership size and maintained the level of stamp duty at the level in the prior year to avoid a further reduction in membership levels, which would have further contributed to an increase in the average net claims costs across the market.
- The differential in net claims costs between older and younger lives, which is calibrated through the claims cost ceiling, and which serves to reduce the costs of insurance for older lives (as age is assumed to be an indicator of risk) in line with the principal aims of the Act.
- The interplay between ARHC and HUC. For the current RES calibration, the Authority increased the level of HUC payments to place an increased level of allocation of RE credits to health status. This is consistent with the aims of introducing a HCCP, whereby the cost of claims is more influenced by health status than by age as outlined in Section 4.

## 9.2 Net Claims Cost

### 9.2.1 Current Calibration

The net claims cost is the claims cost an insurer incurs in respect of an insured life after payment of stamp duty and receipt of RE credits. For an insurer the average net claims cost for a given age, gender and level of cover is currently influenced by the following:

- The average claims cost which tends to increase with age as on average older lives incur higher costs than younger lives;
- **Reduction:** ARHC which serves to significantly reduce the net claims cost for those over 65 (who typically have larger claims). The level of the ARHC is calculated to be the amount necessary so that the net claims cost for age groups 65 and over does not exceed the claims cost ceiling of 133.5% of the average net claims cost across all lives – a more detailed description is set out in Section 6.1;
- **Reduction:** HUC reduces the net claims cost for less healthy people of all ages through compensatory payments for members who experience episodes of hospitalisation and acts as a proxy for health status; and
- **Increase:** Stamp duty increases the net claims cost for all lives, Stamp duty is collected from insurers to fund the distribution of RE credits. The level of ARHC (influenced by the claims cost ceiling) is a key driver of the level of stamp duty.

### 9.2.2 Impact of Introduction of HCCP

Age and hospitalisation are not the only factors which influence claim amounts and members can experience high-cost claims regardless of age. In fact, the cost of high claims that the HCCP will provide credits for does not appear to materially differ by age, although the frequency of such claims is more frequent in older lives (see Section 4). The aim of the introduction of the HCCP is to allow for compensatory payments to be made to insurers in respect of members with high-cost claims, regardless of age, gender or level of cover.

If the intent of the introduction of the HCCP is not to increase the level of distribution of RE credits, but more to allow for the more targeted distribution of RE credits to sicker lives with very high claims, then in theory the introduction of the HCCP should not influence the level of Stamp Duty and either ARHC or HUC would need to be reduced to accommodate this.

- **ARHC:** An increase in the claims cost ceiling would reduce the level of ARHC. As the HCCP would be distributed to all lives (while ARHC is distributed to lives age 65 and older) the net claims cost for older lives would increase which could make health insurance less affordable for older less healthy consumers;
- **HUC:** The impact on the net claims cost by age would be dependent on the relationship between the frequency of hospitalisation (HUC payments) and the level of high cost claims as a function of age (HCCP payments). This is less clearly defined as both HUC and HCCP are designed to target RE credits based on health status.

If the intent of the introduction of the HCCP is to increase the level of distribution of RE credits, then this would result in an increase in the level of stamp duty payable.

Both options are viable but lead to the conflicting objectives in terms of affordability and market sustainability as noted above.

## 9.3 Pros and Cons of Stamp Duty Decision

Set out below are a list of pros and cons in relation to maintaining or changing stamp duty with the inclusion of a HCCP.

Approach	Pros	Cons
Maintain Stamp Duty	<ul style="list-style-type: none"> <li>▪ Stamp duty unchanged.</li> <li>▪ Reduction in net claims costs for younger lives as they are in receipt of HCCP credits.</li> <li>▪ Significant increase in the level of effectiveness of 17.4% due to the inclusion of the HCCP (see Section 11 – Projected Effectiveness).</li> <li>▪ Increase in allocation of resources towards lives with largest claims (see Section 11 – Projected Net Financial Impact).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Results in an increase in net claims cost for ages in receipt of ARHC as allocation to ARHC reduced and a portion of the HCCP credits are allocated to younger lives.</li> <li>▪ Lower allocation of resources towards ARHC which impacts on affordability for older lives.</li> </ul>
Change Stamp Duty	<ul style="list-style-type: none"> <li>▪ Maintains the claims cost ceiling which helps with market segmentation issues.</li> <li>▪ Further increase in the level of effectiveness although increase limited to 0.3%.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Stamp duty increases is other elements of the RES calibration are unchanged. Limited to increase of €9 in stamp duty for non-advanced contracts (i.e. 35% of the stamp duty change for advanced contracts) based on €50k / 40% calibration.</li> </ul>

Approach	Pros	Cons
		<ul style="list-style-type: none"> <li>▪ Increase in net claims costs for younger lives although impact softened due to HCCP allocation.</li> <li>▪ Additional cost could be viewed negatively by the market and capacity to absorb dependent on economic conditions prevailing.</li> </ul>

## 9.4 Conclusion

In setting Stamp Duty for the current RES calibration, the Authority struck a balance between sustaining community rating by keeping health insurance affordable for older less healthy consumers and maintaining the sustainability of the market by keeping younger healthier consumers in the market.

The conflicting objectives remain with the introduction of a HCCP, and we recommend that the Authority be cognisant of these when setting Stamp Duty, noting there are arguments for and against changing or maintaining stamp duty, or for finding an acceptable middle ground. The impact of changing or maintaining stamp duty on the proposed calibration are set out in Section 11.

## 10. Proposed Calibration

Sets out below are details of the proposed calibration (which is an update to the recommendation previously made by the Authority as noted in Section 1.1) based on the observations and recommendations outlined in Sections 3 – 9.

### Proposed Calibration

*The principal aims of the Authority in terms of avoiding risk selection and market segmentation are key in terms of maintaining market stability.*

*There is a balance between an increased effectiveness percentage and the levers available to calibrate the RES. Effectiveness could be increased further by increasing the HCCP pool but this either requires changes to stamp duty or net claims costs which could impact the market in terms of stability.*

*We recommend therefore that the proposed RES should have sufficient flexibility to allow for changes in calibration of all the levers which should be considered each year as credits and stamp duties are set, and as effectiveness is reviewed and monitored. We further recommend that any changes are done on a phased basis to avoid any shocks to the system.*

*Based on the analysis performed in this report, we are of the opinion that the most appropriate approach to the introduction of a HCCP would include the following:*

<b>Claimant Excess</b>	<b>€50,000 Threshold plus (Total ARHC for contract year) plus (HUC received in claim quarter and previous 3 quarters). Indexation of Claimant Excess in line with expected claims inflation.</b>
<b>Quota Share</b>	<b>40% distribution of Max(Total Claim – Claimant Excess, 0) as HCCP credits</b>
<b>Stamp Duty</b>	<b>The Authority should be cognisant of the conflicting objectives when setting its Stamp Duty recommendation in respect of new contracts entered into in the period 1 April 2022 – 31 March 2023.</b>
<b>Cross Over Periods</b>	<b>High cost claims to be assessed on a rolling 4 quarter period.</b>
<b>Claims Definitions</b>	<b>Returned Benefits with consideration given to restrictions in relation to the cost of certain drugs.</b>
<b>HCCP Cap</b>	<b>None initially. Allowance for the inclusion of a cap to be incorporated as experience emerges over time or as quota share increases.</b>

*For the avoidance of doubt, the HCCP will provide compensation in respect of cumulative claims costs that exceed the claimant excess, and as such may be representative of multiple claims that in isolation do not meet the definition of a high cost claim on a standalone basis.*

## 11. Impact of Proposed Calibration

Set out below are details of the expected impact of the inclusion of the proposed HCCP calibration against the current RES calibration. This is to show the impact had the HCCP been included in the RES calibration for health insurance policies that are renewed or entered into on or after 1 April 2021 but before 31 March 2022.

### 11.1 Projected Net Financial Impact for a 12 month period based on RE credits and stamp duty applying for policies commencing in the period 1 April 2021 to 31 March 2022

€m's	Irish Life Health	Laya Healthcare	VHI Healthcare	Total
<b>Current RES Calibration</b>				
<b>Total</b>				<b>43</b>
Age Related Health Credits				605
Hospital Bed Utilisation Credit				200
High Cost Claims Pool				0
Stamp duty				(763)
<b>Proposed HCCP Calibration – (Maintain Stamp Duty, Change Claims Cost Ceiling)</b>				
<b>Total</b>				<b>43</b>
Age Related Health Credits				515
Hospital Bed Utilisation Credit				200
High Cost Claims Pool				93
Stamp duty				(763)
<b>Impact of Introduction of proposed HCCP calibration (Maintain Stamp Duty, Change Claims Cost Ceiling)</b>				
<b>Total</b>				<b>0</b>
Age Related Health Credits				(93)
Hospital Bed Utilisation Credit				0
High Cost Claims Pool				93
Stamp duty				0
<b>Proposed HCCP Calibration – (Change Stamp Duty, Maintain Claims Cost Ceiling)</b>				
<b>Total</b>				<b>43</b>
Age Related Health Credits				554
Hospital Bed Utilisation Credit				200
High Cost Claims Pool				93
Stamp duty				(806)
<b>Impact of Introduction of proposed HCCP calibration (Change Stamp Duty, Maintain Claims Cost Ceiling)</b>				
<b>Total</b>				<b>0</b>
Age Related Health Credits				(51)
Hospital Bed Utilisation Credit				0
High Cost Claims Pool				93
Stamp duty				(43)

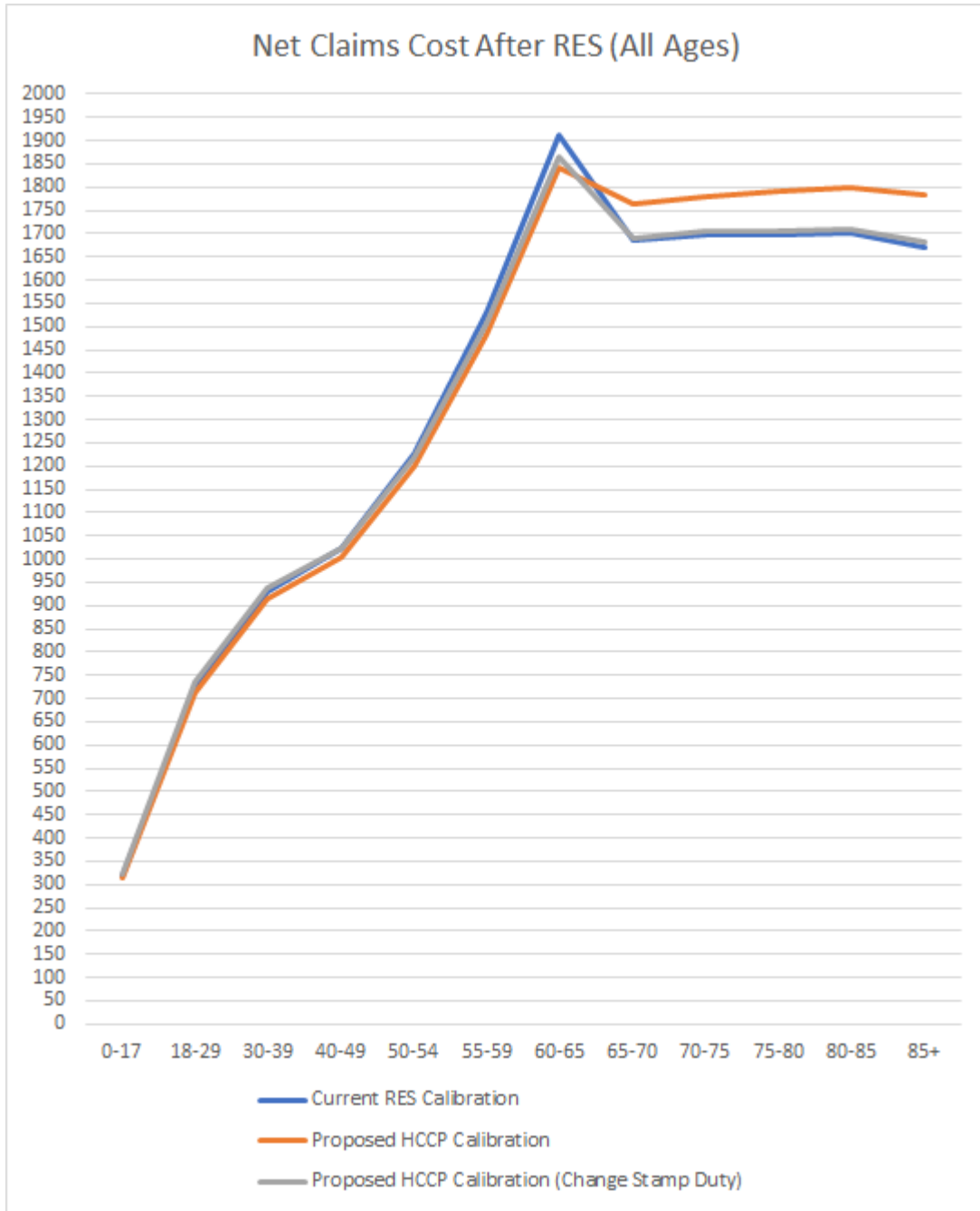
As noted in Section 5, we are of the view that an assessment of the high cost claim over a rolling 4 quarter period would be more equitable and would ensure that high cost claims which span adjacent contract years would be treated consistently. The estimated impact of this approach is to increase the HCCP pool by c. €40m. It should be noted that in the first year the HCCP is introduced that these additional claims would not manifest themselves as they would be in respect of the following year's coverage period. This is because, upon introduction, the HCCP will not perform a retrospective analysis of the previous 4 quarters until a full 4 quarters has elapsed. Thus, in the first year of calibration of the HCCP an allowance for such claims will not be made and the figures presented above are representative of a longer-term view of the impact of inclusion of the HCCP in the RES.

Additionally, it is worth noting that the €40m estimated impact above is based on the additional HCCP costs incurred for full adjacent contract periods based on 12 months exposure in each period. This has been done as the data provided to the Authority was provided on a paid basis. We have discussed this with the Authority and have suggested that the historic incurred claims data be sourced from the insurers on an incurred basis, which will allow for a more refined estimate to be performed. Based on the approach used, and the data provided to us, we would consider the €40m to be larger than the estimate we would expect to obtain using a more refined approach, although as noted in Section 3.1 as the process around data is not fully embedded in the insurers' processes it is possible that further refinements may be made which may impact on the results of the analysis prepared.

## 11.2 Projected Net Claims Cost

Set out in the table below are details of the net claims cost (and impact) by age of allowing for the proposed HCCP calibration. The figures shown set out the impact of maintaining stamp duty (i.e. allowing the claims cost ceiling to change which impacts ARHC) and the impact of changing stamp duty (i.e. maintaining the claims cost ceiling). A graphical representation of the net claims cost by age is included in the graph that follows.

Net Claims Cost After RES	Current RES Calibration	Proposed HCCP Calibration (Maintain Stamp Duty)	Impact of Introduction of proposed HCCP calibration (Maintain Stamp Duty)	Proposed HCCP Calibration (Change Stamp Duty)	Impact of Introduction of proposed HCCP calibration (Change Stamp Duty)
0-17	320	314	(6)	321	1
18-29	721	712	(9)	735	14
30-39	930	916	(14)	939	9
40-49	1,023	1,003	(20)	1,025	2
50-54	1,227	1,197	(30)	1,220	(7)
55-59	1,531	1,483	(48)	1,506	(25)
60-64	1,910	1,842	(68)	1,866	(44)
65-69	1,688	1,765	77	1,691	3
70-74	1,697	1,780	83	1,706	9
75-79	1,698	1,790	92	1,704	6
80-84	1,700	1,798	98	1,710	10
85+	1,672	1,782	110	1,683	9



### 11.3 Projected Age-Related Health Credits

Set out in the table below are details of the ARHC (and impact) by age of allowing for the proposed HCCP calibration. The figures shown set out the impact of maintaining stamp duty (i.e. allowing the claims cost ceiling to change which impacts ARHC) and the impact of changing stamp duty (i.e. maintaining the claims cost ceiling) which also impacts the level of ARHC due to second order effects.

Age	Male Advanced	Non-	Female Advanced	Non-	Male Advanced	Female Advanced
<b>Current RES Calibration</b>						
0-64	€0		€0		€0	€0
65-69	€350		€200		€1,025	€550
70-74	€550		€400		€1,675	€1,150
75-79	€825		€625		€2,500	€1,800
80-84	€1,025		€700		€3,150	€2,250
85+	€1,250		€825		€3,750	€2,550
<b>HCCP – Maintain Stamp Duty €50,000 Excess + Credits Received, 40% Quota Share</b>						
0-64	€0		€0		€0	€0
65-69	€275		€125		€825	€375
70-74	€450		€325		€1,425	€950
75-79	€725		€525		€2,200	€1,550
80-84	€900		€600		€2,800	€1,950
85+	€1,100		€725		€3,325	€2,250
<b>Impact of Introduction of proposed HCCP calibration (Maintain Stamp Duty)</b>						
0-64	€0		€0		€0	€0
65-69	(€75)		(€75)		(€200)	(€175)
70-74	(€100)		(€75)		(€250)	(€200)
75-79	(€100)		(€100)		(€300)	(€250)
80-84	(€125)		(€100)		(€350)	(€300)
85+	(€150)		(€100)		(€425)	(€300)
<b>HCCP – Change Stamp Duty €50,000 Excess + Credits Received, 40% Quota Share</b>						
0-64	€0		€0		€0	€0
65-69	€325		€175		€925	€475
70-74	€500		€350		€1,525	€1,050
75-79	€775		€550		€2,325	€1,650
80-84	€925		€625		€2,900	€2,075
85+	€1,125		€775		€3,450	€2,375
<b>Impact of Introduction of proposed HCCP calibration (Change Stamp Duty)</b>						
0-64	€0		€0		€0	€0
65-69	(€25)		(€25)		(€100)	(€75)
70-74	(€50)		(€50)		(€150)	(€100)
75-79	(€50)		(€75)		(€175)	(€150)
80-84	(€100)		(€75)		(€250)	(€175)
85+	(€125)		(€50)		(€300)	(€175)

As noted above changing stamp duty (i.e. maintaining the claims cost ceiling) also impacts the level of ARHC due to second order effects. This is because the stamp duty collected to fund the HCCP is redistributed through HCCP payments to all lives that experience a high-cost claim. Overall, the net claims cost across the market as a whole is unaffected as the additional stamp duty collected is redistributed as HCCP credits. However, as some of the HCCP is distributed to older lives the level of ARHC reduces. This is because the level of the ARHC is calculated to be the amount necessary so that the net claims cost for age groups 65 and over does not exceed the claims cost ceiling



of 133.5% of the average net claims cost across all lives. As these lives are expected to be in receipt of HCCP credits, the expectation is that less ARHC will be required so that the net claims cost for these lives does not exceed the claims cost ceiling of 133.5% of the average net claims cost across all lives.

## 11.4 Projected Effectiveness

	Over Age 65	All Ages
Current RES Calibration	31.6%	30.3%
Proposed HCCP Calibration (Maintain Stamp Duty)	50.6%	47.7%
Impact of Introduction of proposed HCCP calibration (Maintain Stamp Duty)	+19.0%	+17.4%
Proposed HCCP Calibration (Change Stamp Duty)	51.0%	48.0%
Impact of Introduction of proposed HCCP calibration (Change Stamp Duty)	+19.4%	+17.7%

Impact of Proposed Calibration on Effectiveness by Age					
Age Group	Total Claims Before RES	Avg. Claim	Total Claims After RES	Avg. Claim	Effectiveness
Current RES	€m	€	€m	€	
0-17	92	196	150	320	-24%
18-29	80	331	175	721	2%
30-39	148	568	243	930	15%
40-49	219	659	340	1,023	-5%
50-54	129	874	181	1,227	1%
55-59	172	1,196	221	1,531	7%
60-64	213	1,605	253	1,910	14%
65-70	258	2,179	200	1,688	33%
70-74	299	2,865	177	1,697	33%
75-80	270	3,681	124	1,698	34%
80-84	201	4,315	79	1,700	37%
85+	160	4,791	56	1,672	34%
Proposed HCCP Calibration (Maintain Stamp Duty)					
0-17	92	196	147	314	-18%
18-29	80	331	173	712	20%
30-39	148	568	239	916	24%
40-49	219	659	333	1,003	7%
50-54	129	874	176	1,197	18%
55-59	172	1,196	214	1,483	23%
60-64	213	1,605	244	1,842	32%
65-70	258	2,179	209	1,765	47%
70-74	299	2,865	186	1,780	49%
75-80	270	3,681	131	1,790	58%
80-84	201	4,315	84	1,798	58%
85+	160	4,791	59	1,782	37%
Proposed HCCP Calibration (Change Stamp Duty)					
0-17	92	196	150	321	-18%
18-29	80	331	178	735	19%
30-39	148	568	245	939	24%
40-49	219	659	341	1,025	6%
50-54	129	874	180	1,220	17%
55-59	172	1,196	217	1,506	22%
60-64	213	1,605	247	1,866	32%
65-70	258	2,179	200	1,691	48%
70-74	299	2,865	178	1,706	50%
75-80	270	3,681	125	1,704	58%
80-84	201	4,315	80	1,710	58%
85+	160	4,791	56	1,683	37%

## 12. Administrative Considerations

### 12.1 Information to be provided as part of the Information Returns

If the HCCP is implemented, the Authority will need to identify the scope of data required for the HCCP, both in terms of granularity and the number of years historic data to collect from insurers.

We suggest that the Authority collect data from insurers in relation to their past claims' history for insured lives with high-cost claims on a bi-annual basis with their information returns. We suggest that this data be in relation to claims above €10,000, which would enable sufficient data to be collected for calibration purposes.

We suggest that the information returns contain the following information as a minimum:

- Data split into contract periods
  - Member No. / Identifier
  - Sex
  - Age at contract inception
  - Product Level
  - Advanced/ Non-Advanced flag
- The total claims paid for an insured life for each contract period split by year of payment of the claim.
- All claim payments are included i.e. it includes outpatient claims
- Returned Benefit claim payment breakdown by public, private, consultant
- Total Cell Claim Value split by month
- Total number of overnight stays split by month

For each insured life with high cost claims the required information should be the total claim amount paid by the insurer for that member. If the total claim amount paid to end of the period is less than €10,000, then no data should be included in respect of that insured life. For the avoidance of doubt, we have suggested that the HCCP will provide compensation in respect of cumulative claims costs that exceed the high cost claims threshold, and as such may be representative of multiple claims that in isolation do not meet the definition of a high cost claim on a standalone basis.

Consistent with the information returns we suggest that the information provided to the Authority to calibrate the HCCP should be accompanied by an independent accountant's report stating that the returns are in line with the regulations.

### 12.2 Data for administration/payments

In order to receive payment for their high cost claims, we suggest that insurers will need to populate the below template for incurred paid claims on a quarterly basis and send it to the Authority. The corresponding information in respect of the previous 3 quarters should also be provided to enable the Authority to identify if any errors / adjustments to incurred paid claims previously notified to the Authority have arisen, although we would expect that the insurers should highlight and report these to the Authority. The information from the previous three quarters is required to allow for HCCP to be paid based on a rolling 12 month period. For the avoidance of doubt, the schedule of incurred

paid claims to be provided by insurers should be based on the date of the provision of health services and not based on the timing of the payment of the claim, although the claim payments should only be included where claims are paid and settled.

<b>Member Details</b>	
Member Number	
Contract Period	
Age attained at the start of the policy year	
Gender	
Product at the start of the policy year	
Level 1,2 or 3+	
Advanced "Y" or "N"	
<b>Quarterly Claim Details (Current quarter)</b>	
Period of Claim (Quarter / Month)	
Total Claim	
Total Returned Benefit	
Annual Risk Equalisation Premium Credit	
HUC credit received	
<b>Quarterly Claim Details (1st prior quarter)</b>	
Period of Claim (Quarter / Month)	
Total Claim	
Total Returned Benefit	
Annual Risk Equalisation Premium Credit	
HUC credit received	
HCCP Credit Received	
<b>Quarterly Claim Details (2nd prior quarter)</b>	
Period of Claim (Quarter / Month)	
Total Claim	
Total Returned Benefit	
Annual Risk Equalisation Premium Credit	
HUC credit received	
HCCP Credit Received	
<b>Quarterly Claim Details (3rd prior quarter)</b>	
Period of Claim (Quarter / Month)	
Total Claim	
Total Returned Benefit	
Annual Risk Equalisation Premium Credit	
HUC credit received	
HCCP Credit Received	

## 12.3 Auditing Procedures

From an administrative and operational perspective, it is likely that the Authority will be making some very large payments to insurers in respect of HCCP claims – the distribution of claims in respect of contracts entered into in 2018 by amount is set out in Section 7.1 Given the volumes involved, we are of the view that all larger claims (in excess of €150k or €200k say) would require details of settlements made by insurers to be furnished to the Authority. We are also of the view that smaller claims should be subject to audit, however given the number of claims involved we suggest this be performed on a random sample basis, with more frequent sampling of larger claims compared to smaller ones. We note that the Authority carry out onsite inspections in respect of RE credits paid from the REF on an ongoing basis.

Consistent with the information returns we suggest that the information provided to the Authority to calibrate the HCCP should be accompanied by an independent accountant's report stating that the returns are in line with the regulations.

## Appendix 1: Impact of Calibration Approach on HCCP Distribution

### Option 1: No HUC/ Age Credit Offset

	Exclusion of Cross Over periods	Inclusion of Cross Over periods
Approach	<ul style="list-style-type: none"> <li>▪ 2018 HCCP claims data in excess of threshold developed to maturity.</li> <li>▪ Inflation applied to claims data (which increases the level of applicable claims)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2018 HCCP claims data in excess of threshold developed to maturity.</li> <li>▪ Inflation applied to claims data (which increases the level of applicable claims)</li> <li>▪ Allowance for cross-over of policies between cohort years (as ILH have not provided 2016 data, the periods looked at are 2017-2018 and 2018-2019)</li> </ul>
Threshold	€50k excess	€50k excess
Quota Share	40%	40%
Inflation Allowance	4%	4%
Inflation Period	3.25 years	3.25 years
Number of Lives	5,472	5,472
<b>Final HCCP Pot</b>	<b>€73.5m</b>	<b>€113.1m</b>
Detailed Description	<ol style="list-style-type: none"> <li>1. Total Claims + Inflation at 4% for period of 3.25 years = €457.4m<sup>7</sup></li> <li>2. Reduce this amount by the total excess (€50k*developed claim count) = €457.4m - €50k*5,472 = €183.8m</li> <li>3. Apply the quota share (40%) = €183.8*40% = €73.5m</li> </ol>	<ol style="list-style-type: none"> <li>1. Total HCCP Pot excluding cross over periods of €73.5m (see previous column)</li> <li>2. Additional HCCP cross over claims of €99.0m (allowing for inflation). Apply the quota share (40%) = €99.0*40% = €39.6m<sup>8</sup></li> </ol>
<b>Final HCCP Pot (6% Inflation)</b>	<b>€86.1m</b>	<b>€128.2m</b>
<b>Final HCCP Pot (10% Inflation)</b>	<b>€115.9m</b>	<b>€163.4m</b>

<sup>7</sup> The €457.4m represents the €443.8m total claims over €50k as set out in Section 7.1 adjusted for expected future claims development.

<sup>8</sup> The additional claims used for the purposes of the analysis are based on the average claims emerging from 2018 claims in respect of 2017 contracts and from 2019 claims in respect of 2018 contracts and have been increased to allow for expected inflation when the HCCP would apply. The €39.6m in respect of cross over periods reflects any potential credit offsets due to the additional HUC and ARHC that would be payable in respect of these claims.

More specifically, this has been calculated as the difference between the combined total HCCP of two adjacent contract periods (assuming one claimant excess applies) less the sum of the HCCP of the individual adjacent contract periods (assuming two claims excesses apply). For the purposes of the calculation of the combined total HCCP, the claimant excess includes the total level of HUC over the two contract periods with one claims threshold and one ARHC applying. For the purposes of the sum of the HCCP of the individual adjacent contract periods two claims thresholds and two ARHC are applied (i.e. one per contract period). An average of the 2017-2018 and 2018-2019 cross over period calculations, adjusted for expected claims inflation for when the HCCP would apply, has been included in the final HCCP calculation.

## Option 2: HUC/ Age Credit Offset

	Exclusion of Cross Over periods	Inclusion of Cross Over periods
Approach	<ul style="list-style-type: none"> <li>▪ 2018 HCCP claims data in excess of threshold developed to maturity.</li> <li>▪ Inflation applied to claims data (which increases the level of applicable claims)</li> <li>▪ Calculate Adjusted Excess as Threshold + HUC + ARHC received to date for cohort year</li> <li>▪ Quota Share applied to Claim less Adjusted Excess</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2018 HCCP claims data in excess of threshold developed to maturity.</li> <li>▪ Inflation applied to claims data (which increases the level of applicable claims)</li> <li>▪ Calculate Adjusted Excess as Threshold + HUC + ARHC received to date for cohort year</li> <li>▪ Allowance for cross-over of policies between cohort years (as ILH have not provided 2016 data, the periods looked at are 2017-2018 and 2018-2019)</li> <li>▪ Quota Share applied to Claim less Adjusted Excess</li> </ul>
Threshold	€50k excess	€50k excess
Quota Share	40%	40%
Inflation Allowance	4%	4%
Inflation Period	3.25 years	3.25 years
Number of lives	5,472	5,472
Number of Nights	313,525	313,525
Number of Days	45,369	46,199
<b>HCCP Pot (No Offset)</b>	<b>€73.5m</b>	<b>€113.1m</b>
HUC	€42.6m	€42.6m
<b>HUC Offset (HUC * Quota Share)</b>	<b>€17.0m</b>	<b>€17.0m</b>
Age Credits	€6.6m	€6.6m
<b>Age Credit Offset</b>	<b>€2.7m</b>	<b>€2.7m</b>
<b>Final HCCP Pot</b>	<b>€53.8m</b>	<b>€93.4m</b>
Detailed Description	<ol style="list-style-type: none"> <li>1. Option 1 HCCP Pot = €73.5m</li> <li>2. Increase Excess by HUC of €42.6m. Apply the quota share (40%) = €42.6m * 40% = €17.0m</li> <li>3. Increase Excess by Age Credits of €6.6m. Apply the quota share (40%) = €6.6m * 40% = €2.7m</li> <li>4. HCCP Pot = €73.5m - €17.0m - €2.7m = €53.8m</li> </ol>	<ol style="list-style-type: none"> <li>1. Total HCCP Pot Last Step of €53.8m</li> <li>2. Additional HCCP cross over claims of €99.0m (allowing for inflation). Apply the quota share (40%) = €99.0m * 40% = €39.6m</li> </ol>
<b>Final HCCP Pot (6% Inflation)</b>	<b>€64.6m</b>	<b>€106.7m</b>
<b>Final HCCP Pot (10% Inflation)</b>	<b>€90.8m</b>	<b>€138.3m</b>



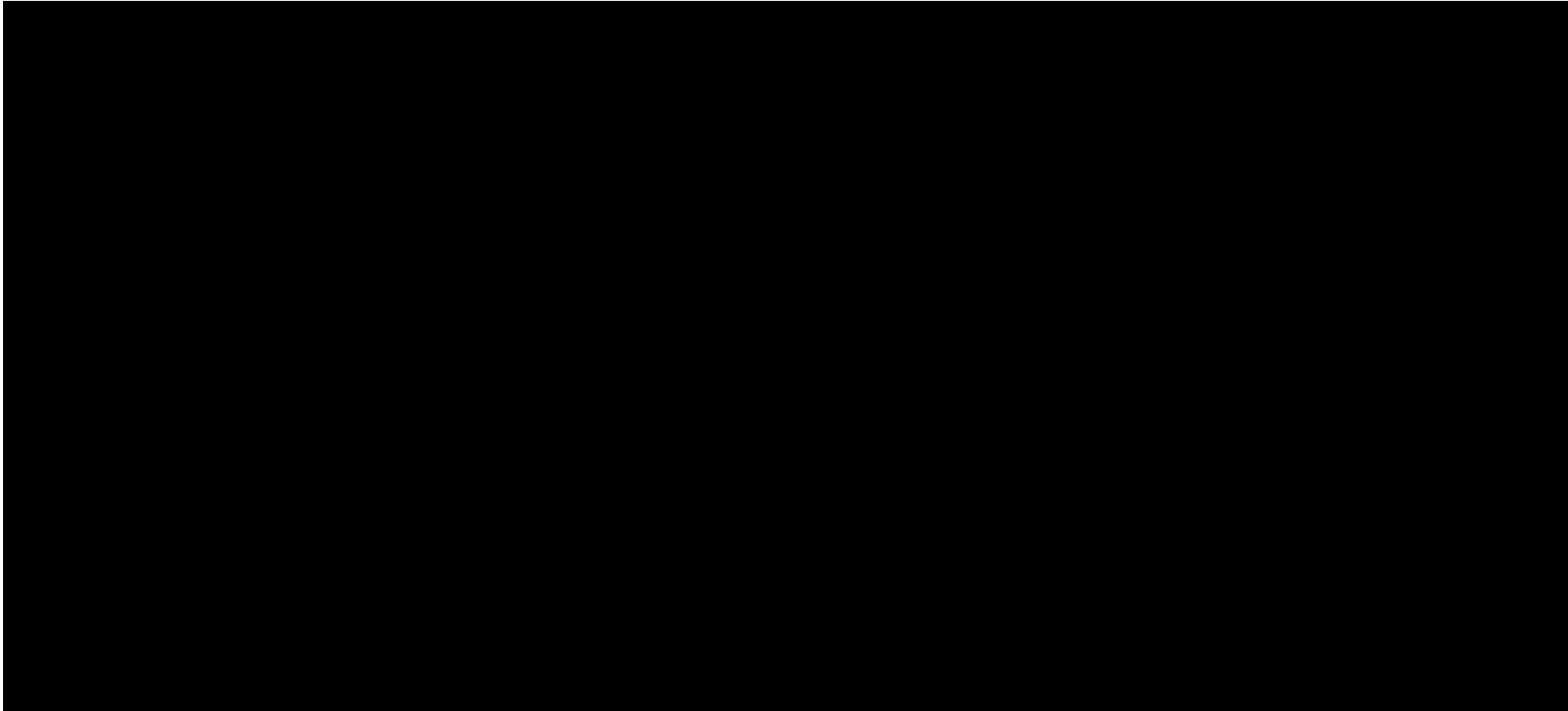
## Appendix 2A: Impact of Calibration Approach on Key HCCP Metrics (including allowance for Cross Over Periods)

Excess/Quota Share	Maintain Stamp Duty (HUC / Age Credit Offset)							Change Stamp Duty (HUC / Age Credit Offset)					
	0%	30%	40%	50%	60%	70%	80%	30%	40%	50%	60%	70%	80%
	<b>HCCP Pot</b>												
<b>0</b>	0.0m												
<b>30,000</b>		126.1m	168.1m	210.1m	252.2m	294.2m	336.2m	126.1m	168.1m	210.1m	252.2m	294.2m	336.2m
<b>35,000</b>		107.5m	143.4m	179.2m	215.1m	250.9m	286.8m	107.5m	143.4m	179.2m	215.1m	250.9m	286.8m
<b>40,000</b>		92.4m	123.2m	154.0m	184.8m	215.6m	246.4m	92.4m	123.2m	154.0m	184.8m	215.6m	246.4m
<b>45,000</b>		80.0m	106.7m	133.3m	160.0m	186.7m	213.4m	80.0m	106.7m	133.3m	160.0m	186.7m	213.4m
<b>50,000</b>		70.1m	93.4m	116.8m	140.1m	163.5m	186.8m	70.1m	93.4m	116.8m	140.1m	163.5m	186.8m
	<b>HCCP Pot as % of RE Credits</b>												
<b>0</b>	0.0%												
<b>30,000</b>		15.7%	20.8%	26.2%	31.7%	36.9%	42.0%	14.6%	19.0%	23.2%	27.3%	31.2%	34.9%
<b>35,000</b>		13.3%	17.8%	22.3%	26.8%	31.3%	36.0%	12.6%	16.4%	20.2%	23.8%	27.2%	30.6%
<b>40,000</b>		11.5%	15.2%	19.1%	22.9%	26.8%	30.9%	10.9%	14.2%	17.6%	20.8%	23.8%	26.9%
<b>45,000</b>		9.9%	13.2%	16.5%	19.8%	23.2%	26.6%	9.5%	12.5%	15.4%	18.2%	21.0%	23.6%
<b>50,000</b>		8.7%	11.5%	14.5%	17.4%	20.3%	23.2%	8.4%	11.0%	13.6%	16.1%	18.6%	21.0%
	<b>Stamp Duty</b>												
<b>0</b>	449												
<b>30,000</b>		449	449	449	449	449	449	484	495	507	518	530	541
<b>35,000</b>		449	449	449	449	449	449	478	488	498	507	517	527
<b>40,000</b>		449	449	449	449	449	449	474	482	490	498	506	514
<b>45,000</b>		449	449	449	449	449	449	471	478	485	492	499	506
<b>50,000</b>		449	449	449	449	449	449	468	474	480	486	492	498



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Excess/Quota Share	Maintain Stamp Duty (HUC / Age Credit Offset)							Change Stamp Duty (HUC / Age Credit Offset)					
	0%	30%	40%	50%	60%	70%	80%	30%	40%	50%	60%	70%	80%
<b>Effectiveness (over 65)</b>													
<b>0</b>	31.6%												
<b>30,000</b>		51.3%	56.2%	60.4%	64.1%	67.3%	69.9%	52.2%	57.2%	61.5%	65.3%	68.5%	71.1%
<b>35,000</b>		50.9%	55.6%	59.7%	63.5%	66.7%	69.3%	51.7%	56.4%	60.7%	64.5%	67.8%	70.5%
<b>40,000</b>		50.2%	54.7%	58.8%	62.5%	65.7%	68.5%	50.6%	55.4%	59.6%	63.4%	66.7%	69.5%
<b>45,000</b>		48.3%	52.3%	56.2%	59.7%	62.8%	65.5%	48.8%	53.1%	57.0%	60.4%	63.6%	66.5%
<b>50,000</b>		46.7%	50.6%	53.9%	57.2%	60.2%	63.0%	47.2%	51.0%	54.6%	57.9%	61.1%	63.9%
<b>Effectiveness (all)</b>													
<b>0</b>	30.3%												
<b>30,000</b>		48.6%	53.5%	57.8%	61.7%	65.1%	68.0%	49.3%	54.3%	58.6%	62.6%	66.0%	68.8%
<b>35,000</b>		48.1%	52.9%	57.0%	60.9%	64.3%	67.2%	48.7%	53.4%	57.8%	61.7%	65.1%	68.0%
<b>40,000</b>		47.2%	51.7%	55.8%	59.6%	63.0%	65.9%	47.5%	52.3%	56.5%	60.2%	63.7%	66.6%
<b>45,000</b>		45.3%	49.3%	53.2%	56.8%	59.9%	62.8%	45.7%	49.9%	53.9%	57.3%	60.6%	63.5%
<b>50,000</b>		43.8%	47.7%	51.1%	54.5%	57.5%	60.4%	44.2%	48.0%	51.7%	55.0%	58.2%	61.1%
<b>Claims Cost Ceiling</b>													
<b>0</b>	133.5%												
<b>30,000</b>		143.1%	146.4%	150.5%	154.6%	158.7%	162.8%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%
<b>35,000</b>		141.6%	144.3%	147.3%	150.7%	154.2%	157.7%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%
<b>40,000</b>		140.3%	142.6%	144.8%	147.6%	150.5%	153.4%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%
<b>45,000</b>		139.4%	141.3%	143.3%	145.2%	147.8%	150.3%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%
<b>50,000</b>		138.6%	140.3%	142.0%	143.7%	145.6%	147.9%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%





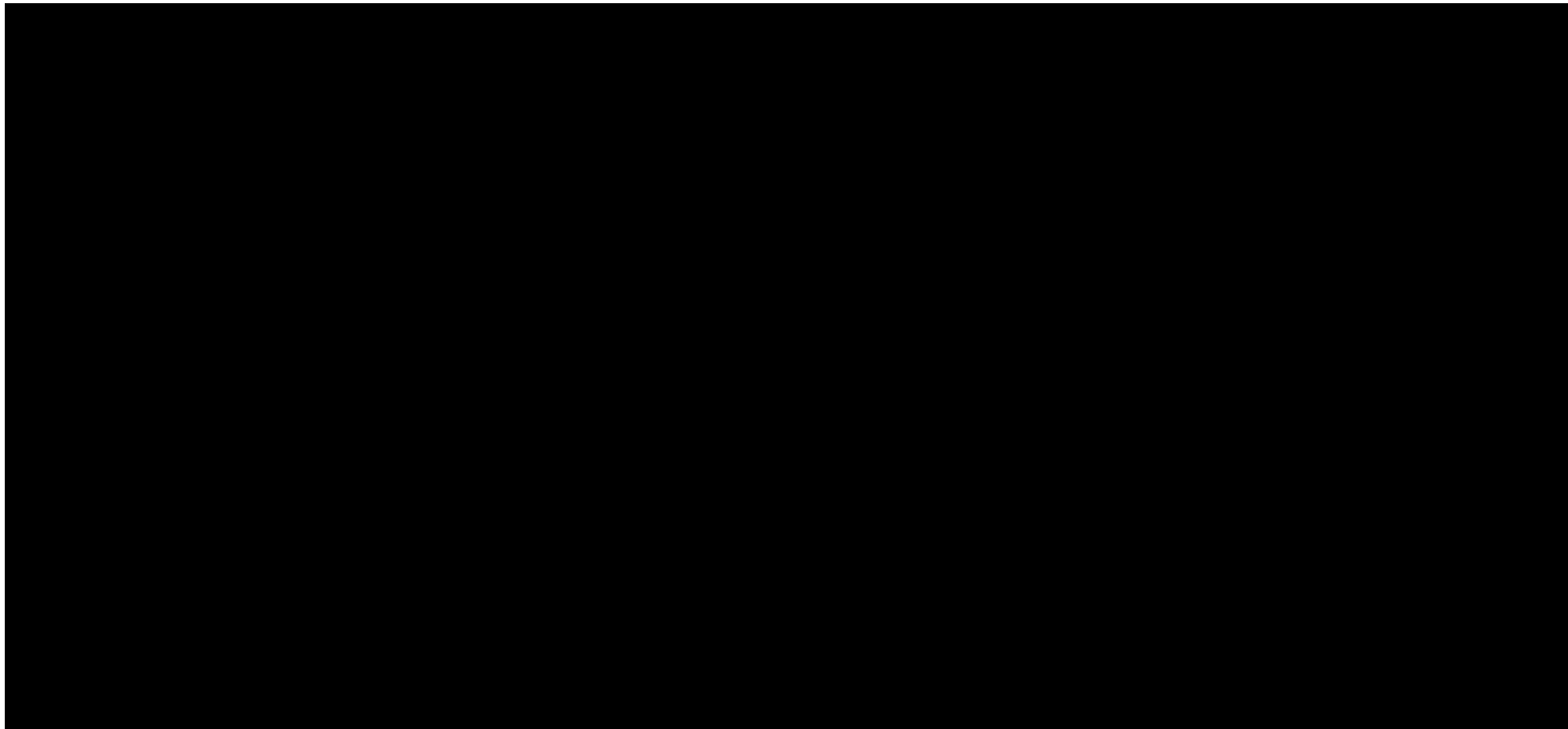
## Appendix 2B: Impact of Calibration Approach on Key HCCP Metrics (excluding allowance for Cross Over Periods)

Excess/Quota Share	Maintain Stamp Duty (HUC / Age Credit Offset)							Change Stamp Duty (HUC / Age Credit Offset)					
	0%	30%	40%	50%	60%	70%	80%	30%	40%	50%	60%	70%	80%
	<b>HCCP Pot</b>												
<b>0</b>	0.0m												
<b>30,000</b>		82.3m	109.8m	137.2m	164.7m	192.1m	219.6m	82.3m	109.8m	137.2m	164.7m	192.1m	219.6m
<b>35,000</b>		67.7m	90.3m	112.9m	135.5m	158.1m	180.7m	67.7m	90.3m	112.9m	135.5m	158.1m	180.7m
<b>40,000</b>		56.3m	75.0m	93.8m	112.5m	131.3m	150.1m	56.3m	75.0m	93.8m	112.5m	131.3m	150.1m
<b>45,000</b>		47.3m	63.0m	78.8m	94.5m	110.3m	126.0m	47.3m	63.0m	78.8m	94.5m	110.3m	126.0m
<b>50,000</b>		40.4m	53.8m	67.3m	80.7m	94.2m	107.6m	40.4m	53.8m	67.3m	80.7m	94.2m	107.6m
	<b>HCCP Pot as % of RE Credits</b>												
<b>0</b>	0.0%												
<b>30,000</b>		10.2%	13.6%	17.0%	20.4%	23.9%	27.5%	9.8%	12.8%	15.8%	18.6%	21.4%	24.2%
<b>35,000</b>		8.4%	11.2%	14.0%	16.8%	19.6%	22.4%	8.1%	10.6%	13.1%	15.6%	18.0%	20.3%
<b>40,000</b>		7.0%	9.3%	11.6%	14.0%	16.2%	18.6%	6.7%	8.9%	11.0%	13.1%	15.2%	17.1%
<b>45,000</b>		5.9%	7.8%	9.7%	11.7%	13.7%	15.6%	5.7%	7.5%	9.3%	11.1%	12.9%	14.6%
<b>50,000</b>		5.0%	6.7%	8.3%	10.0%	11.7%	13.4%	4.9%	6.5%	8.0%	9.6%	11.1%	12.6%
	<b>Stamp Duty</b>												
<b>0</b>	449												
<b>30,000</b>		449	449	449	449	449	449	472	480	487	495	503	510
<b>35,000</b>		449	449	449	449	449	449	468	474	480	486	493	499
<b>40,000</b>		449	449	449	449	449	449	465	470	475	480	485	490
<b>45,000</b>		449	449	449	449	449	449	462	466	470	475	479	483
<b>50,000</b>		449	449	449	449	449	449	460	464	467	471	474	478



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Excess/Quota Share	Maintain Stamp Duty (HUC / Age Credit Offset)							Change Stamp Duty (HUC / Age Credit Offset)					
	0%	30%	40%	50%	60%	70%	80%	30%	40%	50%	60%	70%	80%
<b>Effectiveness (over 65)</b>													
0	31.6%												
30,000		45.7%	49.3%	52.4%	55.6%	58.5%	61.0%	46.3%	50.1%	53.3%	56.7%	59.5%	62.2%
35,000		45.1%	48.4%	51.5%	54.4%	57.2%	59.7%	45.5%	48.9%	52.2%	55.2%	58.1%	60.6%
40,000		44.2%	47.1%	50.1%	53.0%	55.6%	58.1%	44.6%	47.6%	50.7%	53.6%	56.2%	58.9%
45,000		42.7%	45.2%	47.9%	50.3%	52.8%	54.9%	43.0%	45.7%	48.4%	50.9%	53.4%	55.7%
50,000		41.4%	43.8%	46.2%	48.4%	50.4%	52.4%	41.8%	44.3%	46.6%	48.8%	50.9%	53.1%
<b>Effectiveness (all)</b>													
0	30.3%												
30,000		43.0%	46.6%	49.8%	53.0%	55.9%	58.6%	43.4%	47.1%	50.5%	53.8%	56.7%	59.5%
35,000		42.3%	45.6%	48.8%	51.7%	54.5%	57.1%	42.5%	46.0%	49.2%	52.3%	55.2%	57.8%
40,000		41.2%	44.2%	47.2%	50.0%	52.7%	55.2%	41.5%	44.6%	47.6%	50.5%	53.2%	55.8%
45,000		39.8%	42.3%	45.0%	47.4%	49.9%	52.1%	40.0%	42.6%	45.4%	47.9%	50.3%	52.6%
50,000		38.6%	41.0%	43.4%	45.5%	47.6%	49.7%	38.9%	41.3%	43.6%	45.9%	48.0%	50.2%
<b>Claims Cost Ceiling</b>													
0	133.5%												
30,000		139.8%	142.0%	144.1%	146.3%	149.0%	151.7%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%
35,000		138.6%	140.4%	142.1%	143.8%	145.5%	147.7%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%
40,000		137.7%	139.1%	140.5%	141.9%	143.3%	144.7%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%
45,000		137.0%	138.2%	139.3%	140.5%	141.7%	142.9%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%
50,000		136.5%	137.5%	138.5%	139.5%	140.5%	141.5%	133.5%	133.5%	133.5%	133.5%	133.5%	133.5%



## Appendix 3: Cross Over Periods

### Annual Premium

Age credit is received annually in advance  
80 year old male, Advanced Contract

Claim in Year 1 is €110,000

Claim in Year 2 is €20,000

Annual Premium	Q1 Year 1	Q2 Year 1	Q3 Year 1	Q4 Year 1	Q1 Year 2	Q2 Year 2
Claim Amount	0	40,000	50,000	20,000	10,000	10,000
Cumulative claims (4 quarters)	0	40,000	90,000	110,000	120,000	90,000
<i>HUC received</i>	0	2,000	3,000	950	500	500
Cumulative HUC received (4 quarters)	0	2,000	5,000	5,950	6,450	4,950
<i>Age credit received</i>	2,950	0	0	0	2,950	-
Cumulative Age credit received (4 quarters)	2,950	2,950	2,950	2,950	2,950	2,950
Cumulative Credits received (4 quarters)	2,950	4,950	7,950	8,900	9,400	7,900
Threshold	50,000	50,000	50,000	50,000	50,000	50,000
Claims Excess	52,950	54,950	57,950	58,900	59,400	57,900
Claim Eligible for HCCP	0	0	32,050	51,100	60,600	32,100
HCCP Claim (40% of Claim Eligible for HCCP)	0	0	12,820	20,440	24,240	12,840
HCCP received in preceding 3 quarters	0	0	0	12,820	20,440	24,240
Final HCCP	0	0	12,820	7,620	3,800	0

If there was no allowance for claims straddling periods, the HCCP payment would be €3,800 less (i.e. €20,440 instead of €24,240) as no HCCP credits would be allocated in year 2 as the claims excess would not be reached.

## Monthly Premium

Age credit is received on a monthly basis  
80 year old male, Advanced Contract

Claim in Year 1 is €110,000

Claim in Year 2 is €20,000

Monthly Premium	Q1 Year 1	Q2 Year 1	Q3 Year 1	Q4 Year 1	Q1 Year 2	Q2 Year 2
Claim Amount	0	40,000	50,000	20,000	10,000	10,000
Cumulative claims (4 quarters)	0	40,000	90,000	110,000	120,000	90,000
<i>HUC received</i>	0	2,000	3,000	950	500	500
Cumulative HUC received (4 quarters)	0	2,000	5,000	5,950	6,450	4,950
<i>Age credit received</i>	738	738	738	738	738	738
Cumulative Age credit received (4 quarters)	738	1,475	2,213	2,950	2,950	2,950
Cumulative Credits received (4 quarters)	738	3,475	7,213	8,900	9,400	7,900
Threshold	50,000	50,000	50,000	50,000	50,000	50,000
Claims Excess	50,738	53,475	57,213	58,900	59,400	57,900
Claim Eligible for HCCP	0	0	32,788	51,100	60,600	32,100
HCCP Claim (40% of Claim Eligible for HCCP)	0	0	13,115	20,440	24,240	12,840
HCCP received in preceding 3 quarters	0	0	0	13,115	20,440	24,240
Final HCCP	0	0	13,115	7,325	3,800	0

As we can see the total claim payment in Q1 Year 2 is the same as the annual example as the cumulative RE credits in the last 4 quarters is also the same. However, the use of monthly ARHC results in an enhanced level of HCCP in earlier periods, and if the later claims do not materialise the total level of credits eventually allocated would be higher. Thus, we are of the view that the ARHC used in the HCCP calculation should be based on the assumption that the total ARHC was received when the contract was written.

## Appendix 4: Principal Objectives of the RES as set out in Section 1A of the Health Insurance Acts

### 1A. Principal objective of Minister and Authority in performing respective functions under Act.

- 1) The principal objective of this Act is to ensure that, in the interests of the common good and across the health insurance market, access to health insurance cover is available to consumers of [health services](#) with no differentiation made between them (whether [effected](#) by [risk equalisation](#) credits or stamp duty measures or other measures, or any combination thereof), in particular as regards the costs of [health services](#), based in whole or in part on the health risk status, age or sex of, or frequency of provision of [health services](#) to, any such consumers or any class of such consumers, and taking into particular account for the purposes of that objective -
  - a) the fact that the health needs of consumers of [health services](#) increase as they become less healthy, including as they approach and enter old age,
  - b) the desirability of ensuring, in the interests of societal and intergenerational solidarity, and regardless of the health risk status or age of, or frequency of provision of [health services](#) to, any particular generation (or part thereof), that the burden of the costs of [health services](#) be shared by insured persons by providing for a cost subsidy between the more healthy and the less healthy, including between the young and the old, and, without prejudice to the generality of that objective, in particular that the less healthy, including the old, have access to health insurance cover by means of risk equalisation credits,
  - c) the manner in which the health insurance market operates in respect of [health insurance contracts](#), both in relation to individual [registered undertakings](#) and across the market, and
  - d) the importance of discouraging [registered undertakings](#) from engaging in practices, or offering [health insurance contracts](#), whether by segmentation of the health insurance market (by whatever means) or otherwise, which have as their object or effect the favouring of the coverage by the [undertakings](#) of the health insurance risk of the more healthy, including the young, over the coverage of the health insurance risk of the less healthy, including the old.
- 2) A [registered undertaking](#) shall not engage in a practice, or effect an agreement (including a [health insurance contract](#)), which has as its object or effect (whether in whole or in part) the avoidance of the achievement of the principal objective.
- 3) Nothing in this section shall affect the operation of [section 7\(5\)](#) or [7A](#).

## Appendix 5: Additional information on HCCP data collected – 2018 contract years

No. of claims exceeding €10,000 – Raw Data		
Age Band	Market	
0-17		1,122
18-29		1,106
30-39		1,993
40-49		3,856
50-54		2,806
55-59		3,977
60-64		5,195
65-69		6,551
70-74		7,477
75-79		6,607
80-84		4,857
85+		3,791
Total		49,338 (100%)

Total claims exceeding €10,000 – Raw Data		
Age Band	Market €m	
0-17		€30.7
18-29		€28.1
30-39		€47.6
40-49		€92.1
50-54		€66.0
55-59		€95.3
60-64		€123.7
65-69		€162.1
70-74		€186.2
75-79		€168.2
80-84		€126.4
85+		€97.9
Total		€1,224.3 (100%)

No. of claims exceeding €50,000 – Raw Data		
Age Band	Market	
0-17		139
18-29		98
30-39		149
40-49		284
50-54		192
55-59		312
60-64		401
65-69		544
70-74		651
75-79		592
80-84		496
85+		351
Total		4,209 (100%)

Total claims exceeding €50,000 – Raw Data		
Age Band	Market €m	
0-17		€11.3
18-29		€6.8
30-39		€11.4
40-49		€21.7
50-54		€16.2
55-59		€25.2
60-64		€32.2
65-69		€44.3
70-74		€51.4
75-79		€47.2
80-84		€37.9
85+		€26.4
Total		€332.0 (100%)



No. of claims exceeding €50,000 – Raw Data Inflated and Developed		
Age Band		Market
0-17		169
18-29		131
30-39		203
40-49		390
50-54		247
55-59		393
60-64		514
65-69		712
70-74		836
75-79		779
80-84		621
85+		477
Total		5,472 (100%)

Total claims exceeding €50,000 – Raw Data Inflated and Developed		
Age Band		Market €m
0-17		€14.9
18-29		€9.7
30-39		€16.3
40-49		€31.2
50-54		€21.9
55-59		€33.9
60-64		€43.9
65-69		€61.0
70-74		€70.2
75-79		€65.4
80-84		€51.2
85+		€37.7
Total		€457.4 (100%)

## Appendix 6: Australian RES

### How the HCCP in Australia works<sup>9</sup>

The Australian RES system includes a HCCP which is firstly age dependent and subsequently subject to an upper limit.

Age	% of benefits included in aged based pool (ABP)
0-54	0%
55-59	15%
60-64	42.5%
65-69	60%
70-74	70%
75-79	76%
80-84	78%
85+	82%

The amount to be notionally allocated to the HCCP is to be calculated in accordance with the formula  $m(R-T) - H$ , where:

- $m$  is 82%;
- $R$  is the total gross benefit for the current and the preceding 3 quarters less the amount notionally allocated to the ABP in the current and preceding 3 quarters;
- $T$  is the designated threshold which is \$50,000;
- $H$  is the sum of the amounts notionally allocated to the HCCP in the preceding 3 quarters.

### Examples of how the HCCP in Australia works

#### Example 1 of ABP calculation:

For example, Mr X, a 59-year-old insured person whose birthday is on 24 January is admitted to hospital on January 19. Mr X is discharged from the hospital on 29 January. Mr X's gross benefit is \$10,000. In this case, as half the time in which Mr X was receiving treatment was spent while he was 59 years old and the other half while he was 60 years old, the amount to be notionally allocated to the ABP will use the rates in both the 55-59 and the 60-64 age cohorts.

Therefore, the amount notionally allocated to the ABP will be:

$0.5 * \$10,000 * 15\% + 0.5 * \$10,000 * 42.5\%$  which equals \$2,875.

#### Example 2 of ABP & HCCP calculation:

Mr X is 63 and has a gross benefit of \$100,000. In this case, the amount that will be notionally allocated to the ABP is \$42,500 ( $42.5\% * \$100,000$ ). Assuming that Mr X has not made a previous claim in the preceding 3 quarters, Mr X will be above the \$50,000 threshold. That is, \$57,500 (the amount not notionally allocated to ABP in the current quarter with no other claims in the preceding 3 quarters) exceeds the designated threshold of \$50,000. Here, the amount that will be notionally allocated to the HCCP is \$6,150 ( $82\% * (\$57,500 - \$50,000) - 0$ ). As there are no gross benefits in the preceding 3 quarters, the only amount that was not allocated to the ABP is the amount in the current quarter (ie,  $\$100,000 - 42,500 = \$57,500$ ) and the amount notionally allocated to the HCCP in the preceding 3 quarters is zero.

<sup>9</sup> The details are sourced from: <https://www.legislation.gov.au/Details/F2015L01051>

**Example 3 of ABP & HCCP calculation:**

Assuming that, in the next quarter, Mr X has another gross benefit of \$100,000 and is still 63, the amount to be notionally allocated to the ABP will be the same as in the previous example. That is, the amount allocated to the ABP will be \$42,500. The calculation of the total amount not notionally allocated to the ABP will need to account for the previous claim amount in Example 2 for the purposes of calculating whether the total amount not allocated to the ABP exceeds the designated threshold. In this case, the total residual amount will be \$115,000 (\$57,500 (amount not allocated in the ABP in the previous quarter) + \$57,500 (amount not allocated in the ABP in the current quarter)). The result is that the total amount not allocated to the ABP in the current quarter and in the preceding 3 quarters of \$115,000 exceeds the designated threshold of \$50,000.

The amount to be notionally allocated to the HCCP in this case will be \$47,150, which represents 82% of the difference between the sum of the total amount not allocated to the ABP in the current and in the preceding 3 quarters (\$57,500 + \$57,500) and the threshold (\$50,000), minus the sum of the amount notionally allocated to the HCCP in the preceding 3 quarters (in this case, as there was only one amount in the previous quarter, the sum is \$6,150).

Using the formulae above for illustration we get:

$$M * (R-T) - H = 82\% * (\$115,000 - \$50,000) - \$6,150 = \$47,150$$

## Appendix 7: Projected RES Budget

All else being equal we would expect the level of credits to increase in line with expected claims inflation over the lifetime of the next RES. The introduction of a HCCP would not invalidate this as the inclusion of a HCCP is expected to result in a redistribution of payments and not to change the overall level of credits allocated. This would translate to the following estimated annual budget for each year of the pre-notified RES:

Time Period	Estimated Budget €m
1 April 2021 to 31 March 2022	837
1 April 2022 to 31 March 2023	871
1 April 2023 to 31 March 2024	906
1 April 2024 to 31 March 2025	942
1 April 2025 to 31 March 2026	979

The above budget projections assume a continuation in the rate of growth of the market and also continued claims inflation of 4% p.a. in aggregate. Any changes to these assumptions may invalidate the above budgets.

Please note that above budgets do not take into consideration the impact of COVID-19 on market size and claims.



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