



Government
Actuary's
Department

HSC Pension Scheme (HSCPS)

Membership data

Actuarial valuation as at 31 March 2020

Garry Swann FIA & Benjamin Scutt FIA

26 October 2023



Highlights

HSCPS valuation data



127k

Members as at
31 March 2020

+ 15.0% vs. 2016

Membership split

70k

20k

36k

70k

Active
members

20k

Deferred
members

36k

Pensioner
members

Key headlines

There were significant data quality issues in the original HSCPS 2020 valuation membership data provided.

A number of additional data files were provided by the scheme administrators. Using an agreed approach, these were merged with the original data, and the new combined set underwent checks and processing. Adjustments have then been applied, including for around 20% of the membership records.

The movement data was incomplete, where comparisons have been possible there also remain notable inconsistencies between the 2020 membership data and the data provided for the 2016 valuation.

Data quality after checks and adjustments



After making necessary adjustments detailed in this report, and following discussions with the scheme manager, we conclude that the data is appropriate for the purpose of the 2020 HSCPS valuation. However, a different approach to adjusting data could still lead to different valuation results.

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Any terms that appear in this report in underlined text are defined in the Glossary.

At Government Actuary's Department (GAD), we seek to achieve a high standard in all our work. We are accredited under the Institute and Faculty of Actuaries' Quality Assurance Scheme. Our website describes [the standards](#) we apply.

1. Introduction

Who is this report for?

This report is addressed to the Department of Health. The Northern Ireland Department of Finance’s Directions (the Directions) requires the scheme actuary to provide information about the scheme and data. The purpose of this report is to provide the data we will be using and to help readers be confident that the results of the valuation are fit for purpose.

Why has the data been collected?

This data is needed to carry out an actuarial valuation of the HSCPS as at 31 March 2020, in accordance the Directions. This data will be used to set actuarial assumptions, and together the data and assumptions will be used to calculate valuation results.

Why is the data important?

The results of the valuation are critically dependent on the quality of the data used. Poor data could lead to employers making different decisions due to paying too high or too low a contribution rate, or to benefit changes being made unnecessarily.

This data is often used for other important work as well, including the HSCPS annual Resource Accounts.

Results

Assumptions

Data

Data is the first and most important building block of an actuarial valuation.

2. Data as at 31 March 2020

Who provided the data?

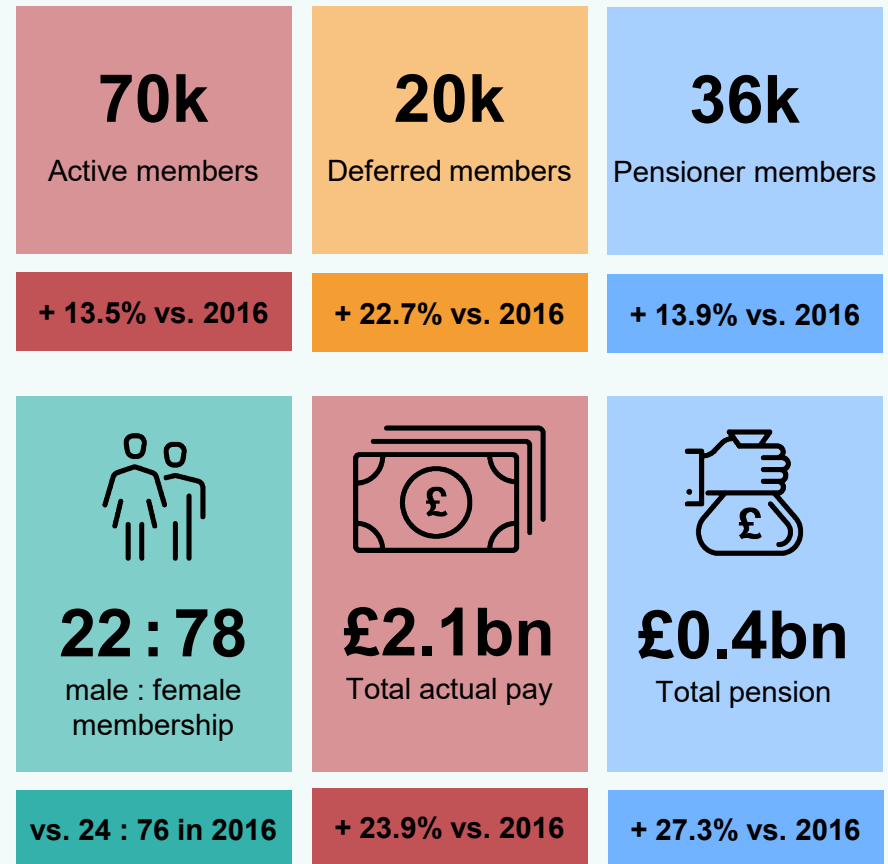
This data was wholly provided by the administrators of the HSCPS, HSC Business Service Organisation (HSC BSO).

What is the data used for?

It will be used to calculate the results of the 2020 HSCPS valuation, specifically:

- employer contribution rates due from 2024
- the cost cap cost of the scheme
- actuarial liabilities as at 31 March 2020.

Detailed data summaries are included in [Appendix A – Detailed summaries: data as at 31 March 2020](#).



Pension amount includes the April 2020 pension increase

3. Movements data

Where did the data come from?

This movements data for 2016 to 2020 was provided for pensioner members by HSC BSO.

What is movements data used for?

We requested movements data in order to review existing assumptions about the scheme membership and propose new assumptions where appropriate. Agreed assumptions are then used to carry out valuation calculations.

Membership reconciliation

This movements data is used to perform a reconciliation which compares data as at 31 March 2016 and 31 March 2020 against movements occurring between this period to check that membership figures are in agreement.

Movements data received

Unfortunately, the movements data which was provided was insufficient to undertake an analysis of experience for active or deferred members. This meant that we were unable to use the movements data to inform the assumptions review or to support a reconciliation with prior membership data.

Reconciliation

The table below shows how the number of members in each category has changed over the period from 31 March 2016 (top row) to 31 March 2020 (bottom row). The intermediate rows summarise the membership movements (where provided) over the period.

It was only possible to undertake a reconciliation of the pensioner membership. The expected number of pensioners is shown in the table. There is only a small difference between this expected number and the number of pensioner records provided at 31 March 2020. This difference is within our tolerance levels for a scheme of this size so no further action needs to be taken.

Figures in intermediate rows are rounded to the nearest 10

	Actives	Deferreds	Pensioners
Number at start of period:	61,845	16,687	31,435
New dependants	N/A	N/A	1,140
Retirements	N/A	N/A	6,240
Deaths and other exits	N/A	N/A	-3,950
Number expected at end of period:	N/A	N/A	34,865
Valuation data at end of period:	70,221	20,470	35,818
Difference:	N/A	N/A	950

4. Checks and adjustments

Why is this data checked?

We carry out checks to ensure this data is fit for purpose for the valuation. These checks also help us to understand and describe limitations on the valuation results due to data omissions. This is also a professional actuarial requirement.

What checks are carried out?

We carry out checks on aggregated statistics produced from the data, and on a record by record basis. A simplified process diagram is shown to the right.

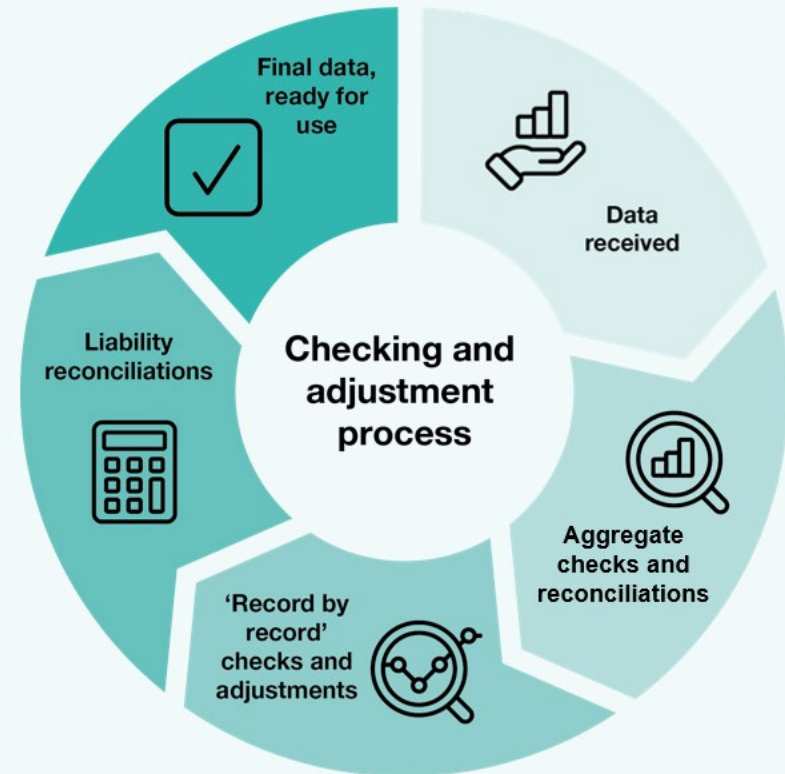
What happens to unreliable data?

Where our checks show that a data record seems to be unreliable, it is either excluded or adjusted. We do this to make sure the data is appropriate for calculating valuation results.

Where we exclude valid data records, we typically compensate for this by scaling up similar, included records.

Where can I find out more?

A detailed summary of what we've done is contained in [Appendix B – Checks, adjustments and uncertainties](#).



After checks & adjustments:

After finalising our checks and adjustments we will consider potential data improvements. We will engage with the scheme manager on any issues we have identified to improve future data submissions, where possible and as appropriate.

5. Data quality

Who is responsible for data quality?

The Department of Health is responsible for ensuring appropriate data is provided in order to support the legislative requirement to perform a valuation.

It is the Department's responsibility to ensure that data that is provided is in line with our specifications.

Was the data provided of good quality?

The results of the valuation are critically dependent on the quality and correctness of the data used. On initial receipt we identified multiple errors and omissions in the data supplied. We have engaged with the administrator to rectify the issues identified through the receipt of supplementary data files. Where this has not been possible, approximations have been made to enable calculations to be undertaken.

It should be noted that a significant number of adjustments have been applied, with some 20% or so records not being directly usable. There are also remain notable inconsistencies between the data provided for the 2020 valuation and the 2016 valuation.

Can the data be used for the valuation?

Yes. After making the adjustments detailed in this report, and in discussion with the Department of Health, we believe the data is adequate for the purposes of the 2020 valuation.

Data quality after checks & adjustments



After making necessary adjustments detailed in this report, and following discussions with the scheme manager, we conclude that the data is appropriate for the purpose of the 2020 HSCPS valuation. However, a different approach to adjusting data could still lead to different valuation results.

6. Impact of data limitations

Do data limitations cause uncertainty?

Yes. Our checks and adjustments aim to ensure that the data is appropriate for use in valuation calculations. However, our checks do not constitute a full audit of the data and our adjustments, although reasonable in our view, may not mean that the dataset adopted accurately reflects the true data of the scheme. This means that there is **residual data uncertainty**.

Is data uncertainty a significant issue?

Residual data uncertainty can potentially have an impact on valuation results, including for example on the cost cap cost of the scheme and any resulting impact on member benefits.

However, in large and complex data sets this uncertainty is normal and is not usually a cause for concern.

In our view, following discussions with the scheme manager, the residual uncertainty present in this data is not significant enough to dissuade users from taking actions recommended from this valuation.

Where can I find out more?

A more detailed summary of residual data uncertainty is set out in [Appendix B – Checks, adjustments and uncertainties](#).



7. Limitations

Data

In preparing this report, GAD has relied on data and other information supplied by HSC BSO as described in the report. GAD has not sought independent verification around its general completeness and accuracy (beyond our comparisons with the relevant Resource Accounts).

Any checks that GAD has made are limited to those described in the report, including those relating to the overall reasonableness and consistency of the data. These checks do not represent a full independent audit of the data supplied.

Throughout this report, the totals given for summed data may not be exactly the same as the sum of the components shown due to rounding effects.

Department of Finance Directions

Throughout this report, in any place where we indicate the potential variability of valuation results - these take into account the Department of Finance [Directions](#) for the 2020 valuations.

Sharing

This report has been prepared for the use of the Department of Health. We are content for the Department of Health to release this report to third parties, provided:

- It is released in full
- The advice is not quoted selectively or partially;
- GAD is identified as the source of the report, and;
- GAD is notified of such release.

Other than the Department of Health, no person or third party is entitled to place any reliance on the contents of this report, except to any extent explicitly stated herein. GAD has no liability to any person or third party for any action taken or for any failure to act, either in whole or in part, on the basis of this report.

This report will be published as part of completing the 2020 valuation of the scheme.

Compliance statement:

This report has been prepared in accordance with the applicable Technical Actuarial Standards: TAS 100 and TAS 300 issued by the Financial Reporting Council (FRC). The FRC sets technical standards for actuarial work in the UK.

Appendix A

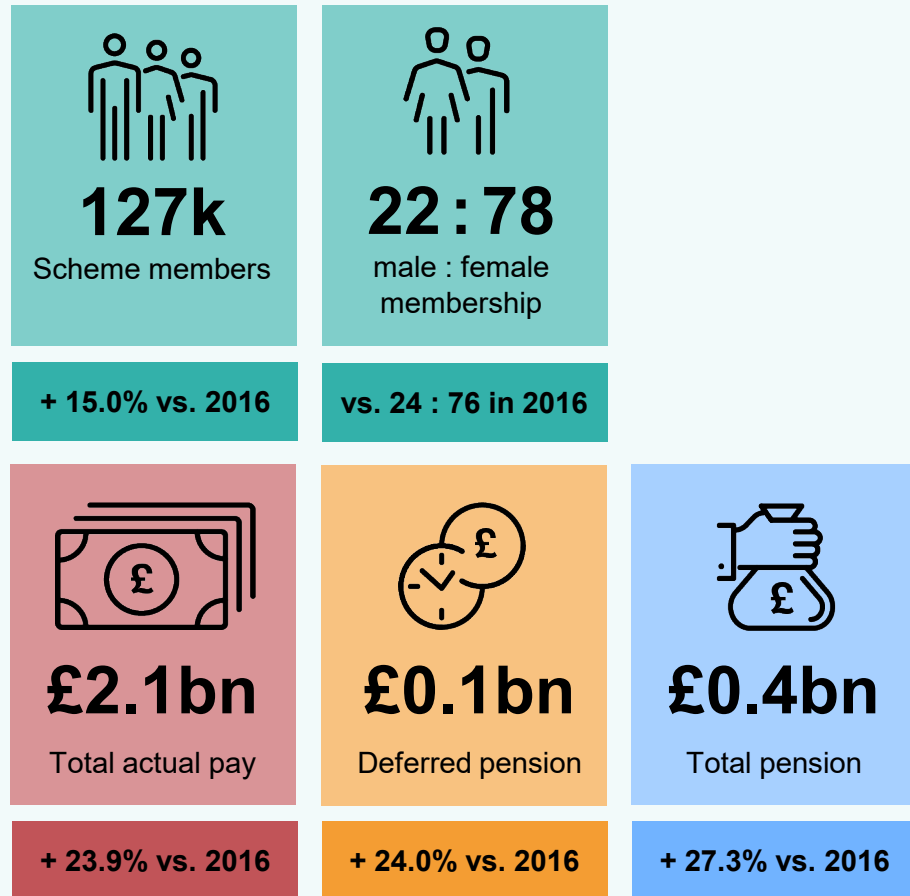
Detailed summaries: Data as at 31 March 2020



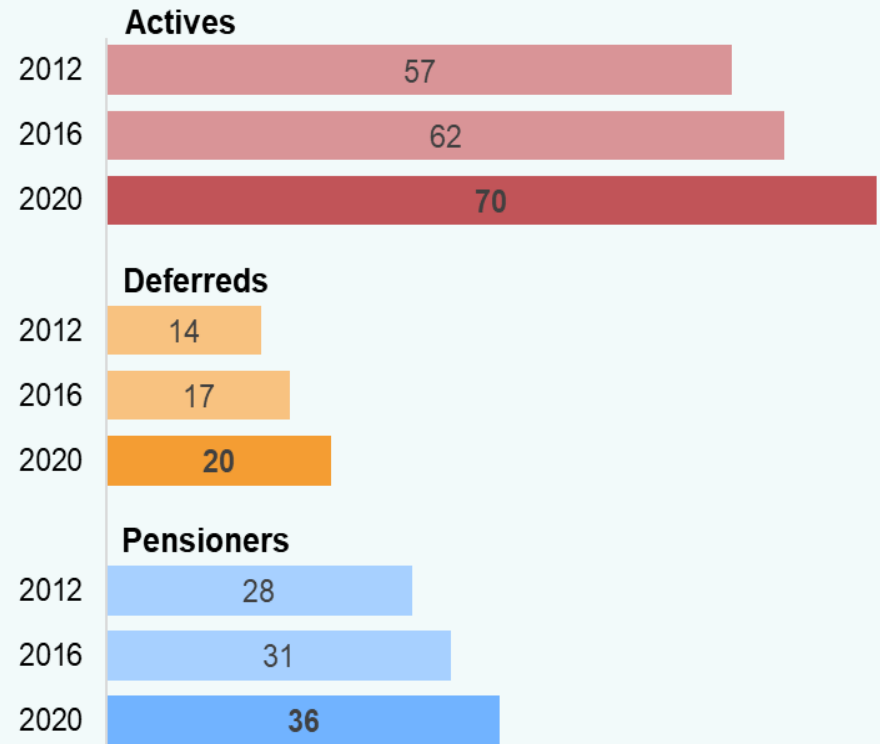
Scheme data

As at 31 March 2020

Summary statistics

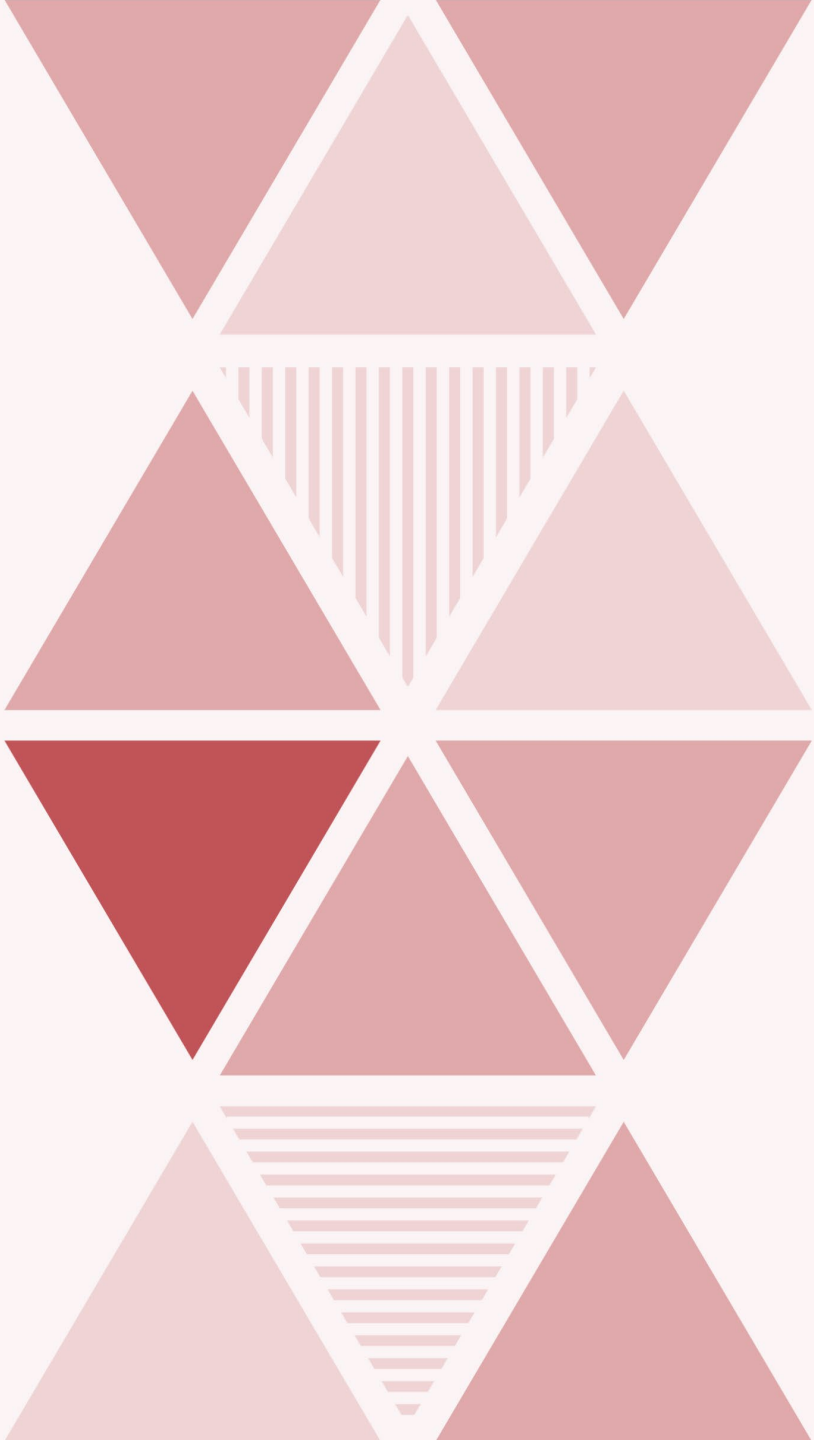


Membership over time (000's)



Pension amount includes the April 2020 pension increase

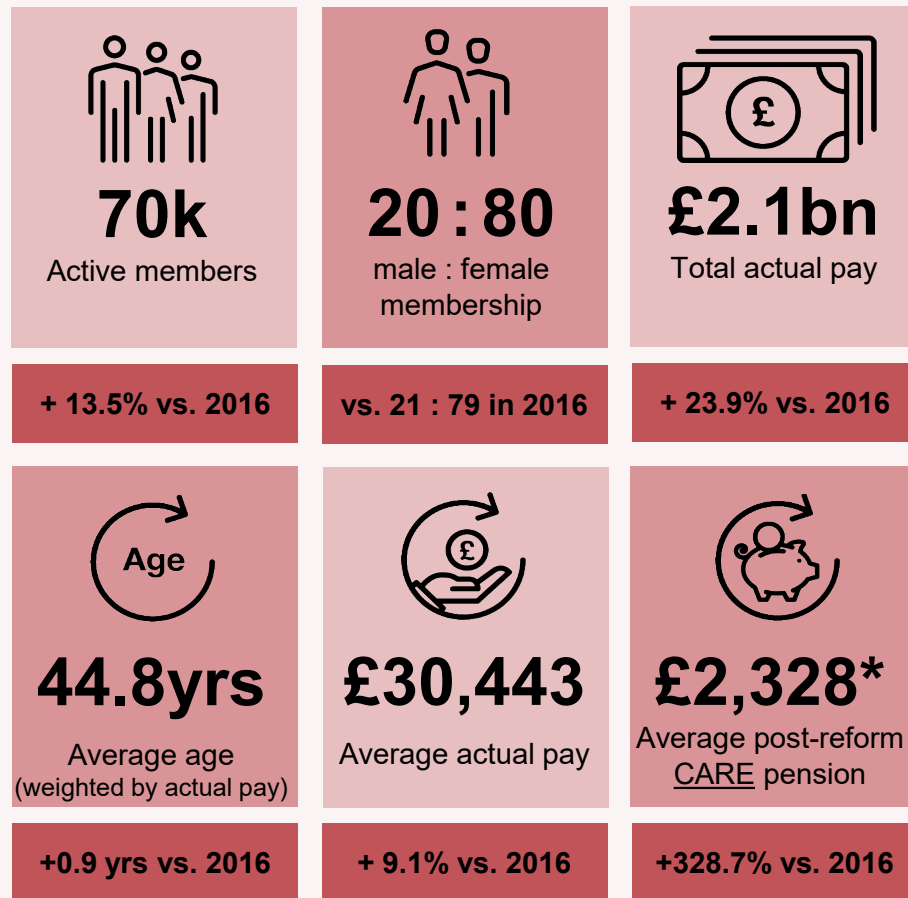
Actives



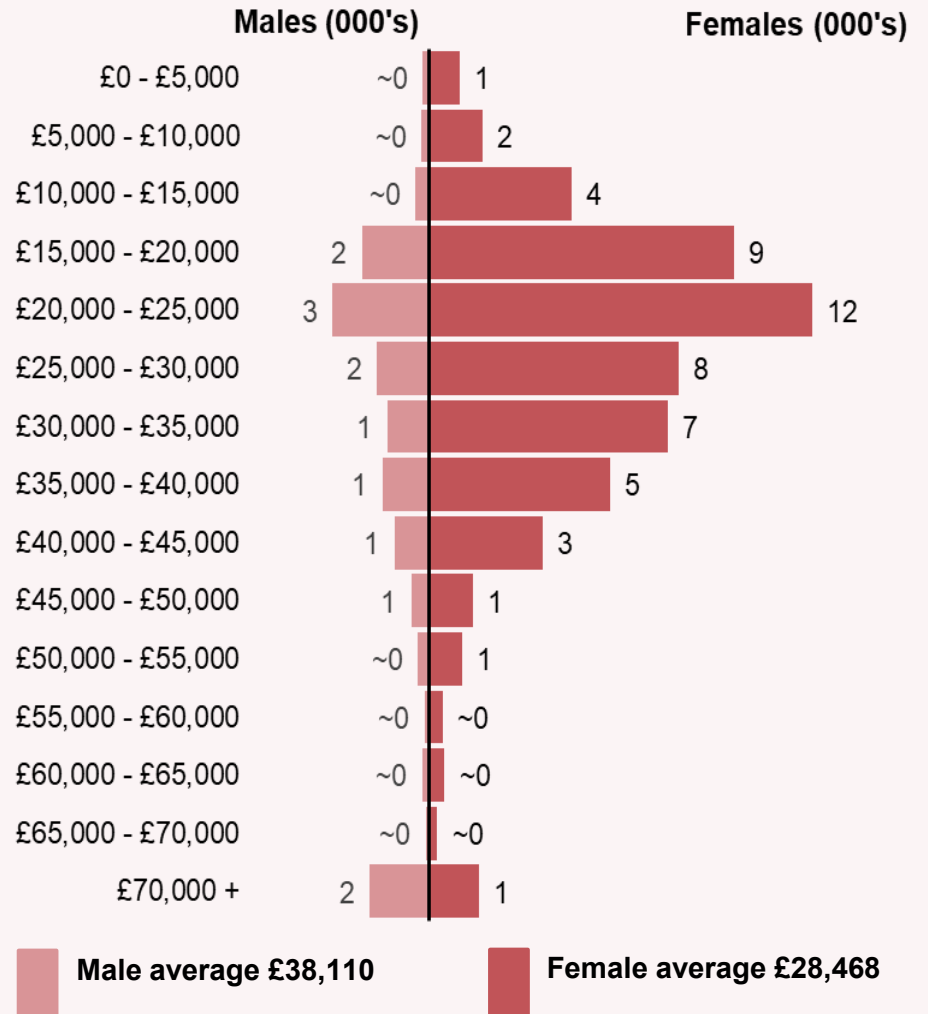
Actives data

As at 31 March 2020

Summary statistics



Actual pay distribution



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Pension amount includes the April 2020 pension revaluation
 *Average is only for members who have post reform CARE pension

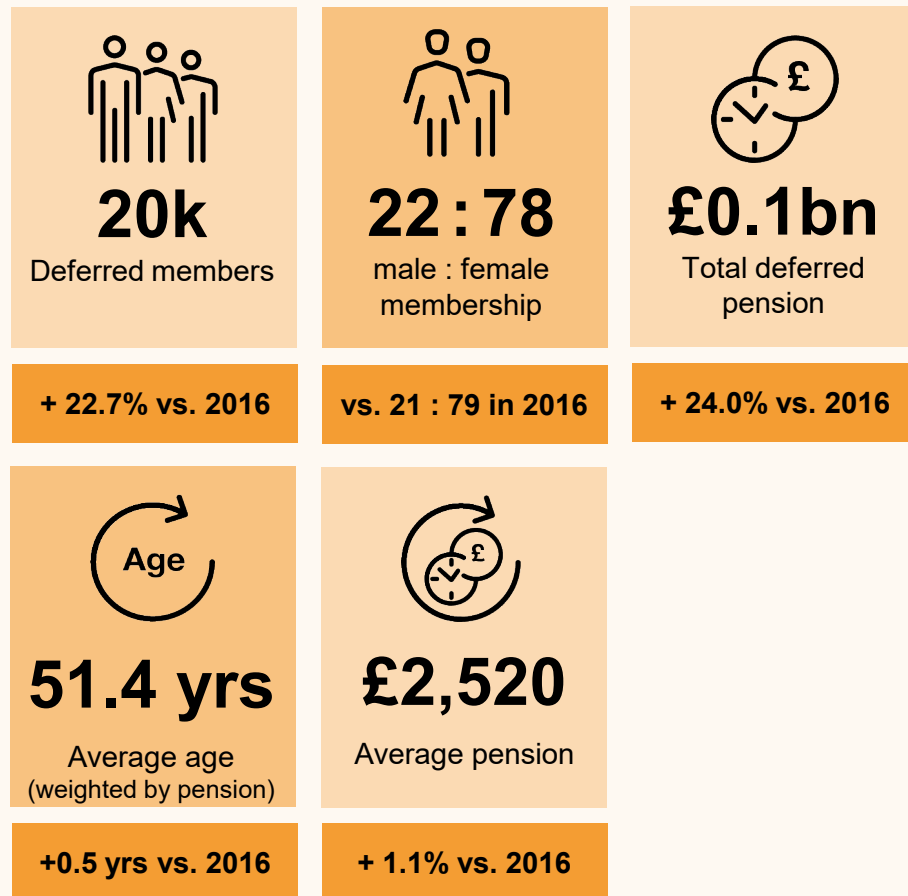
Defferreds



Deferreds data

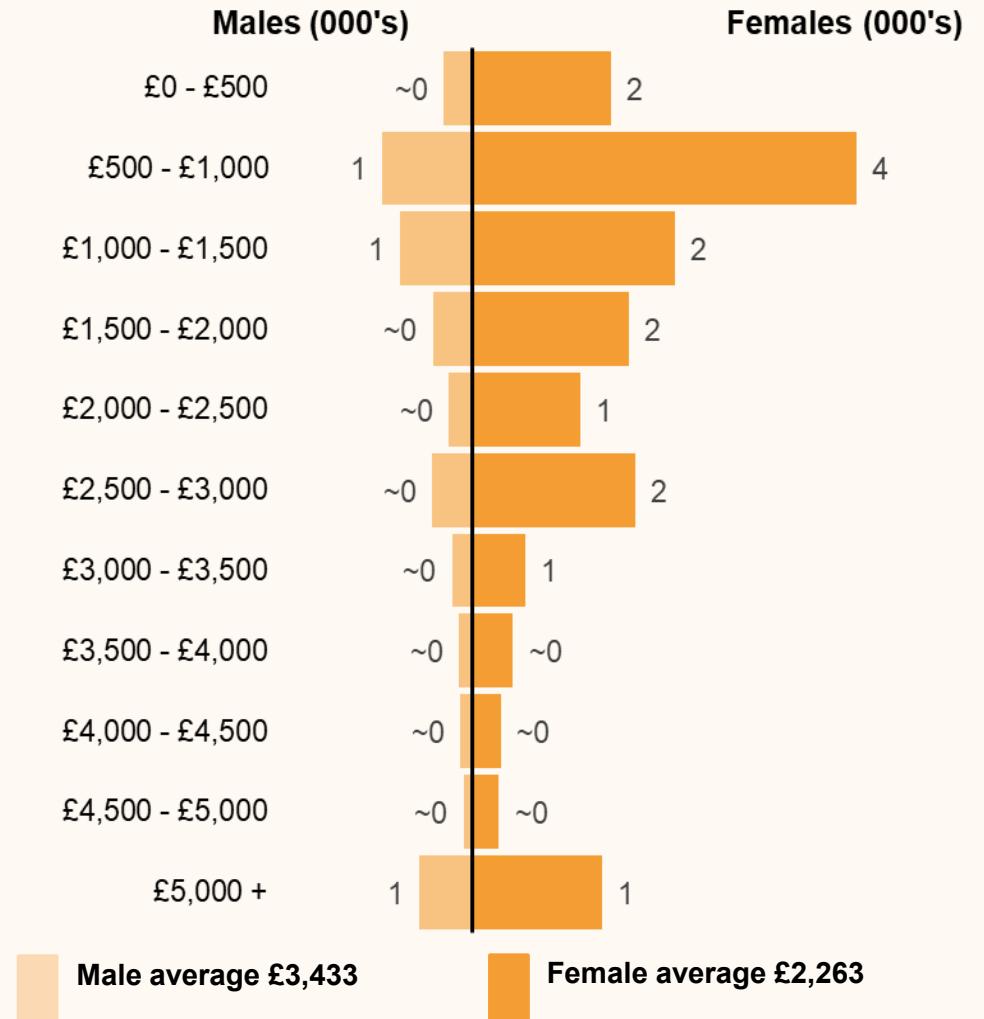
As at 31 March 2020

Summary statistics



Pension amount includes the April 2020 pension increase

Deferred pension distribution



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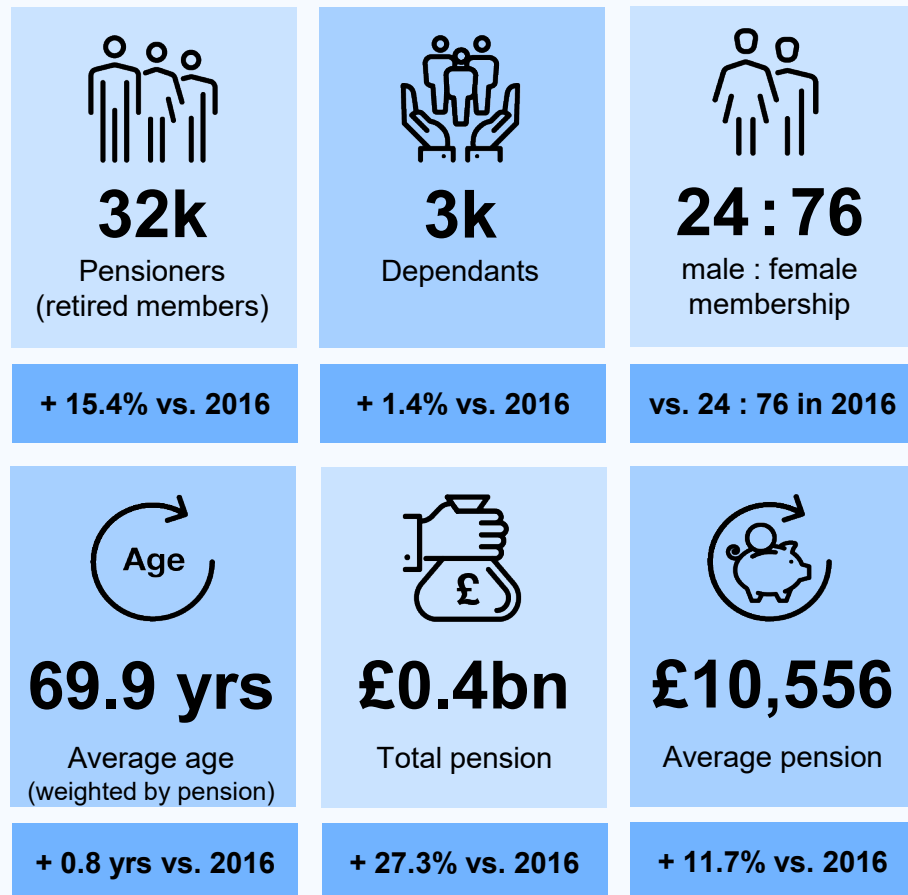
Pensioners



Pensioner data

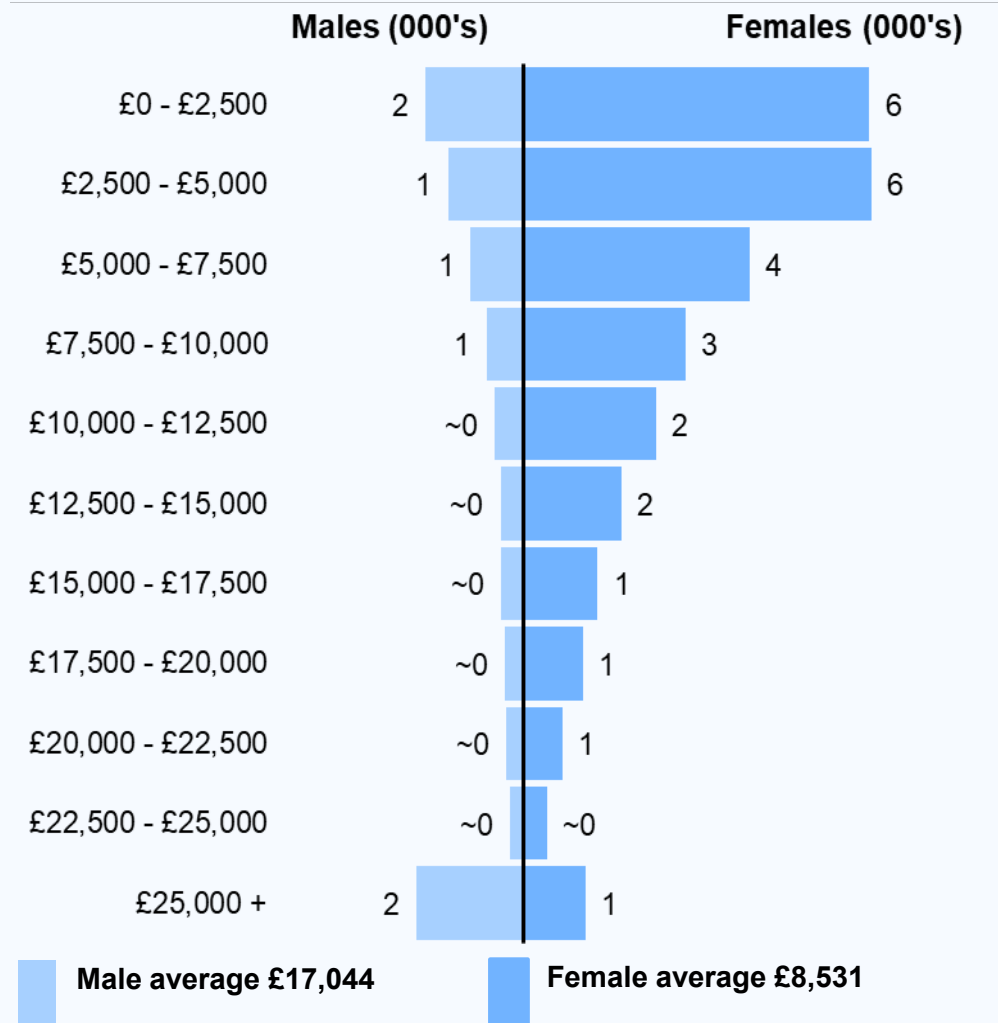
As at 31 March 2020

Summary statistics



Pension amount includes the April 2020 pension increase

Pensioner data pension distribution



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Pensioner membership

As at 31 March 2020

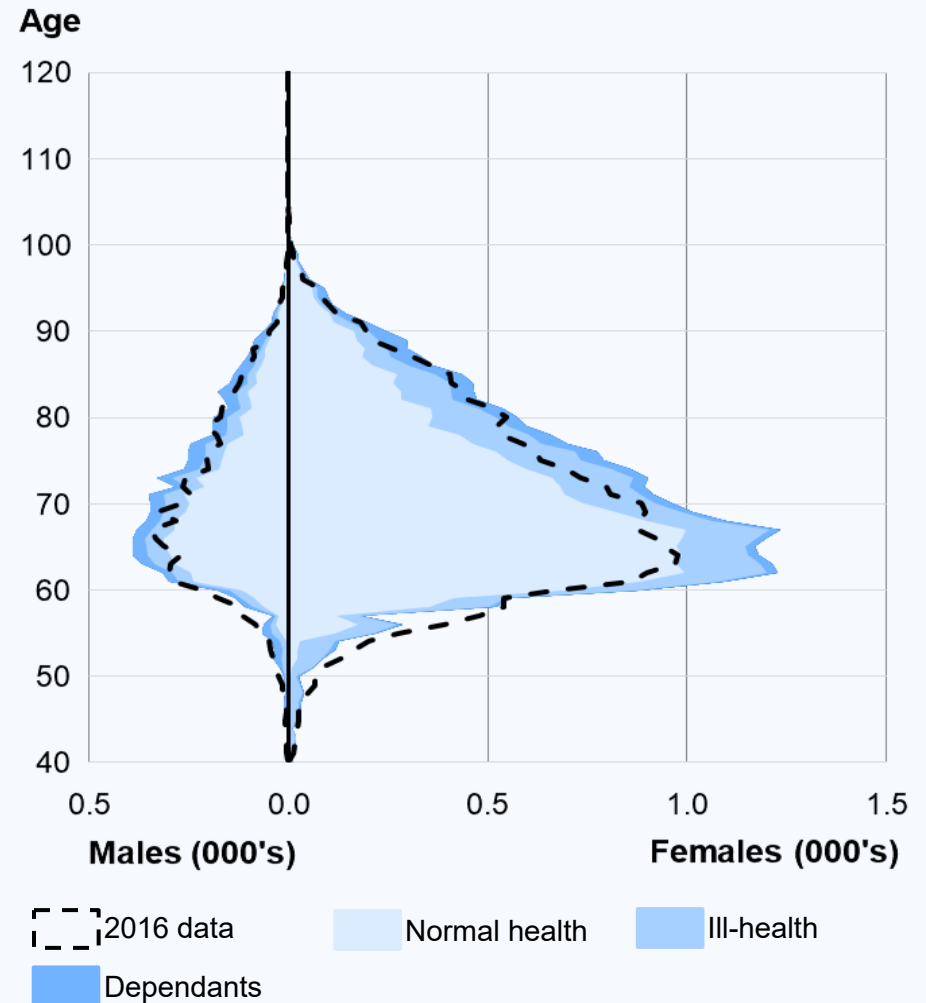
Membership distribution*

The chart sets out the pensioner membership distribution across the normal health retirements, ill health retirements and dependants.

This chart shows the significant increase in the pensioner membership since the 2016 valuation.

Where can I see more?

[Appendix C – Tables of summary statistics](#)



*This chart does not show members aged below 40 years.

Appendix B

Checks, adjustments and uncertainties



Checking and adjustment process



1. Data received

Our work starts when schemes provide data. This is collated and processed to remove any unnecessary personal information and to encrypt any personal information that needs to be retained.

All member data provided and discussed in this report was supplied to GAD by the scheme administrator, HSC BSO.

2. Aggregate checks and reconciliations

Initial checks carried out on the data are at an overall level, as opposed to an individual record basis.

Any unexpected changes compared to previous datasets are identified.

The data provided is then reconciled against that from a separate source (e.g. scheme resource accounts) to check for any potential issues.

3. 'Record by record' checks and adjustments

If the data passes our initial checks, we then undertake a series of automated, record-by-record checks to remove records that are deemed unreliable. For example, duplicate records, or those with missing key data. Where individual records are excluded, remaining records with similar characteristics are typically rated up to compensate for this, where appropriate.

4. Liability reconciliation

At the final checking stage, we use the adjusted data to calculate actuarial liabilities and reconcile them against those calculated in 2016, adjusted for cashflow information.

5. Final data, ready for use

After completion of checks and adjustments, the dataset is ready for calculating valuation results. We then decide whether, in our opinion, it is fit for the purpose of making decisions based on the valuation results.

If we notice significant issues at any stage of our checking process, we request new or additional data from the scheme administrator in order to correct or allow for them.

‘Record by record’ checks and adjustments

Process, limitations & uncertainty

We exclude individual records that have missing or unreliable key data and rate up similar remaining records to replace them, where appropriate.

This process assumes that the membership profile of excluded records is consistent with the profile of the similar reliable records. However, to the extent that this is not the case, there is a degree of uncertainty in the valuation results. Further details are set out in the section of this appendix titled ‘Residual Data uncertainty’.

Overall, we believe this is a reasonable approach to take given the scarcity of alternative information.

Top 3 reasons for excluding records*

10,500	Actual pay not in acceptable range (<u>rate up</u> applied)
9,500	FTE pay not in acceptable range (<u>rate up</u> applied)
7,000	Post-2015 pension zero or missing for unprotected or new members (<u>rate up</u> applied)

* Some members may fail more than one exclusion check. Only one exclusion will apply in such cases. As a result, the total number of members failing a check can exceed the number of exclusions.

Summary of excluded records

14,500 Actives excluded 19.5% of total records	8,500 Deferreds excluded 45.5% of total records	<500 Pensioners excluded 1.0% of total records
A <u>rate up</u> was applied for 72% of the excluded active records	A <u>rate up</u> was applied for 56% of excluded deferred records	A <u>rate up</u> was applied for 99% of excluded pensioner records

Further information

Noting the not insignificant residual concerns with the scale of exclusions and uprating, even after receiving supplementary data, we recommend further work is undertaken to improve the data and extraction process for future valuations. We have already engaged with the Department of Health and the scheme administrator to discuss improvements for these future submissions. We understand a program of work has been identified which seeks to improve the data accuracy and completeness for the next valuation.

Liability reconciliation

Summarised results

At the final data checking stage we carry out the following reconciliation.

Reconciliation against 2016 valuation results

This step assesses the expected versus calculated value of the scheme's actuarial liability as at 31 March 2020. The expected liability is calculated by adjusting the 2016 liabilities for cashflow information from the scheme's resource accounts, allowing for known pension increases and salary awards since 2016. Differences between expected and calculated liabilities could imply missing or incorrect data.

When this reconciliation was first completed we were unable to reconcile the liabilities. This led us to identify the differences in the reckonable service calculations between 2016 and 2020 for around 8,500 members. HSC BSO confirmed that we should use the pensionable service calculations from the 2020 data.



This check is within our tolerance levels.

Tolerance levels and uncertainty

All reconciliations have a **tolerance level**, within which we accept any differences and move on. Our tolerance levels vary between checks, depending on the level of accuracy we believe appropriate.

If differences fall outside of the acceptable tolerance levels, further investigations are carried out before deciding whether to accept, adjust, or reject the data provided.

Limitations

The results of these checks are heavily dependent on the accuracy and completeness of the information contained in the scheme's published resource accounts as at 31 March 2017, 2018, 2019 and 2020.

If any of this information is materially inaccurate the results of our checks will also be inaccurate. We believe this is a low risk, as the scheme's accounts have been audited.

Other non-standard adjustments

Summary

In addition, we sometimes make adjustments to data provided to correct known data issues.

We only do this when requested, and when it is more efficient for us to make simple changes than to request new data from administrators.

The key adjustments we have made for HSCPS are detailed below.

Actives:

- Member scheme has been assigned depending on the valuation group provided (where 2008 valuation group populated, then assigned to 2008 scheme, then 1995, then 2015).
- Scheme corrections have been made for 2008 and 2015 scheme members who have been incorrectly identified as mental health and special class officers.
- For members with Officer and Practitioner service, the reckonable service is calculated by summing the 1995 and 2008 components of reckonable service. This calculation is further adjusted by capping reckonable service at 45 years.

Deferreds:

- Member scheme has been assigned depending on the valuation group provided (where 2008 valuation group populated, then assigned to 2008 scheme, then 1995, then 2015).
- Pension amounts provided for all members have been revalued to include increases from the date of leaving to the valuation date (up to and including the 2020 pension increase).

Pensioners:

- Date pension commenced is based on earliest populated field (if 1995 populated, then this date is used, followed by 2008 and 2015 commencement dates where applicable).

Limitations and uncertainty

The extent to which the true data differs from the adjusted data we use in our calculations creates a degree of **uncertainty** in the valuation results. More details are set out in the section of this appendix titled 'residual data uncertainty'.

Supplementary data

Summary

On initial receipt we identified multiple errors and omissions in the data supplied. These mainly related to the Active and Deferred membership. We concluded it was not feasible to progress the valuation using this initial data without further improvements.

We have engaged with the administrator to rectify the most critical issues through the receipt of supplementary data files, which GAD used to carry out additional data processing.

Further active data

The main changes to the active data in the data processing were as follows:

- Addition of around 8,000 additional records
- Revised calculation of actual pay using additional salary information
- Removing active records where HSC BSO identified that the record was not in the scheme at the valuation date

Deferred data

Almost 7,000 deferred records were found to have missing or zero deferred pension. HSC BSO confirmed this is because deferred member records are classed as “undecided leavers” for 5 years after leaving, as members can return to active service within this time and link benefits to their previous service. Deferred pension is not calculated until 5 years after date of leaving.

We account for missing deferred/undecided leaver members by using a global uprate to the deferred processing.

Pensioner data

No processing changes were made to the pensioner membership.

It should be noted that a significant number of adjustments have been applied, with some 20% or so records not being directly usable.

It has not been possible to fully reconcile the data provided for the 2020 valuation with that from the 2016 valuation. Reckonable service data changed between 2016 and 2020 and we could not undertake an analysis of experience for active or deferred members.

Residual data uncertainty

Summary

The previous sections of this appendix have described the checks and adjustments made to the data to ensure it is fit for the purpose of calculating valuation results.

However, there are risks that the adjustments we have made do not truly represent the underlying data of the scheme, or that the data provided did not truly represent the underlying data of the scheme and we have not made the necessary adjustments to ensure that it does.

Potential impact on valuation results

We are comfortable that the checks and adjustments that have been made are reasonable and that the data is appropriate for the purpose of the 2020 valuation. Although the uncertainty that exists could impact on the employer contribution rate result, we have agreed with the Department of Health that the valuation should proceed. The uncertainty in the results is such that:

- Employer contribution rate: The uncertainty will be captured together with other experience and changes through the 2024 (or subsequent) valuations and the impact could be $\pm 1\%$ of pensionable pay or potentially more.
- Member Outcomes: No impact expected



After making necessary adjustments detailed in this report, and following discussions with the scheme manager, we conclude that the data is appropriate for the purpose of the 2020 HSCPS valuation. However, a different approach to adjusting data could still lead to different valuation results.

Appendix C

Tables of summary statistics



Summary statistics – introduction

Categorisation

The membership data in this appendix is categorised by section. Where applicable, members are assigned to the legacy section that they have already accrued benefits in, even if they have now started to accrue benefits in the reformed scheme. This means that:

- Members who have legacy benefits only as at 31 March 2020 will be categorised under their respective legacy section.
- Members who have a combination of legacy and reformed benefits as at 31 March 2020 having transitioned from a legacy to reformed scheme will be categorised under their respective legacy section.
- Members who have reformed benefits only as at 31 March 2020 will be categorised under the reformed scheme.

All members accrue benefits in the reformed section from 1 April 2022.

Interpretation

This rest of this appendix summarises the scheme data, after adjustments, into a series of tables. An example is shown below.

The first number in each section of the table, in bold text, shows data as at 31 March 2020. The second number, in standard text, shows the change from data as at 31 March 2016 to data as at 31 March 2020.

Positive changes show increases between 2016 and 2020 and negative changes show decreases.

Example table

Section	Males	Females	Total
Legacy section 1	100 +10	100 +10	200 +20
Legacy section 2	100 +10	100 +10	200 +20
Reformed section	100 +10	100 +10	200 +20
All sections	300 +30	300 +30	600 +60

Summary statistics – actives 1

As at 31 March 2020

Number of members (000's)

Section	Males	Females	Total
1995 Section	7	28	35
	- 1	- 4	- 6
2008 Section	4	15	19
	+ 0	+ 1	+ 1
2015 Scheme	4	12	16
	+ 3	+ 10	+ 13
All sections	14	56	70
	+ 2	+ 7	+ 8

Average age* (years)

Section	Males	Females	Total
1995 Section	49.9	49.4	49.5
	+ 1.6	+ 1.9	+ 1.9
2008 Section	41.4	39.8	40.2
	+ 2.9	+ 2.8	+ 2.9
2015 Scheme	36.7	34.8	35.2
	+ 2.2	+ 0.3	+ 0.8
All sections	45.7	44.5	44.8
	+ 1.5	+ 0.7	+ 0.9

* Weighted by actual pay

The first number in each section of the table, in bold text, shows data as at 31 March 2020. The second number, in standard text, shows the change from data as at 31 March 2016 to data as at 31 March 2020.

Positive changes show increases between 2016 and 2020 and negative changes show decreases.

Summary statistics – actives 2

As at 31 March 2020

Total full-time equivalent pay (£m pa)

Section	Males	Females	Total
1995 Section	333 - 7.7%	1,054 - 1.9%	1,386 - 3.4%
2008 Section	144 + 23.6%	490 + 36.6%	634 + 33.5%
2015 Scheme	104 + 454.5%	337 + 538.8%	441 + 516.6%
All sections	581 + 17.2%	1,881 + 26.6%	2,461 + 24.2%

Total actual pay (£m pa)

Section	Males	Females	Total
1995 Section	327 - 7.3%	915 + 0.4%	1,243 - 1.8%
2008 Section	134 + 27.7%	409 + 38.1%	544 + 35.3%
2015 Scheme	86 + 432.1%	265 + 532.3%	351 + 504.3%
All sections	548 + 15.5%	1,589 + 27.1%	2,138 + 23.9%

Summary statistics – actives 3

As at 31 March 2020

Average full-time equivalent pay (£ pa)

Section	Males	Females	Total
1995 Section	50,834 + 9.6%	37,130 + 13.3%	39,699 + 12.2%
2008 Section	34,453 + 22.8%	32,110 + 24.6%	32,613 + 24.1%
2015 Scheme	28,411 + 16.2%	27,638 + 28.9%	27,817 + 25.5%
All sections	40,362 + 3.3%	33,685 + 11.5%	35,053 + 9.4%

Average actual pay (£ pa)

Section	Males	Females	Total
1995 Section	50,028 + 10.1%	32,253 + 15.9%	35,584 + 14.1%
2008 Section	32,268 + 26.8%	26,830 + 25.9%	27,996 + 25.8%
2015 Scheme	23,510 + 11.5%	21,709 + 27.6%	22,127 + 23.0%
All sections	38,110 + 1.8%	28,468 + 11.9%	30,443 + 9.1%

Summary statistics – actives 4

As at 31 March 2020

Average reckonable service* (years)

Section	Males	Females	Total
1995 Section	16.4 + 0.1	13.7 - 3.1	14.2 - 2.4
2008 Section	3.2 - 1.8	2.8 - 3.2	2.9 - 2.7
2015 Scheme	- -	- -	- -
All sections	11.1 - 0.3	9.8 - 2.9	10.1 - 2.1

*2020 service is unweighted and shown for final salary sections only. Conversely, service shown in the 2016 data report was weighted by full time equivalent pensionable pay. As a result, a direct comparison with the 2016 data report is not possible.

Total post-reform CARE pension# (£ m)

Section	Males	Females	Total
1995 Section	23 + 692.8%	60 + 599.6%	83 + 623.0%
2008 Section	10 + 538.2%	32 + 564.5%	42 + 557.9%
2015 Scheme	4 + >1000%	13 + >1000%	17 + >1000%
All sections	37 + 700.8%	105 + 662.5%	142 + 672.2%

Pension amount includes the April 2020 revaluation

Summary statistics – deferreds 1

As at 31 March 2020

Number of members (000's)

Section	Males	Females	Total
1995 Section	3	12	15
	+ 0	+ 1	+ 2
2008 Section	1	3	4
	+ 0	+ 1	+ 1
2015 Scheme	~0	1	1
	+ 0	+ 1	+ 1
All sections	4	16	20
	+ 1	+ 3	+ 4

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Average age* (years)

Section	Males	Females	Total
1995 Section	54.0	52.8	53.1
	+ 0.9	+ 2.0	+ 1.7
2008 Section	43.4	45.3	44.8
	- 4.0	- 1.5	- 2.1
2015 Scheme	36.6	34.3	35.0
	-	-	-
All sections	52.2	51.1	51.4
	+ 0.1	+ 0.8	+ 0.5

* Weighted by pension

The first number in each section of the table, in bold text, shows data as at 31 March 2020. The second number, in standard text, shows the change from data as at 31 March 2016 to data as at 31 March 2020.

Positive changes show increases between 2016 and 2020 and negative changes show decreases.

Summary statistics – deferreds 2

As at 31 March 2020

Total deferred pension* (£m pa)

Section	Males	Females	Total
1995 Section	13 + 19.7%	29 + 12.6%	42 + 14.7%
2008 Section	2 + 40.1%	6 + 88.0%	8 + 72.8%
2015 Scheme	0 -	1 -	1 -
All sections	15 + 25.0%	36 + 23.6%	52 + 24.0%

Average deferred pension (£ pa)

Section	Males	Females	Total
1995 Section	3,967 + 3.8%	2,402 - 90.8%	2,733 - 87.3%
2008 Section	2,505 + 16.5%	2,257 + 49.9%	2,316 + 39.2%
2015 Scheme	899 -	732 -	775 -
All sections	3,433 - 1.7%	2,263 + 1.8%	2,520 + 1.1%

* Pension amount includes the April 2020 [pension increase](#)

Summary statistics – pensioners 1

As at 31 March 2020

Number of members (000's)

Type	Males	Females	Total
Normal health	6	19	25
	+ 1	+ 4	+ 5
Ill-health	1	6	7
	- 0	- 0	- 0
Dependants	1	2	3
	+ 0	- 0	+ 0
All sections	9	27	36
	+ 1	+ 3	+ 4

Average age* (years)

Type	Males	Females	Total
Normal health	71.2	69.1	70.0
	+ 0.7	+ 0.3	+ 0.4
Ill-health	69.2	68.2	68.5
	+ 2.3	+ 2.2	+ 2.2
Dependants	63.7	76.0	73.4
	+ 4.5	+ 1.3	+ 1.4
All sections	70.8	69.4	69.9
	+ 1.1	+ 0.7	+ 0.8

* Weighted by pension

The first number in each section of the table, in bold text, shows data as at 31 March 2020. The second number, in standard text, shows the change from data as at 31 March 2016 to data as at 31 March 2020.

Positive changes show increases between 2016 and 2020 and negative changes show decreases.

Summary statistics – pensioners 2

As at 31 March 2020

Total pension* (£m pa)

Type	Males	Females	Total
Normal health	123 + 24.0%	173 + 41.5%	296 + 33.6%
Ill-health	18 + 0.6%	45 + 9.6%	63 + 6.9%
Dependants	4 + 38.9%	15 + 8.8%	19 + 14.1%
All sections	145 + 20.9%	233 + 31.6%	378 + 27.3%

Average pension (£ pa)

Type	Males	Females	Total
Normal health	21,652 + 5.2%	8,905 + 13.6%	11,793 + 8.7%
Ill-health	12,885 + 11.2%	7,519 + 13.5%	8,533 + 12.1%
Dependants	2,814 + 18.7%	7,870 + 18.2%	5,688 + 12.5%
All sections	17,044 + 7.7%	8,531 + 14.9%	10,556 + 11.7%

* Pension amount includes the April 2020 pension increase

Appendix D

Glossary



Glossary 1

Actuarial liability

The monetary amount assessed, in today's terms, as being required to meet all future payments due in respect of current benefit entitlements. It is dependent on assumptions about future financial conditions and membership changes.

CARE

CARE stands for Career Average Revalued Earnings and refers to a methodology whereby earnings over a member's working lifetime in the scheme are used in the calculation of their benefits in the reformed scheme (referred to as the 2015 Scheme in this report).

Cost cap cost

A way of measuring the cost of benefits being provided from the 2015 scheme, which is then compared to a 'target cost'. The HSCPS target cost is set at 11.6% of pay.

If the results of the valuation show that the cost cap cost is more than 3% of pensionable pay away from the target cost, and the cost of the scheme still results in a breach once the impact of the economic check is taken into account, changes must be made to the 2015 scheme (e.g., to the benefits provided) to bring the cost cap cost back to the target cost.

Directions

A document published by Department of Finance and referred to in The Public Service Pensions Act (Northern Ireland) 2014, which sets out the process and requirements for carrying out valuations, including the results which need to be disclosed.

Directions were first published in 2014 and have been amended several times since then.

Employer contribution rates

The percentage of scheme members' salaries which employers are required to pay in order to:

- meet the costs of benefits currently being built up by active members
- make good any shortfall in the notional amounts set aside to cover benefits already built up.

The result is heavily dependent on assumptions about future financial conditions and membership changes.

McCloud

McCloud refers to a legal judgment made in December 2018. The England and Wales Court of Appeal judgment upheld claims of age discrimination brought by some firefighters and members of the judiciary against 'transitional protection' rules. These rules determined the date on which some members would move between reformed and legacy sections of the scheme.

Glossary 2

Normal pension age

The age at which a member in normal health is entitled to unreduced benefits. This age varies in different scheme sections:

- Age 60 for (most) 1995 section benefits (1995 section)
- Age 65 for legacy 2008 section benefits (2008 section)
- State Pension Age (SPA) (ie currently ages 65 to 68 depending on date of birth) for the reformed scheme benefits (2015 scheme).

Pension increase

Public service pensions are increased under the provisions of the Pensions (Increase) Act 1971 and Section 59 of the Social Security Pensions Act 1975.

Pension revaluation

The rate at which the CARE pension is revalued each year a member is an active member.

Professional actuarial requirements

The professional requirements that we have complied with when completing this actuarial valuation include:

1. Technical Actuarial Standards: TAS 100 and TAS 300, issued by the FRC
2. The Actuaries' Code, issued by the Institute and Faculty of Actuaries (IFoA)
3. The Civil Service Code.

GAD is also accredited under the IFoA's Quality Assurance Scheme. More details can be found in our terms of reference.

Glossary 3

Rate up

A term used to refer to any multiplicative adjustments made to data in order to correct for known issues. For example, if it appears that a group of members have been omitted from the data we've received and salaries are understated by 2% as a result, we might apply a 'rate up' of 2% to the salary data we actually hold as a correction. Although the term 'rate up' implies an increase, we might also 'rate down' if appropriate to do so.

Reformed scheme and legacy sections

The reformed scheme that was set up in line with The Public Service Pensions Act (Northern Ireland) 2014, and which came into force on 1 April 2015 (referred to as the 2015 scheme in this report). All non-reformed sections are known as legacy sections of the legacy scheme. This terminology is used in the McCloud judgment.

Section

The membership data in Appendix C is categorised by section. Members who have legacy and reformed benefits, or legacy only benefits, will be categorised under the legacy section. Members who have reformed benefits only will be categorised under the reformed scheme.