Annex B -Fair Cost of Care Exercise: Domiciliary Care

1. Introduction

This report covers analysis of data collected from Homecare providers for the Fair Cost of Care exercise. Whilst it may inform such, it is not a fee setting exercise. There are a number of reasons why a median cost of care taken from this exercise may not form an appropriate fee, or even a sustainable fee rate for individual providers. When setting fees, particular circumstances of the provider may need to be taken into account.

In particular, there may be differences for providers which deliver primarily either urban or rural care. There may be economies of scale for larger providers which are not accessible to smaller organisations. Certain organisations may provide a level of specialist – and hence more expensive – care which is not provided by other organisations. In addition, there may be a need to provide short notice/last resort care and this is, by necessity, more expensive to provide.

Wirral MB Council commissioned CIPFA C.Co Ltd (C.Co) to support with the data analysis required as part of this exercise.

2. Provider Engagement

Council Officers engaged with care home and domiciliary care providers through its established provider forums in June, July and August of 2022. Officers have engaged directly with Care England (an organisation who represents care home providers) on two occasions between April and June. Officers have also sent out both group and individualised communications to care providers to encourage and support completion. C.Co also offered group and individual sessions on completion of the tools in June and July 2022.

3. Data Collection

Domiciliary data collection was done using the standard Homecare Cost Toolkit developed by ARCC Consulting. Five returns were received from the 25 providers with whom Wirral Council contract, a return rate of 20%. This is a small sample in terms of provider numbers which has potential to distort results. However, we take significant reassurance from the fact that 47% of our current domiciliary commissions are delivered by the 5 providers who submitted responses.

Providers were asked to supply cost data as of April 2022. This should therefore have included:-

- National minimum wage (NMW) at £9.50, giving a minimum carer hourly rate of at least £9.50 (Anything this low should be flagged for review given the Council's commitment to real Living Wage, RLW of £9.90)
- Employer's national insurance threshold of £9,100
- Employer's national insurance percentage of 15.05%
- The effects of inflation as at April 2022

4. Common Errors

Each return was checked both for obvious errors and for areas where the data seemed out of line with other returns. Providers were given the opportunity to provide corrections. Common issues included:

- Apparently high or low mileage per hour
- Excessively high or non existent PPE costs
- Incorrect Employer's NI Threshold used
- Incorrect holiday on cost percentage (below the national minimum which equates to 12.07%)
- Excessive or non existent training days per employee
- Incorrect calculations of FTE for back office staff/no entries
- Blank entries where data was required for calculations

In addition the master data collection form contained an error relating to the calculation of Employer's NI contributions. A correction for this error was later agreed with Care England, and had to be applied to all returns.

5. Corrective Action

All returns were recalculated, ensuring the correct Employer's NI threshold and rates, along with the agreed calculation correction. Where responses had been received from providers the corrected figures were incorporated in the recalculations.

Where no response was received from the provider, action was taken as follows:

- if the correction was obvious (e.g. holiday percentage oncost) then the correction was made and the data included in analysis.
- If the issue was plausible, (e.g. low mileage per hour, or no payment for travel time) it was assumed to be correct
- Failing either of the above scenarios, the data for that element of costs was excluded from the analysis.

6. Range of Returns

Once corrected, the returns gave a range of figures for total cost per care hour from £20.96 to £28.98 as shown in the graph below.



7. Conceptual Data Analysis

The government guidelines require the assessment of the lower quartile, median and upper quartile figures for a range of cost areas which make up the overall cost of homecare per hour care provided. However, there are certain mathematical issues with this approach. In particular, adding up the median figures for each cost area will give a different total median cost than taking the median of the total cost for each individual return.

Using the corrected data as an example the table below shows a considerable variance in the median cost of care per hour depending on the approach taken. Note that how outliers are treated depends on the approach taken.

	Lower		Upper
	Quartile	Median	Quartile
	£ per care	£ per care	£ per care
	hour	hour	hour
Option 1 : Figures taken from the totals of			
each individual return	22.24	24.62	24.98
Option 2 : Figures taken from the sum of three			
key categories	20.88	22.40	25.64
Option 3 : Figures taken from the sum of each			
defined cost area	20.81	22.37	26.15
Option 4 : Recommended approach to the			
Median	20.37	22.29	26.46

The first row of figures takes the median of the total cost per hour from each return. The second row of figures adds together the median of the three key cost areas from each return – careworker costs, business costs, return on operations. The third row of figures is the sum of the median for each cost category as defined by Annex A, Section 3 of the government guidance.

However, there is a further approach, which is likely to :

- minimise the impact of outliers and inaccurate data issues
- reflect the actual cost drivers
- allow for easy updating of the results as driver data (such as Employer's NI rates and thresholds) changes

- allow an authority to incorporate matters of principle (such as NLW, RLW) into the calculations
- is consistent with the UKHCA approach to the calculation of hourly rates

This approach is shown as Option 4 on the above table.

Whilst it is recognised there are various approaches to calculating the median and the Department of Health and Social Care are not setting a prescribed approach, Option 4 is felt by Wirral Council to be the fairest and the most accurate representation of the submitted data. Therefore, this approach was adopted by Wirral as:

- It is consistent with the approach taken previously to informing care fee rate setting
- It is consistent with the approach taken to previous cost of care exercises within Wirral
- It minimises the impact of outliers and inaccurate data issues
- It reflects the actual cost drivers
- It allows for easy updating of the results as cost driver data changes (such as employers NI rates and thresholds)
- It allows an authority to incorporate matters of principle (such as NMW, RLW) into the calculations.

8. Recommended approach

The recommended approach to to calculating the median rate from the submissions is as follows (for median also read lower and upper quartiles).:

Careworker Costs

- a. Direct Care : This is a combination of the hourly rate paid to carers/senior carers/nurses etc and the proportion of hourly care provided by each grade of staff. A number of other care worker costs are derived from this figure. The recommendation is to use the median cost of direct care as taken from the data provided in the returns. This will incorporate both pay levels and the seniority level of care delivery.
- b. Travel Time : Whilst some providers do not pay travel time, the majority in this data collection exercise do pay for travel time. The recommendation is that the median travel time (in minutes) is used to calculate the cost of travel time from the hourly pay rate.
- c. Mileage : Use the median distance given by the returns multiplied by the median mileage rate from the returns.
- d. PPE : Use the median figures as given by the returns, with outliers and zeros removed.
- e. All non contact time : Use the median percentage oncost/statutory minimum percentage oncost multiplied by direct care/travel time costs as defined in the data collection tool. For training time, base this on the median days per full time employee, again as defined in the data collection tool. Where a provider has given figures for some of these categories but not all, it is assumed that the entry for the other categories is zero. Where a provider has not completed any categories, the provider has been removed from this element of the analysis.

- f. National Insurance : Calculate from first principles, assuming full time staff and April 2022 contribution rates and thresholds. This gives a higher figure than is likely, but gives a sufficient cost of care that providers are not constrained in employment options.
- g. Pension : Calculate from first principles, assuming a contribution rate of 3% and 100% take up. This gives a higher figure than is likely but again ensures that providers are not constrained in employment options.

Business Costs

It is recommended that the median figure for each element of the business costs is identified, with outliers removed, and all blanks treated as zeros. However, the median used for the Fair Cost of Care exercise should be the median of the totals from each return. This should minimise the impact of any differences in definition and how costs are treated by individual providers.

Return on Operations

Return on Operations is in fact defined as a percentage of the sum of careworker and business costs. Rather than using the median total figure from the data collected, it is more appropriate to identify the median percentage and apply this to the median totals identified above.

9. Summary Results

Using the recommended approach above gives the following figures:

	Lower		Upper	
Recommended Approach	Quartile	Median	Quartile	Sample Count
	£ per care	£ per care	£ per care	
	hour	hour	hour	
Careworker Costs				
Direct Care	10.26	10.38	10.58	5
Travel Time	1.34	1.39	1.72	
Mileage	0.63	0.79	1.34	
PPE	0.47	0.51	1.02	5
Training (staff time)	0.13	0.22	0.23	
Holiday	1.58	1.62	1.70	
Additional noncontact pay costs	0.00	0.00	0.00	
Sickness/maternity and paternity				
рау	0.35	0.46	0.58	
Notice/suspension pay	0.00	0.01	0.03	
NI (direct care hours)	0.84	0.86	0.89	
Pension (direct care hours)	0.31	0.31	0.32	
Total Careworker Costs	15.90	16.55	18.42	
Business Costs	3.87	4.88	6.79	5
Return on Operations	0.59	0.86	1.26	
Total Cost	20.37	22.29	26.46	
Underlying Data				
Careworker Basic Pay Per Hour £	9.90	10.00	10.05	5
Travel Time (minutes)	7.03	7.23	8.73	5
Miles Travelled	2.11	2.64	3.84	5
Mileage Rate (£)	0.30	0.30	0.35	5
Annual Training Days per FTE	2.3	4.0	4.0	5

Recommended Approach	Lower Quartile	Median	Upper Quartile	Sample Count
	£ per care	£ per care	£ per care	•
	hour	hour	hour	
Holiday % Oncost	12.07	12.07	12.07	Statutory
Additional noncontact pay %				
Oncost	0.00	0.00	0.00	5
Sickness/maternity and paternity				
pay % Oncost	2.73	3.54	4.30	5
Notice/suspension pay % Oncost	0.00	0.04	0.25	5
Employers NI Annual Threshold	9100	9100	9100	Statutory
Employers NI %	15.05	15.05	15.05	Statutory
Employers Pension %	3.00	3.00	3.00	Statutory
Return on Operations %	3.00	4.00	5.00	5

Where a provider has been excluded from a category their underlying data has also been excluded from the analysis. The adjusted table is shown below:

		Lower		Upper		
		Quartile	Median	Quartile	Minimum	Maximum
	Sample	£ per	£ per care	£ per care	£ per care	£ per care
Recommended Approach	Count	care hour	hour	hour	hour	hour
Carer basic pay per hour (£)	5	9.90	10.00	10.05	9.90	10.50
Minutes of travel per contact						
hour (mins)	5	7.03	7.23	8.73	4.46	12.60
Mileage payment per mile (£)	5	0.30	0.30	0.35	0.20	0.37
Total direct care hours per						
annum (Hours)	5	84,708	112,892	131,196	44,044	205,348

10. Visit Lengths

The returns show a range of visit lengths besides the common 15/30/45/60 minute visits. The table below shows the median and quartile weekly number of each of these four visit lengths which form the majority of visits both by number (99%) and by time (96%).

This table shows that the median provider is likely to provide around 774 15 minute visits, 2,675 half hour visits, 430 45 minute visits, and 135 hour long visits per week, along with a small number of visits of other lengths.

Visit Lengths	Sample Count	Lower Quartile	Median	Upper Quartile
		Visit Numbers	Visit Numbers	Visit Numbers
15 minutes	5	210	774	1,504
30 minutes	5	1,923	2,675	2,994
45 minutes	5	198	430	461
60 minutes	5	70	135	168

The table below shows the total number of visits and care hours by length across the sample returns.

Visit Longths	Total Number of Visits per week	Total Care Hours per week
	Visit	Week
	Numbers	Hours
15 minutes	4,182	1,046
30 minutes	14,549	7,275
45 minutes	1,826	1,370
60 minutes	923	923
Other Visit Lengths	134	507
Totals	21,614	11,119

This shows clearly that the vast majority of visits are 30 minutes long (65% to 67% depending on whether measured by care hours or number respectively). The next most common length is 15 minutes (9% or 19% by hours/numbers respectively), with a further 12% to 8% at 45 minutes (again hours/numbers respectively). This means that, whether measured by call numbers or hours of care, between 87% and 95% of calls are in the 15-45 minute length bracket. It is important to note that all 15 minute visits on behalf of the Council are paid as 30 minute visits.

The weighted average visit length is calculated by the data collection tool, and gives a median weighted average visit length of 32.1 minutes, which supports the total data shown above. The graph below, which shows the range of weighted average visit length also shows that, with minor exceptions, this pattern of delivery is likely common to most providers.



11. Careworker Costs

Careworker costs are significantly impacted by the basic hourly rate paid to careworkers. From the returns, all providers pay a minimum of £9.90 as a basic hourly rate rising to a maximum of £10.50. There will be providers who pay a higher rate but do not pay for travel time, although there are none in this particular sample. The pay cost per hour of direct care will be higher than the basic hourly rate as this will encompass some care provided by more senior staff at higher rates.

Careworker Basic Hourly Rate v Pay Cost per Direct Care Hour

The graph below compares the basic hourly rate with the pay cost per hour of direct care, using median figures from the recommended option.

The quartile and median positions are highlighted but this shows that most care is provided by careworkers rather than more senior staff. The median ratio between basic hourly pay and the pay cost per direct care hour is 3.8% higher than basic hourly pay.

Careworker costs are also impacted by travel time and mileage. It is not possible from the return data to identify a different travel time, distance and mileage cost for urban and rural providers. Miles travelled per hour of care ranges from 1 to 4 miles, with a median distance of 2.6 miles. The mileage rate paid ranges from £0.20 to £0.37, but the median figure is £0.30. Overall, travel costs in the returns range from £1.65 to £3.07 with a median figure of £1.98. However, calculating this from the median driver data gives a median figure in the recommended option of £2.12.

PPE costs range from £0.37 to more than £1.43 per hour using the data from the returns. The median figure is £0.51 per hour direct care.

Non contact oncosts range on the returns from £2.03 to £2.39 per hour, affected by sickness levels, and training provision, as well as other leave types, and pay rates. The median cash figure is £2.13 per hour overall, but this is calculated from the medians of the driver data in the recommended option to give a median figure of £2.31.

Overall, careworker costs from the returns range from £15.94 to £19.28 with a median of £16.59 as shown by the graph below. This graph also shows the median figure as calculated from the driver data, which is £16.55.



12. Business Costs

Many providers will define these costs differently. They will also experience different levels of expenditure on each cost area within business costs depending on their particular circumstances. For example, a member of a larger group may have group/head office costs, while an independent provider may have higher back office or professional support costs. Taking the totals from the returns (as used in the recommended option), shows a range from £3.73 to £11.65 per hour, with a median figure of £4.88.



13. Return on Operations

The returns asked for a percentage Return on Operations, which is normally calculated as a percentage of the total of Careworker and Business Costs. This is calculated based on the median percentage figure from the percentages returned by each provider. These range from 3% to 7% with a median figure of 4%.

14. Costs per visit type

It is not possible, given the data collected by this data collection tool, to fully separate out the costs for visits of different lengths. Logically, shorter visits will cost more per care hour. For example, travel distances, time and hence costs are not necessarily shorter for shorter visits, and so proportionately are more per care hour for shorter visits. Similarly, PPE costs will be greater per hour for shorter visits. These are the only two costs that can be separated out per visit rather than per hour to identify separate cost rates for shorter visits. Once these have been identified per visit, the median (and lower and upper quartile) figures can be applied to the calculation of a fair cost of care to identify the separate median costs for 15, 30, 45 and 60 minute length calls as required. These have been calculated using the relevant driver data and the same principles as the recommended option.

	Lower		Upper
Cost Per Call Length	Quartile	Median	Quartile
15 Minute Calls	5.02	5.49	6.53
30 Minute Calls	9.65	10.53	12.30
45 Minute Calls	14.28	15.57	18.07
60 Minute Calls	18.91	20.62	23.83
Per Care Hour	20.37	22.29	26.46

15. Summary

The Council has undertaken a transparent exercise with its domiciliary care provider market, and will need to ensure going forward best value and affordability. The council will take in to account any future funding allocations to support its journey towards a fair cost of care.