

# Chapter 1

## Renfrewshire Council Exploratory Project

### 1.1 Introduction

As described in Chapter ??, the Social Care Survey (SCS) is collected annually by the Scottish Government and provides a snapshot of individuals receiving social care in all 32 Scottish local authorities during a census week - usually including the date the 31st of March (Scottish-Government, 2017c). The cross-sectional nature of this administrative data means it does not identify every individual who receives social care in any given financial year. This has implications for the interpretation of research projects using the SCS and the statistical inferences that can be applied to the data when linked with other sources of information.

In order to gain a better understanding of the data the SCS captures (and the data it does not) an exploratory study was conducted to assess social care data for individuals from one local authority only. This project aimed to analyse complete data for all individuals over a ten-year period to assess the validity of the SCS as a representation of social care delivered in any given financial year. In particular, the exploratory analysis aimed to; quantify the proportion of home care users identified by the SCS in each year, identify what differences (if any) exist between home care packages captured and not captured by the census, and assess whether values captured by the SCS (i.e. the total hours of home care provided) are representative of care received by an individual throughout the year. Given intentions to amalgamate the SCS with administrative resources collected by ISD and move to a quarterly collection of data (ISD, 2017), the exploratory project also aimed to quantify the proportion of all individuals that would be identified by two, three, or four survey repetitions per financial year.

As social care data in Scotland has rarely been used for research purposes, this exploratory

project also offered the opportunity to assess the format, content, and suitability of the data from a research perspective. Ideally, data would be analysed from a number of local authorities for comparison. However, as described below, acquiring sensitive data of this nature is a lengthy and complicated process, relying heavily on the goodwill of the participating local authority. Despite early intentions to approach multiple local authorities, practical considerations limited the project to data collected from Renfrewshire Council.

SCS umbrella and breakdown with Renfrew data

## 1.2 Background

The decision to approach Renfrewshire Council as a potential source of data was due to convenience given previous cooperation between the council and UBDC on other projects. Another local authority was also approached but preliminary discussions suggested that whilst the purpose of proposed research was supported, the council was unlikely to be able to provide sufficient resource to facilitate data sharing. Preliminary meetings with data analysts from Renfrewshire council confirmed that data could be provided to facilitate the proposed research and the formal process of obtaining data using UBDC's controlled data service was instigated in April 2016.

Renfrewshire Council area accounts for 3.2% of the total population of Scotland and has a similar proportion of individuals aged over 60 compared to the rest of the country (24.4% v 24.2%) (NRS, 2015). The mortality rate is very slightly higher than recorded for the rest of Scotland (10.9% v 10.3%) with the main causes of death being cancer, circulatory diseases, and respiratory diseases (NRS, 2015). Life expectancy at birth is lower than the Scottish average for both males and females (75.9 v 77.1 & 80.6 v 81.1) (NRS, 2015). Sixty-three percent of dwellings in Renfrewshire fall into the lowest council tax bands A-C (NRS, 2015) which is a higher than the ratio seen in the whole country (61%) (NRS, 2016). Of all datazones in the Renfrewshire Council area, 37.3% fall into the most deprived 30% of Scottish datazones - the ninth highest rate out of all 32 local authorities (Scottish-Government, 2017a). Datazones in the area show marked differences in SIMD scores with some of the most and least deprived datazones in the whole of Scotland and a spread of urban and rural neighbourhoods (Scottish-Government, 2017a).

In terms of social care, the 2017 SCS (Scottish-Government, 2017b, supp.charts) shows that the proportion of over 65s receiving home care provided or administered by Renfrewshire dipped a little between 2011 and 2015 but has nearly returned to 2010 levels (52.4 per thousand in 2010, 49.4 per thousand in 2017). Historically, this is lower than levels seen across Scotland as a whole, although national levels are now very similar to those seen in

Table 1.1: Definitions of home care types

Type of home care	Definition
Care at Home (Mainstream)	The aim of care at home is to help vulnerable people of all ages live independently and securely in their own homes by providing personal and housing support services. Care at home services are provided very much on each individual's own circumstances and needs.
Reablement	Provides support and encouragement to help keep up or increase the skills and confidence needed to be able to return home after a stay in hospital or after an illness. Most people referred for care at home will receive a reablement service in the first instance to help support and improve independence. Long term services can be provided following reablement if ongoing support is needed.
Rapid Response	
Community Mental Health	
Extra Care Housing	
Housing Support	
Overnight Services	

Renfrew (60.8 per thousand in 2010 to 48.9 per thousand in 2017). The absolute numbers of over 65s receiving home care in Renfrewshire in the 2010 census week was 1812 versus 1603 in the 2017 census (Scottish-Government, 2017b, supp.charts).

More recent versions of the SCS collect information on home care (such as personal care or reablement), housing support and meals services provided during the census week. In addition, data on services such as community alarm, telecare, social worker, and self-directed support that are provided at any time during the financial year is also collected (Scottish-Government, 2017b). The purpose of the exploratory project was to compare service provision of those services collected in the census week. As the vast majority of this data is focussed on home care services, the analysis concentrates on this service only. Home care refers to services received in the home such as personal care or reablement (described in section ?? and summarised in table 1.1).

### 1.2.1 Research Questions

- To what extent does SCS data capture the distribution of individuals receiving home care across each financial year?
- Are there differences in the types of home care package that are/are not captured by the census? Do these differences vary by age or gender?
- For packages that *are* captured by the SCS, is the value of total hours of home care received reflective of the total hours of home care received in the previous and following six months?
- What proportion of the total amount individuals receiving home care would be captured if more than one census was conducted in each financial year?

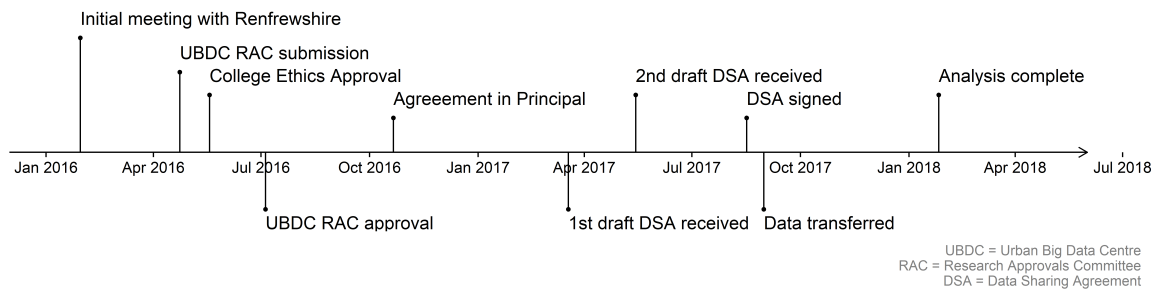
## 1.3 Methods

### 1.3.1 Project approvals and timeline

The exploratory project utilised the controlled data service provided by UBDC and therefore required approval from UBDC’s Research Approvals Committee (RAC). This process is more fully explained in section ?? Approval from RAC was gained on 01/06/2016 (*Appendix A*). Ethical approval for the study was gained from the University of Glasgow College of Social Sciences Research Ethics Committee on 24/05/2016 (*Appendix B*). .

Following academic and ethical approval the process of obtaining a data sharing agreement (DSA) between the University of Glasgow and Renfrewshire council was instigated. This involved the production of an agreement in principal and privacy impact assessment as a basis for the DSA. Production of the DSA involved the input of legal teams from both institutions as well as liaison with data analysts at Renfrewshire council and UBDC. The initial draft was produced by the local authority with amendments from both sides before final completion and signing 06/09/2017. Final transfer of data took place on 21/09/2017. An illustration of this timeline is shown in figure 1.1

Figure 1.1: Timeline of Renfrewshire exploratory project



### 1.3.2 Data

As with all services provided by Renfrewshire council, home care data is collected to ensure efficient management of the service and as evidence of service provision (Renfrewshire-Council, 2015). Recording of individual episodes of care also helps with budgetary management of the service.

Data provided for the purposes of this exploratory study detailed anonymised information on; how many days per week, how many hours per day, service provider (e.g. local authority or independent provider), type of care (e.g. mainstream or reablement), start date and end date for every episode of home care delivered to individuals in the Renfrewshire council

area between April 2006 and April 2017. Demographic information detailing gender and year of birth was also provided.

As all episodes of home care were delivered over a period of time, data was provided for some packages where the care was first delivered as early as 2004 or as late as Summer 2017 (e.g. a home care episode starting in December 2005 and running to December 2006 was included in the data transfer). Data detailing information on community alarm and telecare services provided by Renfrewshire council were not analysed as part of this project.

Analysis focussed on individuals over the age of 65. An unexpectedly large number of individuals ( $n = 112$ , 0.01%) had a year of birth recorded as 1900 (compared to  $n = 68$  born between the years 1901 and 1910). A similar phenomenon was reported in the SCS linkage process (described in chapter ??) with the deduction that 1900 was a code for missing data. In this analysis these records were omitted. To protect anonymity individual month and day of birth were not shared meaning age was calculable from year of birth only.

The SCS requests information on the total hours of home care each individual received during the census week. To replicate this information, every episode of care in the exploratory dataset was summarised. For each episode of home care the number of hours per day was multiplied with days per week to give a weekly total of home care hours for each episode. To identify *packages* of home care, episodes of home care with the same start and end date and of the same home care type, were added together. For example, an individual receiving home care of the type “Care at Home (Mainstream)” with an episode of care lasting 1 hour in the morning for 3 days a week, an episode of care lasting 45 minutes at lunchtime 7 days a week, an evening episode of 30 minutes 7 days a week, and nighttime episode of 45 mins 7 days a week, would have a total weekly home care hours count of 17 hours per week for that home care type. Finally, the totals for all types of home care were summed to give an overall weekly total for each individual.

### 1.3.3 Analysis

To enable comparison of packages at different time points a time-series was created for the study period 27th March 2006 to 28th March 2016 at weekly intervals. The value of total hours of home care each individual was receiving at each of the 523 weekly time points was identified. From this time series weekly counts of the total number of individuals receiving home care were calculated. Maximum and minimum values, measures of central tendency and range of these weekly values were compared to the total number of individuals receiving home care in each financial year and visualised. Comparison was also made of the number of individuals receiving home care in the census week to figures returned by Renfrewshire council to the SCS for the same census week.

For the financial years 2011/12 - 2015/16 (the study period of the main thesis project) data was subset to identify those packages of home care that were “live” during the week including the 31st of March and those that were not “live” i.e. (those that would not have been captured by SCS census). These subsets were then compared by visualising the distribution of package duration and intensity (i.e. the total hours of homecare provided) across age and gender groups. The non-parametric Mann\_Whitney U test was used to compare differences between groups with p-values <0.05 accepted as showing a statistically significant difference. As the home care packages of the types “Community Mental Health”, “Overnight Services”, “Housing Support”, and “Extra Care Housing” accounted for less than one percent of packages of care, they were omitted from the comparative visualisations and analysis.

In order to assess whether the value of the total hours of homecare provided was representative of care in the six months preceding and following the census week, data was subset by individuals who only received a single package of care in the 12 months surrounding the census and those that received multiple packages of care. For those that received single packages of care, and therefore had an accurate measurement of their total hours of care, the distribution of the duration of these packages was assessed. For those that received multiple packages of care, and therefore had differing values of hours of home care, the net difference in total hours of care received across all packages was calculated in order to summarise the variation from the reported hours of each individual. For example, an individual initially receiving 6 hrs of care, experiencing a break in care to zero hours, and then receiving a new package of care of 7 hrs before a further drop to 2 hrs would have a net difference of  $(-6 + 7 - 5) = -4$  hours. The distribution of this value across all individuals was then assessed.

Additional variables indicating whether home care packages were “live” at three, four, six, eight, and nine months before the census of each financial year were appended to the dataset. This enabled counts of individuals who would be captured by six-monthly, four monthly, and three monthly census repetitions.

All data cleaning and analysis was conducted using the R language and environment for statistical computing version 3.4.0 (R-Core-Team, 2017) with packages `dplyr` v0.7.4 (Wickham and Francois, 2017), `tidyr` v0.7.2. (Wickham and Henry, 2017), `forcats` v0.2.0 (Wickham, 2017), `purrr` v0.2.4 (Henry and Wickham, 2017), `lubridate` v1.6.0. (Grolemund and Wickham, 2017), `magrittr` v1.5 (Bache and Wickham, 2014), `broom` v0.4.2 (Robinson, 2017), and `ggplot2` v2.2.1 (Wickham and Chang, 2016) via the Integrated Development Environment RStudio v1.0.143 (RStudio-team, 2016). Data was held securely in the safe haven environment described in section ??

## 1.4 Results

### 1.4.1 Descriptive statistics

After data cleaning, information on 41,002 packages of home care received by 10,130 individuals during the period 2006 to 2016 were included in the analysis. The number of records retained at each stage of the cleaning process is shown in table 1.2. Of these packages, 28,775 described actual packages of care. The remainder described placeholders for each individual where they were not receiving care, either because of a break in care or because care provision had ended altogether. These 12,227 records showed a value of zero for the total hours of homecare received and in the case of care provision having ended, showed an end date of 28th March 2016.

Table 1.2: Number of records at each stage of data cleaning

Data Cleaning stage	Number of records
Initial home care file	106,111
Including over 65s only	92,723
Summarised to packages of care	41,002 <sup>1</sup>
Packages of non-zero hours of care	28,775

<sup>1</sup> Total number of individuals = 10,310

Mean age of those included in the analysis was 80.8 years and median age was 81. Sixty-four percent of individuals ( $n = 6515$ ) were female. Detailed breakdown of age and gender groups is shown in figure 1.2. The highest absolute numbers of individuals are found in the 76-85 age group. Statistical disclosure control meant that grouping an additional age group for over 95s was not possible.

Seventy-eight percent of home care packages ( $n=22484$ ) were provided for “Care at Home (Mainstream)” with “Reablement” type packages making up the majority of the remainder (Figure 1.3). Only 60 packages of care for over 65s were classified as being provided for “Community Mental Health” or “Overnight Services” during the study period. “Reablement” packages were first coded as such in the financial year 2010/11 meaning “Care at Home (Mainstream)” made up an even larger proportion of care packages prior to this.

Almost two-thirds of home care packages in the study period provided care at intensities of less than 10 hours per week. Only 1,352 (47%) packages over the 10 year study period provided high intensity care of over 20 hours per week (figure 1.4). Eight-five percent of packages lasted for less than one year (figure 1.5).

Figure 1.2: Breakdown of age and gender

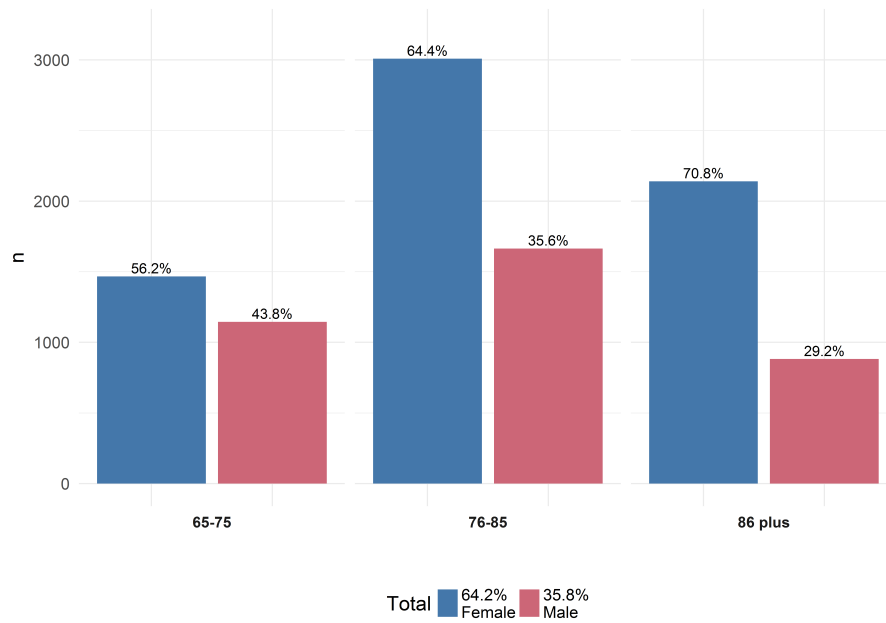


Figure 1.3: Count and proportion of home care type

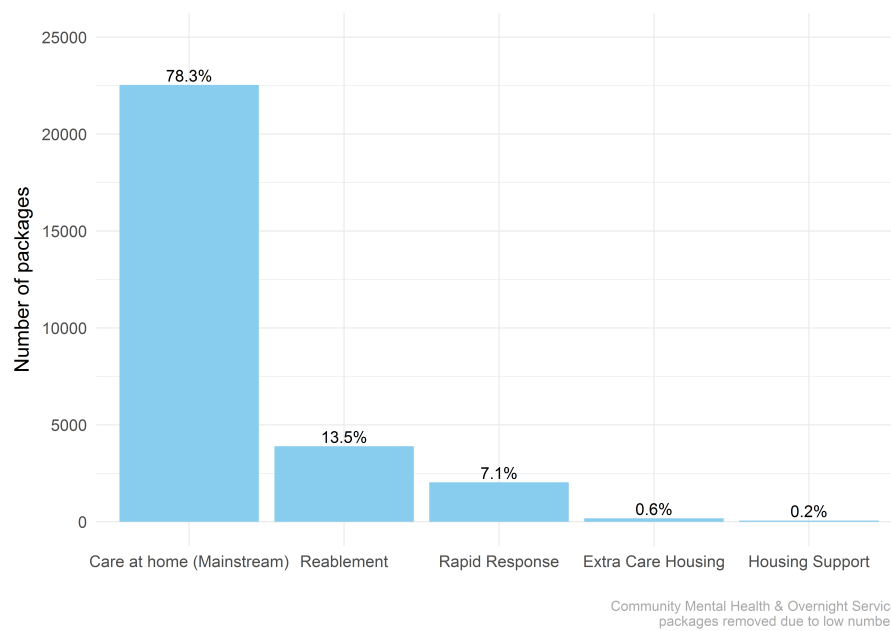




Figure 1.4: Count of packages of care by intensity

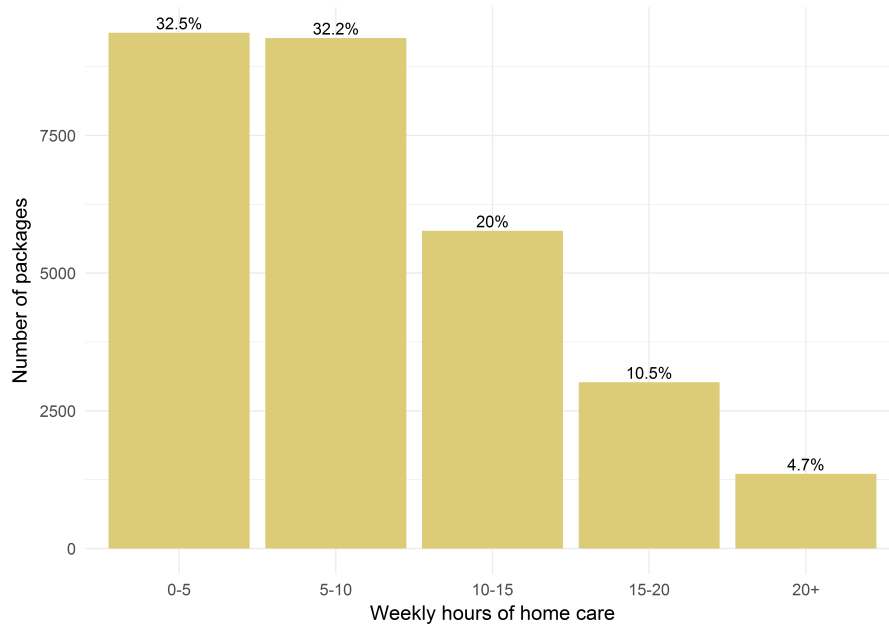
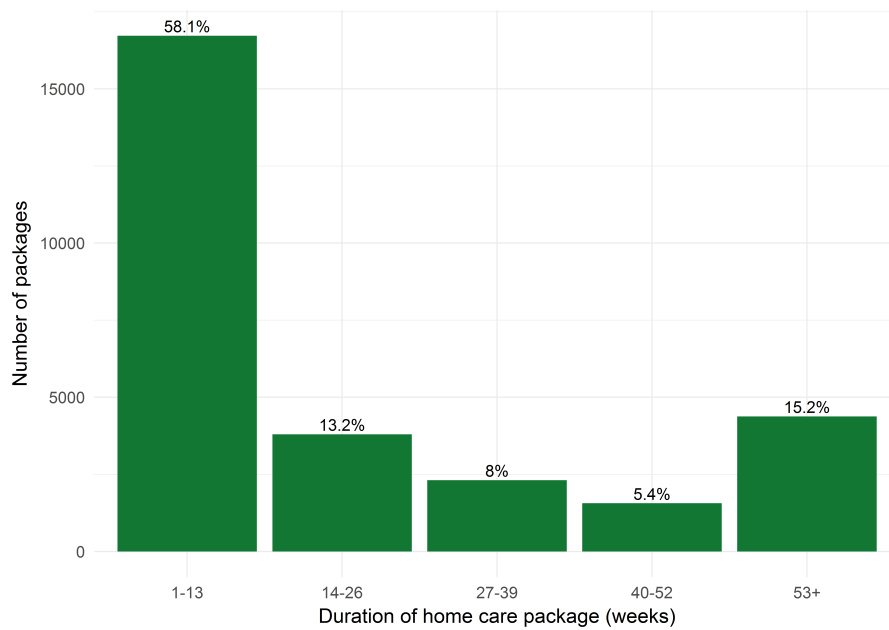


Figure 1.5: Count of packages of care by duration



## 1.4.2 Distribution of individuals receiving home care

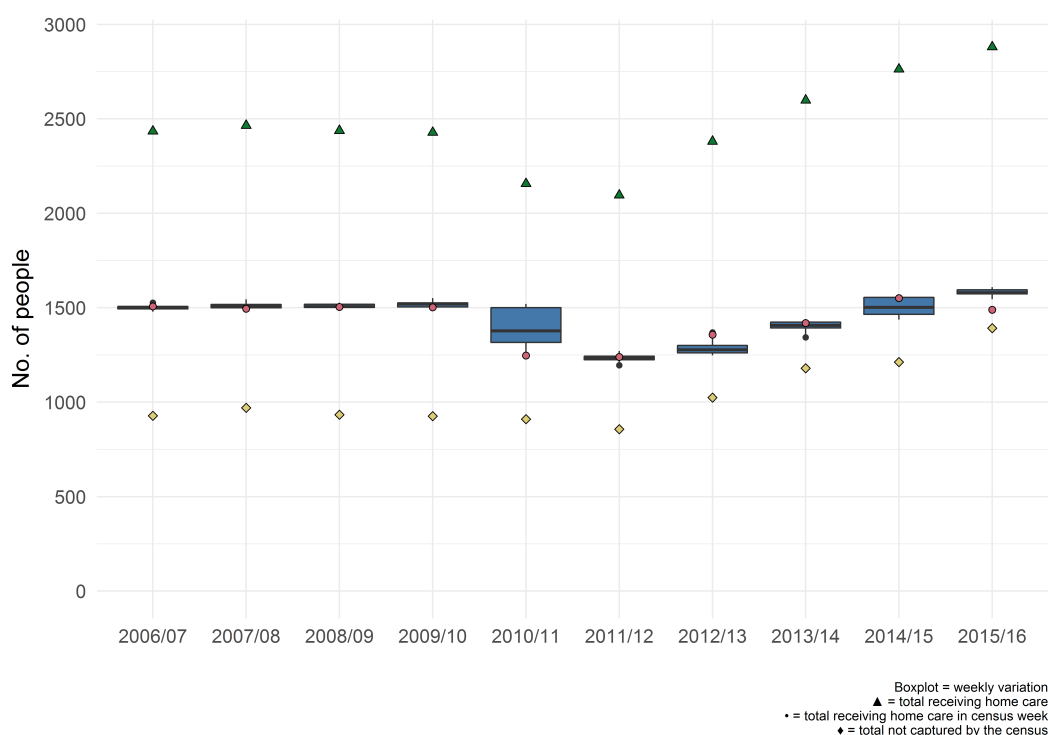
Table 1.3 and figure 1.6 show the variation in the number of people receiving home care during each financial year. There is little weekly variation within years with the exception of financial year 2010/11 which saw a large drop in the total number of individuals receiving care. The variation in years following this show gradual increases and overall numbers return to pre-2010/11 levels by 2014/15.

Figure 1.6 and table 1.3 also indicate that number of individuals receiving home care and captured by the census is between 51.7% and 61.9% of the total number of individuals that will receive care in that year. The trend shows a decreasing proportion of individuals are captured by the census.

Table 1.3: Variation in the number of individuals receiving home care

Financial Year	min	max	mean	sd	median	range	IQR	Total individuals receiving home care	Total individuals not captured by census	Ratio of individuals captured by census (%)
2006/07	1479	1527	1502.51	11.75	1501	48	15	2435	928	61.89
2007/08	1488	1544	1508.65	12.61	1508	56	18	2465	970	60.65
2008/09	1486	1527	1508.63	9.96	1508	41	16	2438	934	61.69
2009/10	1488	1551	1516.43	15.62	1520	63	24	2428	926	61.86
2010/11	1256	1520	1399.39	90.85	1378	264	176	2157	910	57.81
2011/12	1195	1271	1234.19	15.21	1236	76	19	2096	857	59.11
2012/13	1248	1369	1288.44	36.55	1278	121	39	2381	1024	56.99
2013/14	1343	1436	1405.52	21.17	1408	93	31	2599	1180	54.60
2014/15	1437	1568	1505.50	44.68	1502	131	90	2763	1212	56.13
2015/16	1545	1609	1582.60	13.27	1580	64	21	2881	1392	51.68

Figure 1.6: Variation in the number of individuals receiving home care



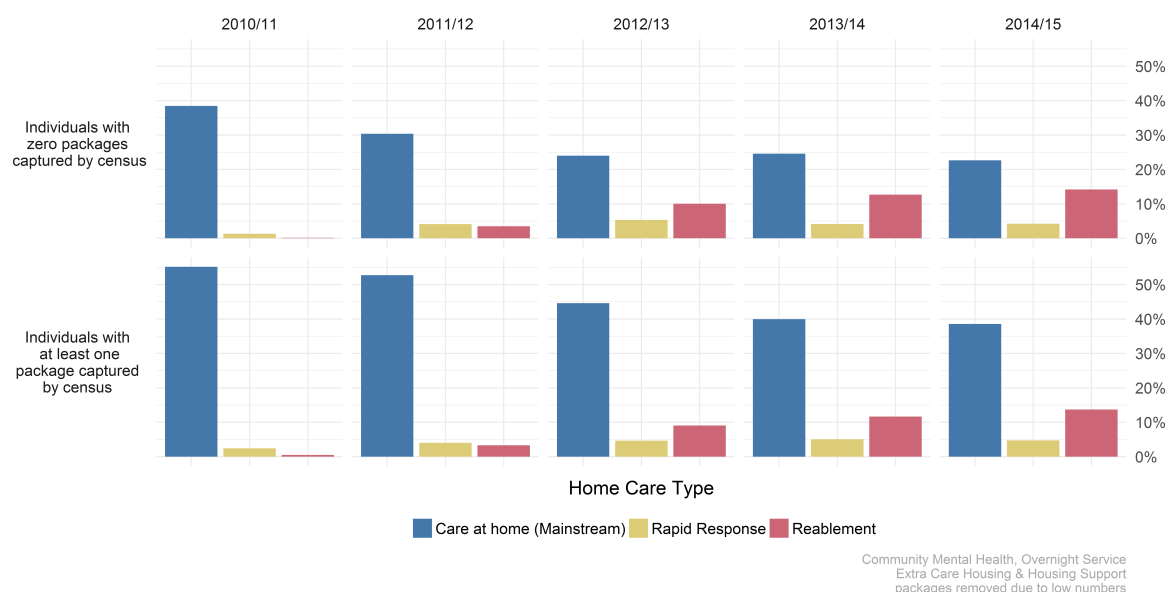
### 1.4.3 Differences in packages captured by the census

#### Major changes in this section rename

Table ?? shows that all care types have fewer absolute numbers of packages captured by the census in each financial year. There is also a gradual increase in the total number of packages over time from 3,101 in 2010/11 to 4,717 in 2015/16. “Reablement” packages show a gradual increase in the total proportion of packages provided in each financial year from 6.5% in 2010/11 to 29.5% in 2015/16. This increase is largely at the expense of “Care at Home (Mainstream)” packages which show a decreased share from 85.2% to 67.6% over the same time period. Between 30.3% and 38.8% of packages delivered are “live” during the census week in the Financial years 2011/12 - 2015/16.

Despite there being many more packages not captured by the census, there is much less variation in the duration of these packages which also tend to be shorter in length. Using Financial year 2013/14 as an example, figure ?? shows boxplots of the variation in duration of home care package split by age group, gender, and type of home care. The visualisation shows marked differences in packages either captured or not captured by the census. Table ?? confirms the differences between groups are statistically significant across all gender and age groups. This pattern is repeated across all years of data (see supplementary charts in section 1.7).

Figure 1.7: Proportion of individuals receiving home care



A similar pattern is seen when comparing the intensity of packages either captured or not by the census. Figure 1.9 shows higher median values of total hours of home care across all groups but with much more overlap in variation. Table ?? shows that despite this overlap, the differences in variation between packages in/not in the census are statistically significant in all but two groups - Males in the age groups 76-85 and 86 plus receiving “Rapid Response” care being the exceptions. Again, this pattern is repeated across all years of data (See supplementary figure in section 1.7)

Figure 1.8: Variation in intensity of home care

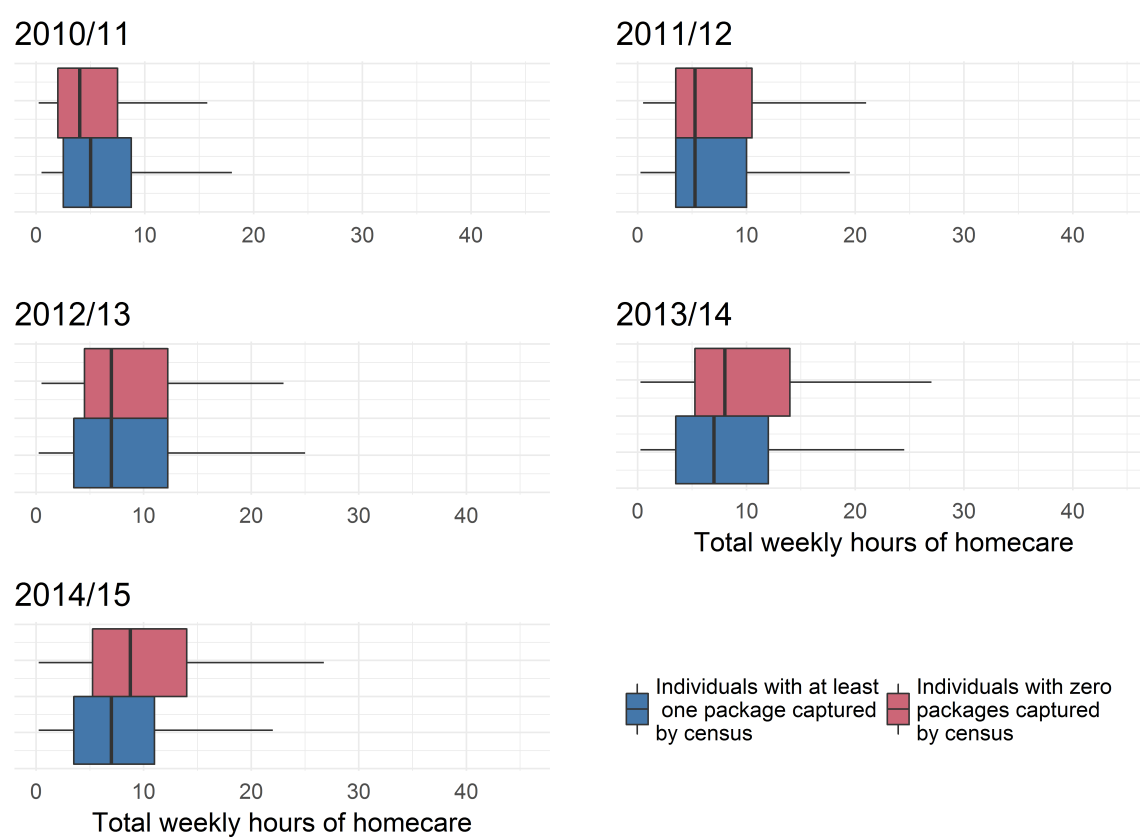


Figure 1.9: 2013/14. Variation in intensity of package (hrs) - by type



### 1.4.4 Census packages - variation in total hours

**This section needs re-analysed to take into account combined duration of care for those with multiple packages**

Between the years 2011/12 and 2014/15 a gradual decrease from 50.3% to 39.4% of individuals captured by the census received only one package of care in the 12-month period surrounding the census. The remaining individuals received more than one package of care in the same time period.

Those who did not see a change in their care package were more likely to have a longer lasting package of care than seen across the whole dataset with a median value of between 105 and 139 weeks across years (table 1.4 and figure 1.10). At the census week in each financial year three-quarters of individuals had packages of care that lasted for at least 75 weeks. This compares to almost 85% of all packages lasting less than 52 weeks as previously shown in figure 1.5.

Table 1.4: Summary statistics of package duration (weeks) for individuals receiving a single package of home care in 12 months surrounding the census week

Financial Year	Individuals (n)	Individuals (%)	25th Percentile	Median	75th Percentile	IQR
2011/12	623	50.3	82.5	139	205	122.5
2012/13	675	49.7	75	135	194.5	119.5
2013/14	667	47.0	84.5	128	177	92.5
2014/15	612	39.4	81	105	153.25	72.25

Over time, an increasing number of individuals received multiple packages of care in the 12 months surrounding the census date of each year. The variation in the net difference in total hours of homecare between these packages is shown in table 1.5 and figure 1.11. Whilst there are some outlying points in every year, median values are close to zero with the interquartile range varying from 6.3 to 9.5 hours. Over time, values of net difference were more likely to be negative. In 2011/12 the interquartile range was between -1.75 and 4.5 hours, whereas in 2014/15 it was between -7.0 and 2.5 hours.

Table 1.5: Summary statistics of net difference in total hours of homecare in 12 months surrounding the census week for individuals with multiple packages of care

Financial Year	Individuals (n)	Individuals (%)	25th Percentile	Median	75th Percentile	IQR	Min	Max	Range
2011/12	616	49.7	-1.75	0.75	4.5	6.3	-24	49	73
2012/13	682	50.3	-3.5	0	3.9375	7.4	-29	30	59
2013/14	752	53.0	-3.0	1	4.25	7.2	-28	27	55
2014/15	940	60.6	-7.0	-1.75	2.5	9.5	-45.5	35.5	81

Figure 1.10: Distribution of package duration for individuals receiving a single package of homecare in the 12 months surrounding the census week

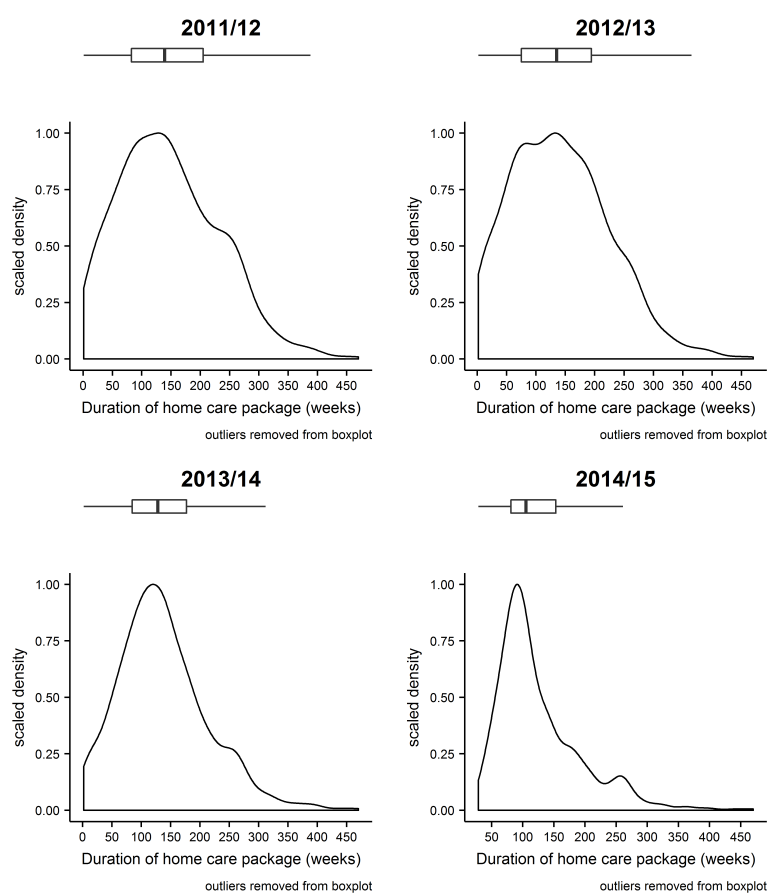
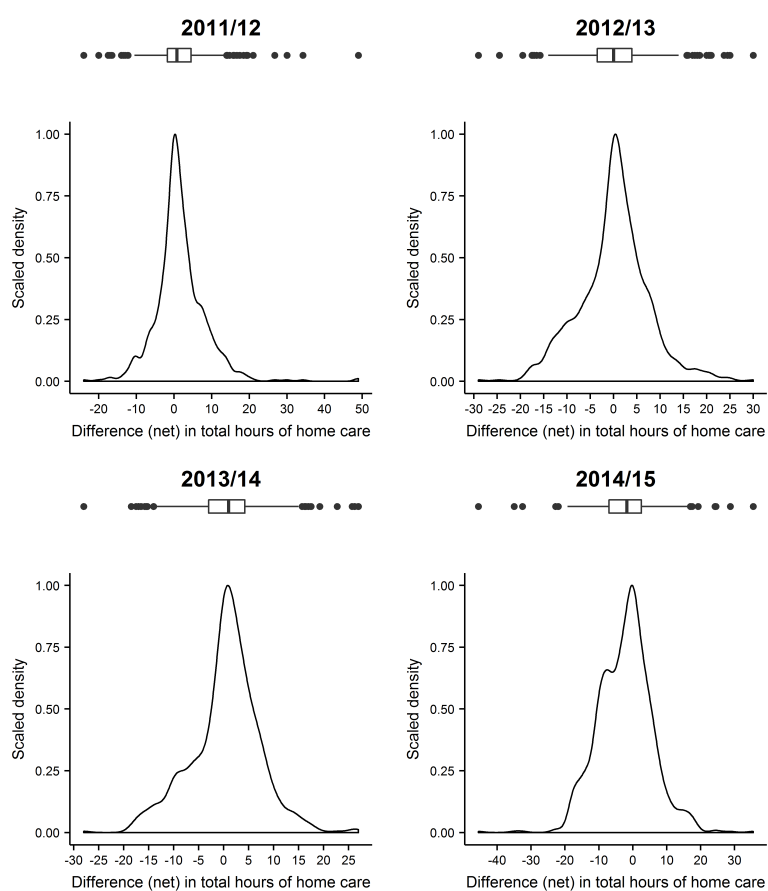




Figure 1.11: Distribution of net difference in total hours of home care in 12 months surrounding the census week for individuals with multiple packages of care



## 1.4.5 Multi-census

Table 1.6: Proportion of individuals captured by census and hypothetical multi-census in each financial year

Financial Year	Total receiving home care (n)	Captured by census (%)	Captured by six-monthly census (increase) (%)	Captured by four-monthly census (increase) (%)	Captured by three-monthly census (increase)(%)
2006/07	2435	62.1	75.5 (13.4)	80.9 (18.8)	84.2 (22.1)
2007/08	2465	60.7	74.5 (13.8)	80.1 (19.4)	83.2 (22.4)
2008/09	2438	61.7	75.0 (13.3)	81.3 (19.6)	84.5 (22.8)
2009/10	2428	61.9	75.5 (13.7)	81.1 (19.2)	83.9 (22.0)
2010/11	2157	57.8	72.8 (15.0)	82.9 (25.1)	85.8 (28.0)
2011/12	2096	59.1	73.4 (14.3)	78.9 (19.8)	82.6 (23.5)
2012/13	2381	57.0	68.2 (11.3)	73.9 (16.9)	77.8 (20.8)
2013/14	2599	54.6	68.1 (13.5)	73.7 (19.1)	78.8 (24.2)
2014/15	2763	56.2	69.7 (13.5)	86.6 (30.4)	87.8 (31.6)
<b>Mean</b>	2418	59.0	72.5 (13.5)	79.9 (20.9)	83.2 (24.2)

Table 1.6 shows the percentage of the total number of individuals receiving home care in each financial year that would be captured if six-monthly, four monthly, or three-monthly census had been conducted and the increases these would signify. A bi-annual census would have captured an average of 72.5% of individuals that received home care during the study period - an average increase of 13.5% from the census. Tri-annual census collection would have captured an average 79.9% of individuals (average increase of 20.9%) whilst a quarterly census collection would have captured an average 83.2% of individuals (average increase of 24.2%).

Unsurprisingly, the largest increases are seen in the years where the number of individuals captured by a single census are relatively low compared to other years, in particular 2010/11, 2013/14, and 2015/16.

## 1.5 Discussion

- 60% sample
- Same type of people
- Same type of packages
- Different types of packages not accurately captured by categorisation?

This exploratory project has investigated the variation in packages of care from one Scottish local authority area. It has found that figures returned by Renfrewshire council to the SCS represent between 58.4% and 63.7% of the total number of individuals that the council provided home care for in the financial years 2006/07 to 2015/16.

Counts of individuals produced by this analysis appear to be similar to those returned by Renfrewshire Council to the SCS for the years 2006/07 to 2010/11. Thereafter, counts are slightly less. This could be due to changes in the way data was returned to SCS from

the year 2011 onwards. There have also been changes in the criteria of which individuals should be included in counts of home care since 2011 that could not be replicated in this analysis.

*Packages not captured by the census tend to be of much shorter duration and have a higher intensity (measured by total hours per week) than those packages that are seen in the census weeks.* (Maybe drop this - need to focus more on difference in individuals rather than packages) More recent years have seen a greater proportion of packages being delivered for Reablement type services at the expense of Care at home (Mainstream) type packages of care. However, reablement services only account for a maximum of 8% of packages captured by the census and 21.5% not captured by the census with much lower proportions in earlier years.

Coupled with the finding that roughly half of individuals with “live” care packages during the census week have only a single package of care in the six months pre and post census, usually with a long duration, a picture emerges of two types of “Care at Home (Mainstream)” packages. The first type are long-term packages, sometimes lasting multiple years. The second type have much shorter duration and mirror many of the characteristics of “Reablement” type packages (*but I haven’t accounted for multiple packages received by one individual*). Whether these packages are misclassified, or if the recent addition of “Reablement” packages as a care type has not yet filtered through to data categorisation is unknown.

Returns to the SCS by local authorities do not distinguish between types of home care but provide a value of total weekly hours of home care only. This analysis shows that variables detailing the weekly hours of home care received by an individual may disguise differing underlying types of care being delivered.

*Needs para on implications for research - taking into account re-analysis of multi-packages - if duration of care is more similar then can happily say that SCS is a good 60% representative sample of individuals receiving home care and can be dealt with in the same way as any other type of cross-sectional data (with better power than most surveys). If not, then need to quantify the error and suggest that analysis with SCS must take account of this error. Also need to bear in mind that ~50% of those captured by SCS will have variation in the amount of care they receive in the year surrounding the census but there is no way of identifying these individuals with current SCS variables*

This analysis is limited by the fact that data was obtained from only one local authority area. It is impossible to know if the number of individuals captured or not by the SCS in the Renfrewshire area is indicative of numbers across the country. Given each of the 32 local authorities in Scotland have bespoke methods of delivering and recording social care the findings from this analysis can not be generalised to a national level.

Furthermore, the method of summarising data into packages of care is subjective and may differ from the method used by Renfrewshire council. There is some comfort in the similarity of results for some years shown in figure 1.6, however there are notable differences, particularly in later years, suggesting structural differences in methods. The year 2010 was the first in which individual level data was collected by the Scottish Government which may have led to different methods of collating data. Furthermore, changes have been made at varying intervals for what constitutes home care with differing types of care, e.g. Housing Support being included as home care and then collected as a separate type of service in later years.

Future work using this data should consider the difference in individuals receiving care at different time intervals (e.g. first six months of the year). If the census week were to capture a higher proportion of individuals in a more narrow time-frame then alternative types of statistical analyses, such as time-to-event analysis, may be possible using SCS data.

**longitudinal analysis**

## **1.6 Conclusion**

Analysis of individual level social care data from Renfrewshire council area suggests that the number of people recorded as receiving home care by the Social Care Survey captures between 52% and 64% of the total number of people that will receive home care during a financial year. This has implications for the types of analysis that can be conducted with SCS in data linkage projects. Those individuals receiving care in the census week have packages of care that are broadly similar in duration and intensity. Some reablement packages of care may be misclassified.

## **1.7 Supplementary charts**

Figure 1.12: Variation in duration - by care type - all years

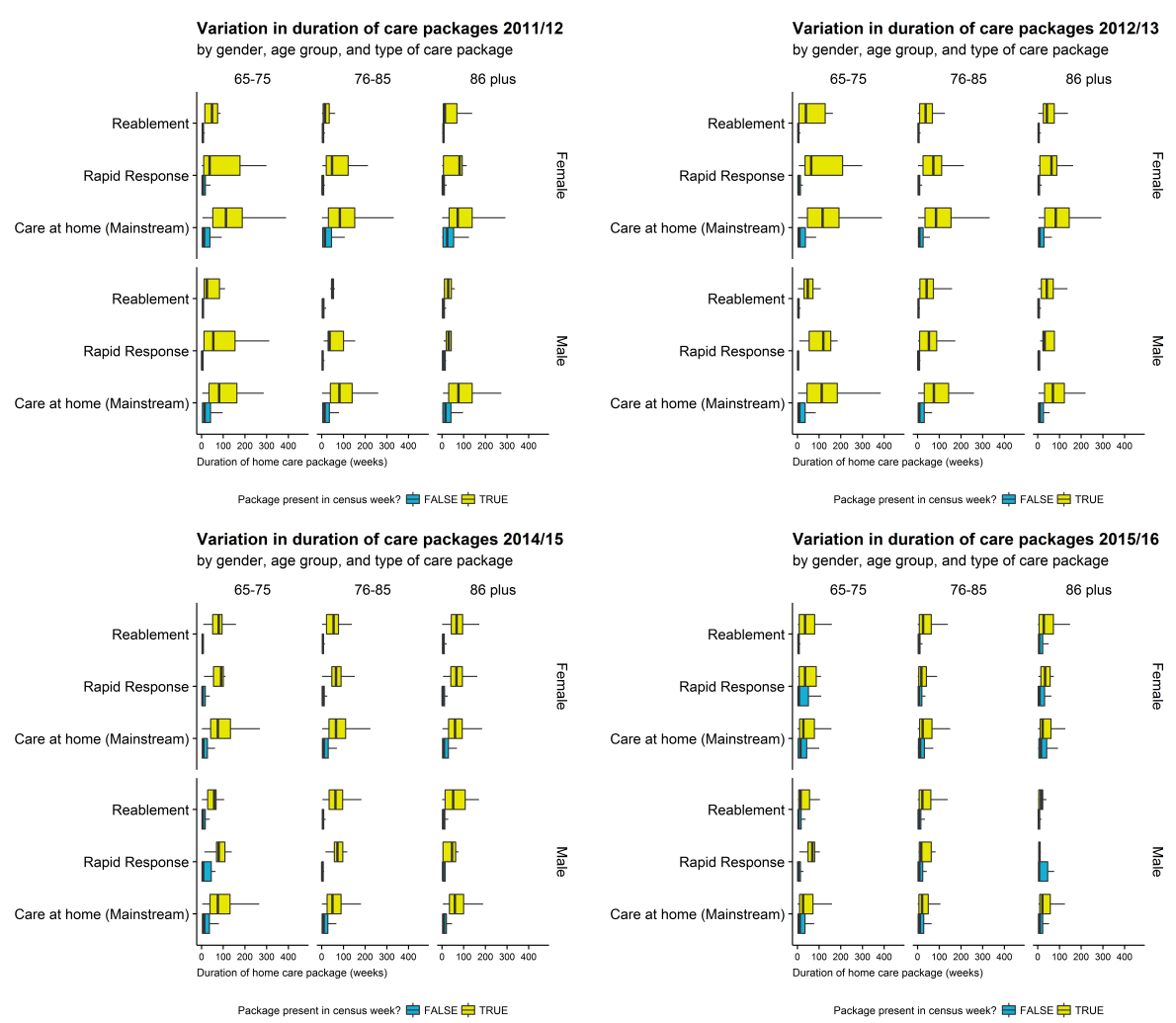
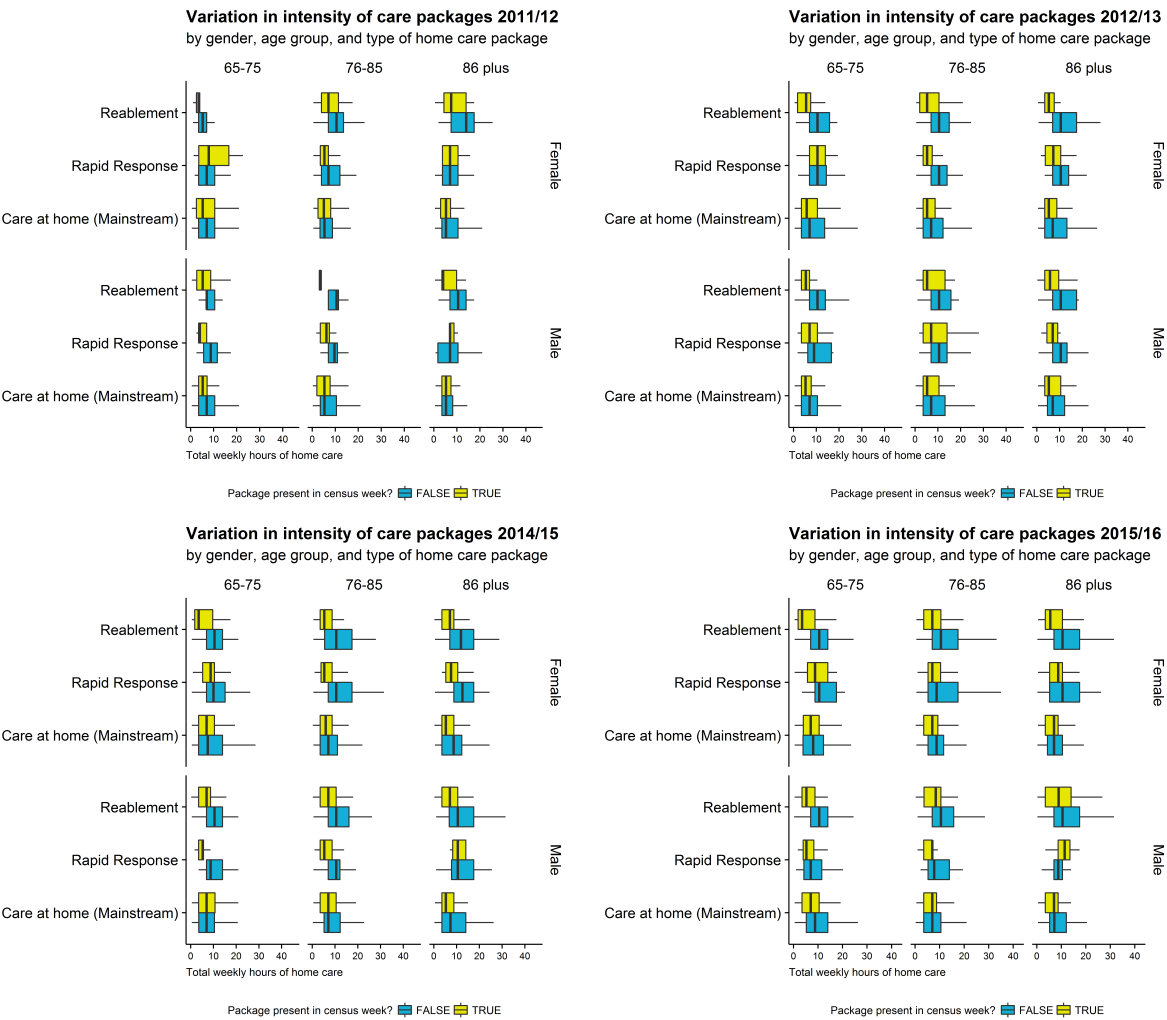


Figure 1.13: Variation in intensity - by care type - all years



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