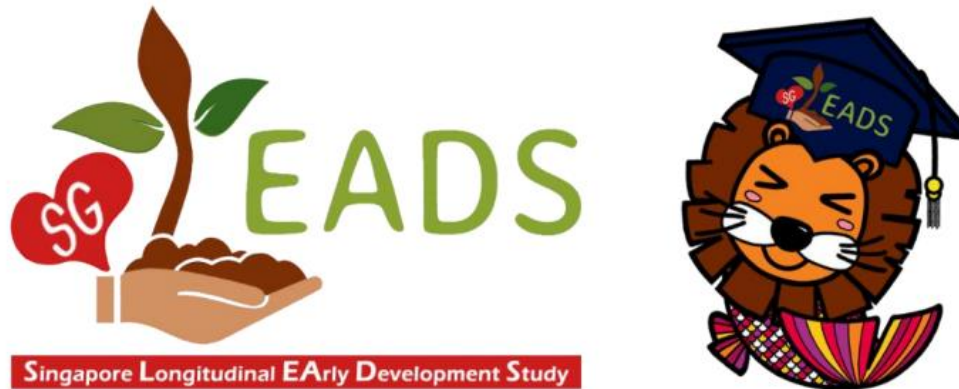


Singapore Longitudinal Early Development Study (SG LEADS)



Panel Survey Wave 1

Technical Report 14

Documentation for Child Care Arrangements

Lee Jia Jin Kristy, Wei-Jun Jean Yeung

National University of Singapore

1 March 2024

Documentation for Child Questionnaire, Section H: Child Care Arrangements

This section contains caregiver-reported information on children’s care arrangements since birth, such as the type of care, relationship of caregiver to child, age of child when receiving care, time spent in care, subsidies and out-of-pocket expenditure on care, and age of child upon stopping care. The documentation for this section includes a description of information available to users, summary statistics to illustrate broad patterns of child care arrangements in the sample, and an identification of data issues.

Missing Data Alert. A technical glitch occurred in the Computer-Assisted Personal Interviews (CAPI) system during the first phase of SG LEADS fieldwork. This resulted in questions being erroneously skipped for respondents who were required to provide a response to those questions. The technical glitch was later discovered and resolved. The SG LEADS team also performed a callback to respondents for whom questions were erroneously skipped; however, not all data were recovered as some respondents could not be reached during the callback.

For variables with >20% missingness, we report the results of logistic regressions examining whether housing type, child’s gender, and child’s race predicted missingness in the data. Child-level sampling weights were applied to all analyses. Missingness refers to cases where no information was collected despite a response being required from the respondent. “Not applicable based on skipping pattern”, “Don’t know”, and “Refused” are not considered missing data arising from the technical glitch.

1. Non-Parental Care Since Birth (Questions H4, H4a, H4b)

Description. Caregivers responded to questions about whether their child had ever received regular care from people other than their parents, their child’s age when receiving non-parental care, whether non-parental care first occurred before or after kindergarten, and the number of care arrangements used between birth and kindergarten.

Missing Data. Missingness exceeded 20% on Questions H4a and H4b. **Table 1** illustrates the frequency distribution of missing, non-missing, and not applicable observations in the full sample. To examine patterns of missingness for each question, we performed logistic regressions with housing type, child’s gender, and child’s race as the predictors. Data were coded as “missing” if no information was collected from the respondent, and as “non-missing” if a response was provided (including “Don’t know” and “Refused”). Respondents for whom the question was not applicable based on their responses to earlier questions were excluded from the analysis (see Appendix A for the skipping logic in the questionnaire).¹ Child weights were applied to all analyses.

Table 1. Frequency Distribution of Missing, Non-missing, and Not Applicable Observations

H4a. Non-Parental Care Started Before or After Kindergarten			
	<i>Freq.</i>	<i>% including NA</i>	<i>% excluding NA</i>
Missing	1,173	23.44	36.45
Non-missing	2,045	40.86	63.55
Not applicable (NA)	1,787	35.70	-
Total <i>N</i>	5,005	5,005 (100%)	3,218 (100%)

¹ Our rationale for excluding NA was two-fold: First, combining NA with either Missing or Non-missing (both of which the question is applicable to the respondent) would result in the analysis identifying not only predictors of missingness but also applicability, and this was not our goal; Second, users are likely to be using only the applicable cases to address their research questions, therefore our investigations focused on missingness in the applicable data.

H4b. Number of Care Arrangements Between Birth and Kindergarten			
	<i>Freq.</i>	<i>% including NA</i>	<i>% excluding NA</i>
Missing	1,283	25.63	37.59
Non-missing	2,130	42.56	62.41
Not applicable (NA)	1,592	31.81	-
Total <i>N</i>	5,005	5,005 (100%)	3,413 (100%)

Coefficients and odds ratios of the analyses are presented in **Tables 2-3**. Across both questions, housing type and child's race significantly predicted whether data were likely to be missing. Respondents living in condominiums and landed properties were less likely to have missing data than those living in HDB 1- and 2-room flats; Indian children were more likely to have missing data than Chinese children. For Question H4a, child's gender was also a significant predictor of missingness, such that boys were more likely to have missing data than girls.

Table 2. Logistic Regression of Variables Predicting Data Missingness on Question H4a ("Non-Parental Care Started Before or After Kindergarten") (N = 3,218)

Parameter	<i>B (SE)</i>	<i>Odds Ratio (SE)</i>
Intercept	-0.57 (0.15) ***	0.56 (0.09)
Housing Type (ref. HDB 1-2 Room Flat)		
HDB 3-Room Flat	-0.04 (0.15)	0.96 (0.14)
HDB 4-Room Flat	-0.11 (0.14)	0.89 (0.13)
HDB 5-Room and Executive Flat	-0.15 (0.16)	0.86 (0.14)
Condominium and Landed Property	-0.39 (0.19) *	0.68 (0.13)
Child's Gender (ref. Female)	0.18 (0.09) *	1.20 (0.11)
Child's Race (ref. Chinese)		
Indian	0.39 (0.17) *	1.47 (0.24)
Malay	0.11 (0.12)	1.11 (0.13)
Others	-0.41 (0.30)	0.66 (0.20)

* $p < .05$, *** $p < .001$.

Table 3. Logistic Regression of Variables Predicting Data Missingness on Question H4b ("Number of Care Arrangements Between Birth and Kindergarten") (N = 3,413)

Parameter	<i>B (SE)</i>	<i>Odds Ratio (SE)</i>
Intercept	-0.52 (0.15) **	0.59 (0.09)
Housing Type (ref. HDB 1-2 Room Flat)		
HDB 3-Room Flat	-0.03 (0.15)	0.97 (0.14)
HDB 4-Room Flat	-0.08 (0.14)	0.93 (0.13)
HDB 5-Room and Executive Flat	-0.17 (0.16)	0.84 (0.13)
Condominium and Landed Property	-0.40 (0.19) *	0.67 (0.13)
Child's Gender (ref. Female)	0.17 (0.09)	1.18 (0.11)
Child's Race (ref. Chinese)		

Indian	0.40 (0.18) *	1.50 (0.28)
Malay	0.11 (0.12)	1.12 (0.14)
Others	-0.28 (0.29)	0.76 (0.22)

* $p < .05$, ** $p < .01$.

2. First Care Arrangement Between Birth and Kindergarten (Questions H5-12, #1)

Description. Caregivers whose children received non-parental care before kindergarten responded to questions about the first care arrangement they used for their child since birth, including type of care, age of child when receiving care, days and hours per week in the care arrangement, subsidy and out-of-pocket expenditure on care, and age of child upon stopping the care arrangement. **Table 4** depicts the frequency distribution of care arrangements among children who received non-parental care before kindergarten.

Table 4. Frequency Distribution of First Child Care Arrangements Since Birth

Care Arrangement	Age Group			
	Under 2 years	2 to under 4 years	4 to under 5 years	5 to under 7 years
Before or after-school program	0 (0%)	0 (0%)	0 (0%)	1 (0.20%)
Care in a non-relative's home	2 (0.52%)	0 (0%)	3 (0.36%)	8 (3.95%)
Care in a relative's home	13 (3.39%)	7 (0.32%)	10 (2.37%)	33 (20.86%)
Child cares for self alone	1 (0.43%)	0 (0%)	0 (0%)	1 (0.17%)
Infant care centre	94 (32.16%)	6 (0.46%)	1 (0.21%)	7 (3.63%)
Non-relative in the child's home	22 (9.05%)	4 (0.39%)	8 (1.61%)	16 (7.63%)
Nursery school, preschool, or childcare centre	147 (47.37%)	1,180 (98.31%)	323 (93.67%)	84 (43.79%)
Relative in the child's home	19 (7.07%)	7 (0.52%)	8 (1.78%)	41 (19.77%)
Total	298 (100%)	1,204 (100%)	353 (100%)	191 (100%)

Note. Table displays unweighted counts and weighted percentages. Missing and NA cases are omitted.

Missing Data. Missingness ranged from 27.31% to 28.19% on questions about type of care, age of child during care, and time spent in care. Missingness ranged from 58.66% to 59.18% on questions related to subsidy and out-of-pocket expenditure. We identified patterns of missingness on Questions H5 (type of care) and H9 (subsidy for care). **Table 5** illustrates the frequency distribution of missing, non-missing, and not applicable observations in the full sample.

Table 5. Frequency Distribution of Missing, Non-missing, and Not Applicable Observations

H5 #1. First Child Care Arrangement Since Birth			
	Freq.	% including NA	% excluding NA
Missing	1,367	27.31	40.05

Non-missing	2,046	40.88	59.95
Not applicable (NA)	1,592	31.81	-
Total <i>N</i>	5,005	5,005 (100%)	3,413 (100%)
H9 #1. Any Subsidy for First Child Care Arrangement Since Birth			
	<i>Freq.</i>	<i>% including NA</i>	<i>% excluding NA</i>
Missing	2,936	58.66	86.02
Non-missing	477	9.53	13.98
Not applicable (NA)	1,592	31.81	-
Total <i>N</i>	5,005	5,005 (100%)	3,413 (100%)

Coefficients and odds ratios of logistic regressions examining patterns of missingness for each question are presented in **Tables 6-7**. For Question H5 (type of care), boys were more likely to have missing data than girls, and Indian children were more likely to have missing data than Chinese children. For Question H9 (subsidy for care), housing type was a significant predictor of missingness, such that respondents living in HDB 3-room flats, HDB 4-room flats, HDB 5-room and executive flats, and condominiums and landed properties, were less likely to have missing data than those living in HDB 1- and 2-room flats.

Table 6. Logistic Regression of Variables Predicting Data Missingness on Question H5 #1 (“First Child Care Arrangement Since Birth”) (N = 3,413)

Parameter	<i>B</i> (SE)	Odds Ratio (SE)
Intercept	-0.51 (0.15) **	0.60 (0.09)
Housing Type (ref. HDB 1-2 Room Flat)		
HDB 3-Room Flat	-0.01 (0.14)	0.99 (0.14)
HDB 4-Room Flat	-0.004 (0.14)	1.00 (0.14)
HDB 5-Room and Executive Flat	-0.17 (0.16)	0.84 (0.13)
Condominium and Landed Property	-0.15 (0.18)	0.86 (0.16)
Child’s Gender (ref. Female)	0.22 (0.09) *	1.24 (0.11)
Child’s Race (ref. Chinese)		
Indian	0.39 (0.17) *	1.47 (0.25)
Malay	0.15 (0.12)	1.16 (0.14)
Others	-0.33 (0.28)	0.72 (0.20)

* $p < .05$, ** $p < .01$.

Table 7. Logistic Regression of Variables Predicting Data Missingness on Question H9 #1 (“Any Subsidy for First Child Care Arrangement Since Birth”) (N = 3,413)

Parameter	<i>B</i> (SE)	Odds Ratio (SE)
Intercept	2.82 (0.30) ***	16.85 (5.02)
Housing Type (ref. HDB 1-2 Room Flat)		
HDB 3-Room Flat	-0.98 (0.27) ***	0.38 (0.10)
HDB 4-Room Flat	-0.93 (0.27) **	0.40 (0.11)
HDB 5-Room and Executive Flat	-0.96 (0.32) **	0.38 (0.12)

Condominium and Landed Property	-0.74 (0.33) *	0.48 (0.16)
Child's Gender (ref. Female)	-0.23 (0.13)	0.80 (0.10)
Child's Race (ref. Chinese)		
Indian	0.02 (0.28)	1.02 (0.28)
Malay	-0.04 (0.24)	0.96 (0.23)
Others	0.12 (0.41)	1.13 (0.46)

* $p < .05$, ** $p < .01$, *** $p < .001$.

3. Second Care Arrangement Between Birth and Kindergarten (Questions H5-12, #2)

Description. Caregivers whose children received non-parental care before kindergarten responded to questions about the second care arrangement they used for their child since birth, including type of care, age of child when receiving care, days and hours per week in the care arrangement, subsidy and out-of-pocket expenditure on care, and age of child upon stopping the care arrangement.

Missing Data. Missingness ranged from 27.09% to 27.19% on questions related to second child care arrangement. Missingness was generally carried forward from the earlier questions on first child care arrangement. Respondents who did not provide information on their first care arrangement had skipped the entire section about child care, including second and third care arrangements, due to the technical glitch described in the beginning of this report. While it is possible that the respondents had used only one care arrangement between birth and kindergarten, making questions about second and third care arrangements inapplicable to them, we are unable to determine whether this is the case without further information and therefore considered their responses to be “Missing”.

We identified patterns of missingness on Question H5 (type of care). **Table 8** illustrates the frequency distribution of missing, non-missing, and not applicable observations in the full sample. Due to the lack of variability in missingness (i.e., only 41 non-missing compared to 1,356 missing), as well as the aforementioned difficulty in assessing whether data were truly missing or not applicable, we did not perform further analysis on patterns of missingness for this question.

Table 8. Frequency Distribution of Missing, Non-missing, and Not Applicable Observations

H5 #2. Second Child Care Arrangement Since Birth			
	Freq.	% including NA	% excluding NA
Missing	1,356	27.09	97.07
Non-missing	41	0.82	2.93
Not applicable (NA)	3,608	72.09	-
Total <i>N</i>	5,005	5,005 (100%)	1,397 (100%)

4. Third Care Arrangement Between Birth and Kindergarten (Questions H5-12, #3)

Description. Caregivers whose children received non-parental care before kindergarten responded to questions about the third care arrangement they used for their child since birth, including type of care, age of child when receiving care, days and hours per week in the care arrangement, subsidy and out-of-pocket expenditure on care, and age of child upon stopping the care arrangement.

Missing Data. 27.09% of data were missing on all questions related to third child care arrangement. **Table 9** illustrates the frequency distribution of missing, non-missing, and not applicable observations in the full sample. As with second child care arrangement, we did not perform further analysis on third child care arrangement, as missingness was lacking in variability (i.e., only 7 non-missing compared to 1,356 missing) and the difficulty in assessing whether data were truly missing or not applicable.

Table 9. Frequency Distribution of Missing, Non-missing, and Not Applicable Observations

H5 #3. Third Child Care Arrangement Since Birth			
	<i>Freq.</i>	<i>% including NA</i>	<i>% excluding NA</i>
Missing	1,356	27.09	99.49
Non-missing	7	0.14	0.51
Not applicable (NA)	3,642	72.77	-
Total <i>N</i>	5,005	5,005 (100%)	1,363 (100%)

5. Current Care Arrangements (Question H13)

Description. Question H13 asked about the current care arrangements for children at K1, K2, and Primary One schooling level. Caregivers indicated whether their child was receiving regular care from relatives, non-relatives, parents, centre-based care, or self-care.

6. Most Frequently Used Care Arrangement (Questions H14, H17-22)

Description. Caregivers whose children were at K1, K2, or Primary One schooling level responded to questions about their most frequently used care arrangement for their child, including type of care, relationship of caregiver to child, days and hours per week in the care arrangement, total duration of care, and subsidies and out-of-pocket expenditure on the care arrangement. **Table 10** depicts the frequency distribution of most frequently used care arrangements among K1 and K2 children.

Table 10. Most Frequently Used Care Arrangements Among K1 and K2 Children

Most Frequently Used Care Arrangement	<i>N (Weighted %)</i>
Before or after-school program	1 (0.03%)
Care in a non-relative's home	2 (0.12%)
Care in a relative's home	27 (1.85%)
Non-relative in the child's home	29 (1.91%)
Nursery school, preschool, or childcare centre	1,333 (93.90%)
Relative 13 or older in the child's home	20 (1.42%)
Relative under 13 in the child's home	5 (0.76%)
Total	1,417 (100%)

Note. Missing and NA cases are omitted.

Missing Data. Missingness exceeded 20% only on Questions H22 and H22a. **Table 11** illustrates the frequency distribution of missing, non-missing, and not applicable observations in the full sample.

Table 11. Frequency Distribution of Missing, Non-missing, and Not Applicable Observations

H22. Whether Expenditure on Care Arrangement Covered Other Children			
	<i>Freq.</i>	<i>% including NA</i>	<i>% excluding NA</i>
Missing	1,284	25.65	85.89
Non-missing	211	4.22	14.11
Not applicable (NA)	3,510	70.13	-
Total N	5,005	5,005 (100%)	1,495 (100%)

Coefficients and odds ratios of a logistic regression examining patterns of missingness on Question H22 are presented in **Table 12**. None of the demographic variables predicted missingness in the data.

Table 12. Logistic Regression of Variables Predicting Data Missingness on Question H22 (“Whether Expenditure on Care Arrangement Covered Other Children”) (N = 1,495)

Parameter	B (SE)	Odds Ratio (SE)
Intercept	1.70 (0.34) ***	5.48 (1.89)
Housing Type (ref. HDB 1-2 Room Flat)		
HDB 3-Room Flat	0.24 (0.33)	1.27 (0.42)
HDB 4-Room Flat	0.30 (0.33)	1.35 (0.44)
HDB 5-Room and Executive Flat	-0.07 (0.35)	0.93 (0.32)
Condominium and Landed Property	0.33 (0.46)	1.39 (0.64)
Child’s Gender (ref. Female)	-0.19 (0.19)	0.83 (0.16)
Child’s Race (ref. Chinese)		
Indian	-0.05 (0.37)	0.95 (0.36)
Malay	0.25 (0.26)	1.28 (0.33)
Others	0.16 (0.76)	1.17 (0.89)

*** $p < .001$.

7. Second Most Frequently Used Care Arrangement (Questions H15, H23-28)

Description. Caregivers whose children were at K1, K2, or Primary One schooling level responded to questions about their second most frequently used care arrangement for their child, including type of care, relationship of caregiver to child, days and hours per week in the care arrangement, total duration of care, and subsidies and out-of-pocket expenditure on the care arrangement.

8. Third Most Frequently Used Care Arrangement (Questions H16, H29-34)

Description. Caregivers whose children were at K1, K2, or Primary One schooling level responded to questions about their third most frequently used care arrangement for their child, including type of care, relationship of caregiver to child, days and hours per week in the care arrangement, total duration of care, and subsidies and out-of-pocket expenditure on the care arrangement.

Summary

Missingness in the data varied from variable to variable. The effect of demographic characteristics on missingness was generally small.² Housing type predicted missingness on variables such as whether non-parental care first started before or after kindergarten, number of child care arrangements between birth and kindergarten, and whether the family had received subsidies for their first child care arrangement since birth (inverted OR range: 1.48-2.66). Child's gender and race predicted missingness on variables such as whether non-parental care first started before or after kindergarten, number of child care arrangements between birth and kindergarten, and type of first child care arrangement since birth (OR range: 1.20-1.50). Users might benefit from including demographic characteristics associated with missingness in their missing data management procedures (e.g., Full Information Maximum Likelihood models or Multiple Imputation) to reduce bias in their estimates.³

Supporting Materials



Appendix A

Section H of Child Questionnaire with questions, response options, and skipping logic.



Appendix B

Tabularized summary of Section H, consisting of brief descriptions per variable, missingness percentages, and data alerts.

² Odds ratios ranging from 1.5 to under 2.5 reflect a small effect; 2.5 to under 4 reflect a medium effect; 4 and above a large effect. Maher, J. M., Markey, J. C., & Ebert-May, D. (2013). The other half of the story: Effect size analysis in quantitative research. *CBE: Life Sciences Education*, 12(3), 345–351. <https://doi.org/10.1187/cbe.13-04-0082>

³ Tagliabue, S., & Donato, S. (2015). Missing data in family research: Examining different levels of missingness. *TPM-Testing, Psychometrics, Methodology in Applied Psychology*, 22(2), 199–217.

SECTION H: CHILD CARE**Maternity/adoption/paternity/childcare leave**

H1. Has/Is this family used/using the following leave for (CHILD)?

H1a/b Rule: Child lives with biological mother → **GO TO H1a, and SKIP H1b**
 Child lives with adoptive mother → **GO TO H1b**
 Child does not live with biological/adoptive mother → **GO TO H1c Rule**

- a. Paid maternity leave: _____ weeks for (CHILD)
 b. Paid adoption leave: _____ weeks for (CHILD)

H1c Rule: Child lives with biological or adoptive father → **GO TO H1c**
 Child does not live with biological or adoptive father → **GO TO H1d**

- c. Paid paternity leave: _____ weeks for (CHILD)

H1d Rule: Child lives with biological/adoptive/step-mother → **GO TO H1d**
 Child does not live with biological/adoptive/step-mother → **GO TO H1e Rule**

- d. Mother's paid childcare leave in the past 12 months: _____ days for (CHILD)

H1e Rule: Child lives with biological/adoptive/step-father → **GO TO H1e**
 Child does not live with biological/adoptive/step-father → **GO TO H1f Rule**

- e. Father's paid childcare leave in the past 12 months: _____ days for (CHILD)

H1f Rule: Child lives with biological/adoptive/step-parent → **GO TO H1f**
 Child does not live with biological/adoptive/step-parent → **GO TO H2 Rule**

- f. Unpaid infant care leave: _____ days for (CHILD)

Note. Fill in NA if not applicable (e.g. father/mother is not living in this household).

H2 RULE:
 CHILD's biological/adoptive/step-mother is living in the household → **GO TO H2**
 CHILD's biological/adoptive/step-mother is not living in the household → **GO TO H3 RULE**

H2. Is (CHILD's) (biological mother/adoptive/step) mother currently not working, working full time, or working part time?

1. Working full time
2. Working part time
3. Not working currently

H3 RULE: CHILD's biological/adoptive/step-father is living in the household → **H3**
CHILD's biological/adoptive/step-father is not living in the household → **H4**

H3. Is (CHILD's) (biological father/adoptive/step) father currently not working, working full time, or working part time?

1. Working full time
2. Working part time
3. Not working currently

Child care arrangements

H4. How old was (CHILD) when (he/she) was first cared for by someone other than you (or your spouse) on a regular basis? By regular I mean at least once a week for a month.

YEARS MONTHS

NEVER WAS CARED FOR BY SOMEONE ELSE → **GO TO SECTION J**

H4a RULE: **REVIEW E1**

1. CHILD IS IN K1, K2, OR PRIMARY SCHOOL → **GO TO H4a**
2. ALL OTHERS → **GO TO H4b**

H4a. Was that before or after (CHILD) started Kindergarten?

1. BEFORE → **GO TO H4b**
2. AFTER → **GO TO H13**

H4b. How many child care arrangements have you used for (CHILD) between (his/her) birth and when (he/she) started kindergarten?

_____ (number of child care arrangements)

The next questions ask about the child care arrangements or programmes that you have used for your (CHILD) since (his/her) birth. We want to start with the first arrangement you used for (CHILD) and then continue through any additional arrangements you may have used, in the order that you used them. We will end the history when (CHILD) started kindergarten.

Arrangements	#1	#2	#3
H5. What type of programme or arrangement was that?	1. RELATIVE IN THE CHILD'S HOME	1. RELATIVE IN THE CHILD'S HOME	1. RELATIVE IN THE CHILD'S HOME
	2. NON-RELATIVE IN THE CHILD'S HOME (DOMESTIC WORKER)	2. NON-RELATIVE IN THE CHILD'S HOME (DOMESTIC WORKER)	2. NON-RELATIVE IN THE CHILD'S HOME (DOMESTIC WORKER)
	3. CARE IN A RELATIVE'S HOME	3. CARE IN A RELATIVE'S HOME	3. CARE IN A RELATIVE'S HOME
	4. CARE IN A NON-RELATIVE'S HOME (FAMILY DAY CARE PROVIDER)	4. CARE IN A NON-RELATIVE'S HOME (FAMILY DAY CARE PROVIDER)	4. CARE IN A NON-RELATIVE'S HOME (FAMILY DAY CARE PROVIDER)
	5. INFANT CARE CENTRE	5. INFANT CARE CENTRE	5. INFANT CARE CENTRE
	6. NURSERY SCHOOL, PRESCHOOL, OR CHILD CARE CENTRE	6. NURSERY SCHOOL, PRESCHOOL, OR CHILD CARE CENTRE	6. NURSERY SCHOOL, PRESCHOOL, OR CHILD CARE CENTRE
	7. BEFORE OR AFTER-SCHOOL PROGRAMME	7. BEFORE OR AFTER-SCHOOL PROGRAMME	7. BEFORE OR AFTER-SCHOOL PROGRAMME
	8. CHILD CARES FOR SELF ALONE	8. CHILD CARES FOR SELF ALONE	8. CHILD CARES FOR SELF ALONE
	9. OTHER TYPE OF CHILD CARE, (SPECIFY): _____ _____	9. OTHER TYPE OF CHILD CARE, (SPECIFY): _____ _____	9. OTHER TYPE OF CHILD CARE, (SPECIFY): _____ _____
H6. How old was (CHILD) when you started using the programme or arrangement?	_____ _____ YEARS _____ _____ MONTHS	_____ _____ YEARS _____ _____ MONTHS	_____ _____ YEARS _____ _____ MONTHS
H7. How many <u>days</u> each week was (CHILD) cared for in this programme or arrangement?	_____ _____ DAYS/WEEK	_____ _____ DAYS/WEEK	_____ _____ DAYS/WEEK
H8. How many <u>hours</u> each week was (CHILD) cared for in this programme or arrangement?	_____ _____ HOURS/WEEK	_____ _____ HOURS/WEEK	_____ _____ HOURS/WEEK
H9. Did your household receive subsidies for this programme?	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO

H9a. How much was it?	\$_____	\$_____	\$_____
H9b. Was that...?	1. EVERY MONTH	1. EVERY MONTH	1. EVERY MONTH
	2. EVERY YEAR	2. EVERY YEAR	2. EVERY YEAR
	3. OTHER, (SPECIFY) _____	3. OTHER, (SPECIFY) _____	3. OTHER, (SPECIFY) _____
H10. How much did your household pay out of pocket (not covered by government or public agency) for this programme or arrangement?	\$_____	\$_____	\$_____
	NOTHING → GO TO H20	NOTHING → GO TO H20	NOTHING → GO TO H20
H10a. Was that...?	1. PER HOUR	1. PER HOUR	1. PER HOUR
	2. PER DAY	2. PER DAY	2. PER DAY
	3. PER WEEK	3. PER WEEK	3. PER WEEK
	4. EVERY 2 WEEKS	4. EVERY 2 WEEKS	4. EVERY 2 WEEKS
	5. EVERY MONTH	5. EVERY MONTH	5. EVERY MONTH
	6. EVERY YEAR	6. EVERY YEAR	6. EVERY YEAR
	7. OTHER, (SPECIFY) _____	7. OTHER, (SPECIFY) _____	7. OTHER, (SPECIFY) _____
H10b. Was that amount for (CHILD) only, or did it cover other children in your household?	1. CHILD ONLY → GO TO H11	1. CHILD ONLY → GO TO H11	1. CHILD ONLY → GO TO H11
	2. OTHER CHILDREN IN THE HOUSEHOLD	2. OTHER CHILDREN IN THE HOUSEHOLD	2. OTHER CHILDREN IN THE HOUSEHOLD
H10c. How many other children did it cover?	___ # OF CHILDREN	___ # OF CHILDREN	___ # OF CHILDREN
H11. How old was (CHILD) when you stopped using this programme or arrangement?	1. ENDED IN _____ YEARS _____ MONTHS	1. ENDED IN _____ YEARS _____ MONTHS	1. ENDED IN _____ YEARS _____ MONTHS
	2. HAS NOT ENDED, STILL USING ARRANGEMENT	2. HAS NOT ENDED, STILL USING ARRANGEMENT	2. HAS NOT ENDED, STILL USING ARRANGEMENT
H12. Did you use any other programmes or arrangements (before (CHILD) entered school) that you have not told me about? (This can be at same time as previous arrangement or after previous arrangement)	1. YES → GO TO ARR 2	1. YES → GO TO ARR 3	1. YES → GO TO H13 RULE
	5. NO → GO TO H13 RULE	5. NO → GO TO H13 RULE	5. NO → GO TO H13 RULE

H13 RULE: SEE E1

- 1. CHILD IS IN K1, K2, OR PRIMARY SCHOOL → **GO TO H13**
- 2. ALL OTHERS → **GO TO J1 RULE**

H13. Please tell me which of these you now use for (CHILD) on a regular basis, that is, at least once a week for the last month. [CHECK ALL THAT APPLY]

A. RELATIVE UNDER 13 IN THE CHILD'S HOME

B. RELATIVE 13 OR OLDER IN THE CHILD'S HOME

C. NON-RELATIVE IN THE CHILD'S HOME (DOMESTIC WORKER)

D. CARE IN A RELATIVE'S HOME

E. CARE IN A NON-RELATIVE'S HOME (FAMILY DAYCARE PROVIDER)

F. NURSERY SCHOOL, PRESCHOOL, CHILD CARE CENTRE, OR INFANT CARE CENTRE

G. BEFORE OR AFTER-SCHOOL PROGRAMME CARE CENTRE

H. CHILD CARES FOR SELF ALONE

I. OTHER TYPE OF CHILD CARE (SPECIFY) _____

J. NONE, ONE PARENT ALWAYS CARES FOR CHILD

H14 RULE: SEE H13

- 1. "NONE" (BOX J) CHECKED AT H13 → **TURN TO J1 RULE**
- 2. MORE THAN ONE ARRANGEMENT CHECKED AT H13 → **GO TO H14**
- 3. ONLY ONE ARRANGEMENT CHECKED AT H13 → **WRITE LETTER OF THAT ARRANGEMENT IN H14 AND GO TO H17**

H14. Please tell me which of those arrangements you use the most hours each week.

_____ (LETTER OF FIRST ARRANGEMENT)

H14a. (IF ARRANGEMENT IN H13 IS LETTER A, B, OR D, ASK:) How is this person related to (CHILD)?

RELATIONSHIP TO CHILD

H15. (ASK IF NECESSARY, BUT MARK LETTER) Which arrangement do you use next most frequently?

_____ (LETTER OF SECOND ARRANGEMENT)

H15a. (IF ARRANGEMENT IN H13 IS LETTER A, B, OR D ASK:) How is this person related to (CHILD)?

RELATIONSHIP TO CHILD

H16. (ASK IF NECESSARY, BUT MARK LETTER) Which arrangement do you use next most frequently after that?

_____ (LETTER OF THIRD ARRANGEMENT)

H16a. (IF ARRANGEMENT IN H13 IS LETTER A, B, OR D ASK:) How is this person related to (CHILD)?

RELATIONSHIP TO CHILD

H17. How many days each week is (CHILD) cared for in (NAME OF ARRANGEMENT FROM H14)?

_____ (DAYS)

H18. How many hours each week is (CHILD) cared for in this programme/arrangement?

_____ (HOURS)

H19. For how long has (CHILD) been cared for on a regular basis in this programme/arrangement? Again, by regular, we mean at least once a week for the last month.

_____ MONTHS OR _____ (WEEKS) OR _____ DAYS

H20. Has your household received any subsidies for this programme/arrangement?

1. Yes → **GO TO H20a**
2. No → **GO TO H21**

H20a. How much was it?

_____ Singapore Dollars

H20b. Was it...?

1. Every month
2. Every year
3. Other, specify _____

H21. How much does your household pay out of pocket (not covered by government or public agency) for this programme/arrangement?

\$_____ → GO TO H21a

NOTHING

→ GO TO H23 RULE

H21a. (Is that per hour, daily, weekly, every 2 weeks, every month or every year?)

1. Per hour
2. Daily
3. Weekly
4. Every 2 weeks
5. Every month
6. Every year

H22. Is this amount of payment for (CHILD) only, or does it cover other children in your household as well?

1. Includes other children → GO TO H22a
2. Includes (CHILD) only → GO TO H23 RULE

H22a. How many other children does this payment include?

_____ NUMBER OF CHILDREN

H23 RULE: SEE H15

1. R HAS ANSWER IN H15 GO TO H23 (ASK H23-H27 ABOUT THIS ARRANGEMENT)
2. ALL OTHERS → GO TO J1 RULE

H23. Now tell me about the programme/arrangement that you use the second greatest number of hours each week, (NAME OF ARRANGEMENT FROM H15). How many days each week is (CHILD) cared for in this programme/arrangement?

_____ DAYS

H24. How many hours each week is (CHILD) cared for in this programme/arrangement?

_____HOURS

H25. For how many months has (CHILD) been cared for on a regular basis in this programme/arrangement? Again, by regular, we mean at least once a week for the last month.

_____MONTHS OR _____WEEKS OR _____DAYS

H26. Has your household received any subsidies for this programme/arrangement?

1. Yes → **GO TO H26a**
2. No → **GO TO H27**

H26a. How much was it?

_____ Singapore Dollars

H26b. Was it...?

1. Every month
2. Every year
3. Other, specify _____

H27. How much does your household pay out of pocket (not covered by government or public agency) for this programme/arrangement?

\$ _____ → GO TO H27a

NOTHING → GO TO H29 RULE

H27a. (Is that per hour, daily, weekly, every 2 weeks, every month or every year?)

1. Per hour
2. Daily
3. Weekly
4. Every 2 weeks
5. Every month
6. Every year

H28. Is this amount of payment for (CHILD) only, or does it cover other children in your household as well?

1. Includes other children → GO TO H28a
2. Includes (Child) only → GO TO H29 RULE

H28a. How many other children does this payment include?

_____ NUMBER OF CHILDREN

H29 RULE: SEE H16

1. R HAS ANSWER IN H16 → GO TO H29 (ASK H29-H33 ABOUT THIS ARRANGEMENT)
2. ALL OTHERS → GO TO J1 RULE

H29. Now tell me about the programme/arrangement that you use the third greatest number of hours each week, (NAME ARRANGEMENT FROM H256). How many days each week is (CHILD) cared for in this (programme/arrangement)?

_____ DAYS

H30. How many hours each week is (CHILD) cared for in this programme/arrangement?

_____HOURS

H31. For how many months has (CHILD) been cared for on a regular basis in this programme/arrangement? (Again, by regular, we mean at least once a week for the last month.)

_____MONTHS OR _____WEEKS OR _____DAYS

H32. Has your household received any subsidies for this programme/arrangement?

- 1. Yes → **GO TO H32a**
- 2. No → **GO TO H33**

H32a. How much was it?
_____ Singapore Dollars

- H32b. Was it...?
- 1. Every month
 - 2. Every year
 - 3. Other, specify _____

H33. How much does your household pay out of pocket (not covered by government or public agency) for this programme/arrangement?

\$ _____ → **GO TO H33a**

NOTHING → **GO TO SECTION J**

H33a. (Is that per hour, daily, weekly, every 2 weeks, every month, or every year?)

- 1. Per hour
- 2. Daily
- 3. Weekly
- 4. Every 2 weeks
- 5. Every month
- 6. Every year

H34. Is this amount of payment for (CHILD) only, or does it cover other children in your household as well?

- 1. Includes other children → **GO TO H34a**
- 2. Includes (CHILD) only → **GO TO SECTION J**

H34a. How many other children does this payment include?

_____NUMBER OF CHILDREN

Appendix B: Summary of Section H (Child Care Arrangements)

Domain	Question No.	Variable Label	Description	Missing (N, %) ¹	Data Alert
	H4	CB_H4_W1	Whether child had ever received regular non-parental care	0 (0%)	NIL
	H4	CB_H4_YEARS_W1	Child's age in years during non-parental care	12 (0.24%)	NIL
	H4	CB_H4_MONTHS_W1	Child's age in months during non-parental care	12 (0.24%)	NIL
	H4a	CB_H4_A_W1	Whether non-parental care started before or after kindergarten	1,173 (23.44%)	Question H4a should have been skipped for children not enrolled in Kindergarten 1 or 2 or primary school, but the skipping pattern is inconsistent with E11 (whether child was in K1, K2, primary school, or none) and child's schooling level based on their birth year. Contrary to the skipping rule, caregivers whose children were at earlier schooling levels (Infant, Playgroup, Nursery) responded to this question. 1. Three cases (111013CHILD1, 13220CHILD1, 371020CHILD1) did not observe the skipping rule: Caregivers indicated that non-parental care for their child only began after kindergarten but responded to all questions about child care arrangements between birth and kindergarten. 2. Four caregivers (11037CHILD2, 153151CHILD1, 292473CHILD1, 31001CHILD2) indicated that they had only one child care arrangement between birth and kindergarten but provided details for a second or third care arrangement in the next sections.
Non-Parental Care Since Birth	H4b	CB_H4_B_W1	Number of care arrangements between birth and kindergarten	1,283 (25.63%)	
	H5 #1	CB_H5_W1	First child care arrangement since birth	1,367 (27.31%)	NIL
	H6 #1	CB_H6_YEARS_W1	Child's age in years during first care arrangement	1,367 (27.31%)	NIL
	H6 #1	CB_H6_MONTHS_W1	Child's age in months during first care arrangement	1,367 (27.31%)	NIL
	H7 #1	CB_H7_DAYS_W1	Number of days per week in first care arrangement	1,367 (27.31%)	NIL
	H8 #1	CB_H8_HOURS_W1	Number of hours per week in first care arrangement	1,367 (27.31%)	NIL
	H9 #1	CB_H9_W1	Whether family received subsidies for first care arrangement	2,936 (58.66%)	NIL
	H9a #1	CB_H9_A_SGD_W1	Subsidy amount for first care arrangement	2,936 (58.66%)	NIL
	H9b #1	CB_H9_B_W1	Subsidy frequency for first care arrangement	2,936 (58.66%)	NIL
	H10 #1	CB_H10_W1	Whether family paid out of pocket for first care arrangement	2,936 (58.66%)	NIL
	H10 #1	CB_H10_SGD_W1	Expenditure on first care arrangement	2,936 (58.66%)	NIL
	H10a #1	CB_H10_A_W1	Frequency of spending on first care arrangement	2,936 (58.66%)	NIL
	H10b #1	CB_H10_B_W1	Whether expenditure on care arrangement covered other children	2,962 (59.18%)	NIL
	H10c #1	CB_H10_C_CHILDREN_W1	Number of other children covered	2,962 (59.18%)	NIL
	H11 #1	CB_H11_W1	Whether first care arrangement was still in use	1,394 (27.85%)	NIL
	H11 #1	CB_H11_YEARS_W1	Child's age in years upon stopping first care arrangement	1,411 (28.19%)	Twelve caregivers indicated that they were still using their first child care arrangement but provided a stopping age.
	H11 #1	CB_H11_MONTHS_W1	Child's age in months upon stopping first care arrangement	1,411 (28.19%)	
First Care Arrangement Between Birth and Kindergarten	H5 #2	CB_H5_2_W1	Second child care arrangement since birth	1,356 (27.09%)	NIL
	H6 #2	CB_H6_2_YEARS_W1	Child's age in years during second care arrangement	1,361 (27.19%)	NIL
	H6 #2	CB_H6_2_MONTHS_W1	Child's age in months during second care arrangement	1,356 (27.09%)	NIL
	H7 #2	CB_H7_2_DAYS_W1	Number of days per week in second care arrangement	1,356 (27.09%)	NIL
	H8 #2	CB_H8_2_HOURS_W1	Number of hours per week in second care arrangement	1,356 (27.09%)	NIL
	H9 #2	CB_H9_2_W1	Whether family received subsidies for second care arrangement	1,356 (27.09%)	NIL
	H9a #2	CB_H9_2_A_SGD_W1	Subsidy amount for second care arrangement	1,356 (27.09%)	NIL
	H9b #2	CB_H9_2_B_W1	Subsidy frequency for second care arrangement	1,356 (27.09%)	NIL
	H10 #2	CB_H10_2_W1	Whether family paid out of pocket for second care arrangement	1,356 (27.09%)	NIL
	H10 #2	CB_H10_2_SGD_W1	Expenditure on second care arrangement	1,356 (27.09%)	NIL
	H10a #2	CB_H10_2_A_W1	Frequency of spending on second care arrangement	1,356 (27.09%)	NIL
	H10b #2	CB_H10_2_B_W1	Whether expenditure on care arrangement covered other children	1,356 (27.09%)	NIL
	H10c #2	CB_H10_2_C_CHILDREN_W1	Number of other children covered	1,356 (27.09%)	NIL
	H11 #2	CB_H11_2_W1	Whether second care arrangement was still in use	1,357 (27.11%)	NIL
	H11 #2	CB_H11_2_YEARS_W1	Child's age in years upon stopping second care arrangement	1,361 (27.19%)	NIL
	H11 #2	CB_H11_2_MONTHS_W1	Child's age in months upon stopping second care arrangement	1,361 (27.19%)	NIL
Second Care Arrangement Between Birth and Kindergarten	H5 #3	CB_H5_3_W1	Third child care arrangement since birth	1,356 (27.09%)	NIL
	H6 #3	CB_H6_3_YEARS_W1	Child's age in years during third care arrangement	1,356 (27.09%)	NIL
	H6 #3	CB_H6_3_MONTHS_W1	Child's age in months during third care arrangement	1,356 (27.09%)	NIL
	H7 #3	CB_H7_3_DAYS_W1	Number of days per week in third care arrangement	1,356 (27.09%)	NIL
	H8 #3	CB_H8_3_HOURS_W1	Number of hours per week in third care arrangement	1,356 (27.09%)	NIL
	H9 #3	CB_H9_3_W1	Whether family received subsidies for third care arrangement	1,356 (27.09%)	NIL
	H9a #3	CB_H9_3_A_SGD_W1	Subsidy amount for third care arrangement	1,356 (27.09%)	NIL
	H9b #3	CB_H9_3_B_W1	Subsidy frequency for third care arrangement	1,356 (27.09%)	NIL
	H10 #3	CB_H10_3_W1	Whether family paid out of pocket for third care arrangement	1,356 (27.09%)	NIL
	H10 #3	CB_H10_3_SGD_W1	Expenditure on third care arrangement	1,356 (27.09%)	NIL
	H10a #3	CB_H10_3_A_W1	Frequency of spending on third care arrangement	1,356 (27.09%)	NIL
	H10b #3	CB_H10_3_B_W1	Whether expenditure on care arrangement covered other children	1,356 (27.09%)	NIL
	H10c #3	CB_H10_3_C_CHILDREN_W1	Number of other children covered	1,356 (27.09%)	NIL
	H11 #3	CB_H11_3_W1	Whether third care arrangement was still in use	1,356 (27.09%)	NIL
	H11 #3	CB_H11_3_YEARS_W1	Child's age in years upon stopping third care arrangement	1,356 (27.09%)	NIL
	H11 #3	CB_H11_3_MONTHS_W1	Child's age in months upon stopping third care arrangement	1,356 (27.09%)	NIL
Third Care Arrangement Between Birth and Kindergarten	H13	CB_H13_A_W1	Whether child was receiving care from relative under 13 in child's home	43 (0.86%)	Skipping rules were not observed: Caregivers who indicated in H4 that their child had never received non-parental care (N = 90), or whose children were not enrolled in Kindergarten 1 or 2 or Primary School (based on E11; N = 37), responded to questions about their current child care arrangements.
	H13	CB_H13_B_W1	Whether child was receiving care from relative 13 or older in child's home	43 (0.86%)	
	H13	CB_H13_C_W1	Whether child was receiving care from non-relative in child's home	43 (0.86%)	
	H13	CB_H13_D_W1	Whether child was receiving care in a relative's home	43 (0.86%)	
	H13	CB_H13_E_W1	Whether child was receiving care in a non-relative's home	43 (0.86%)	
	H13	CB_H13_F_W1	Whether child was receiving care in a nursery school, preschool, or child care centre	43 (0.86%)	
	H13	CB_H13_G_W1	Whether child was receiving care in a before or after school program	43 (0.86%)	
	H13	CB_H13_H_W1	Whether child cared for self alone	43 (0.86%)	
	H13	CB_H13_I_W1	Other type of child care arrangement not listed above	43 (0.86%)	
Current Care Arrangements for Older Children (K1, K2, Primary One)	H13	CB_H13_J_W1	None of the above - one parent always cared for child	43 (0.86%)	
	H14	CB_H14_W1	Most frequently used child care arrangement	135 (2.70%)	
	H14a	CB_H14_A_W1	Relative's relationship to child (if a relative provided care for child)	1 (0.02%)	
	H14b	CB_H14_B_W1	Number of days per week in most frequently used care arrangement	145 (2.90%)	
	H14c	CB_H14_C_W1	Number of hours per week in most frequently used care arrangement	149 (2.98%)	
	H14d	CB_H14_D_W1	Duration type - Months, weeks, or days	145 (2.90%)	
	H14e	CB_H14_E_W1	Duration of most frequently used care arrangement in months	10 (0.20%)	
	H14f	CB_H14_F_W1	Duration of most frequently used care arrangement in weeks	2 (0.04%)	
	H14g	CB_H14_G_W1	Duration of most frequently used care arrangement in days	1 (0.02%)	
	H20	CB_H20_W1	Whether family received subsidies for most frequently used care arrangement	189 (3.78%)	
	H20a	CB_H20_A_SGD_W1	Subsidy amount for most frequently used care arrangement	189 (3.78%)	
	H20b	CB_H20_B_W1	Subsidy frequency for most frequently used care arrangement	189 (3.78%)	
	H21	CB_H21_W1	Whether family paid out of pocket for most frequently used care arrangement	191 (3.82%)	
	H21a	CB_H21_A_SGD_W1	Expenditure on most frequently used care arrangement	191 (3.82%)	
	H21b	CB_H21_B_W1	Frequency of spending on most frequently used care arrangement	191 (3.82%)	
Most Frequently Used Care Arrangement for Older Children (K1, K2, Primary One)	H22	CB_H22_W1	Whether expenditure on care arrangement covered other children	1,284 (25.65%)	
	H22a	CB_H22_A_CHILDREN_W1	Number of other children covered	1,284 (25.65%)	
	H15	CB_H15_W1	Second most frequently used child care arrangement	80 (1.60%)	
	H15a	CB_H15_A_W1	Relative's relationship to child (if a relative provided care for child)	0 (0%)	
	H23	CB_H23_DAYS_W1	Number of days per week in second most frequently used care arrangement	81 (1.62%)	
	H24	CB_H24_HOURS_W1	Number of hours per week in second most frequently used care arrangement	81 (1.62%)	
	H25	CB_H25_W1	Duration type - Months, weeks, or days	81 (1.62%)	
	H25a	CB_H25_MONTHS_W1	Duration of second most frequently used care arrangement in months	1 (0.02%)	
	H25b	CB_H25_WEEKS_W1	Duration of second most frequently used care arrangement in weeks	0 (0%)	
	H25c	CB_H25_DAYS_W1	Duration of second most frequently used care arrangement in days	0 (0%)	
	H26	CB_H26_W1	Whether family received subsidies for second most frequently used care arrangement	81 (1.62%)	
	H26a	CB_H26_A_SGD_W1	Subsidy amount for second most frequently used care arrangement	81 (1.62%)	
	H26b	CB_H26_B_W1	Subsidy frequency for second most frequently used care arrangement	81 (1.62%)	
	H27	CB_H27_W1	Whether family paid out of pocket for second most frequently used care arrangement	81 (1.62%)	
	H27a	CB_H27_SGD_W1	Expenditure on second most frequently used care arrangement	81 (1.62%)	
	H27b	CB_H27_B_W1	Frequency of spending on second most frequently used care arrangement	81 (1.62%)	
Second Most Frequently Used Care Arrangement for Older Children (K1, K2, Primary One)	H28	CB_H28_W1	Whether expenditure on care arrangement covered other children	81 (1.62%)	
	H28a	CB_H28_A_CHILDREN_W1	Number of other children covered	81 (1.62%)	
	H16	CB_H16_W1	Third most frequently used child care arrangement	43 (0.86%)	
	H16a	CB_H16_A_W1	Relative's relationship to child (if a relative provided care for child)	0 (0%)	
	H29	CB_H29_DAYS_W1	Number of days per week in third most frequently used care arrangement	43 (0.86%)	
	H30	CB_H30_HOURS_W1	Number of hours per week in third most frequently used care arrangement	43 (0.86%)	
	H31	CB_H31_W1	Duration type - Months, weeks, or days	43 (0.86%)	
	H31a	CB_H31_MONTHS_W1	Duration of third most frequently used care arrangement in months	0 (0%)	
	H31b	CB_H31_WEEKS_W1	Duration of third most frequently used care arrangement in weeks	0 (0%)	
	H31c	CB_H31_DAYS_W1	Duration of third most frequently used care arrangement in days	0 (0%)	
	H32	CB_H32_W1	Whether family received subsidies for third most frequently used care arrangement	43 (0.86%)	
	H32a	CB_H32_A_SGD_W1	Subsidy amount for third most frequently used care arrangement	43 (0.86%)	
	H32b	CB_H32_B_W1	Subsidy frequency for third most frequently used care arrangement	43 (0.86%)	
	H32c	CB_H32_C_W1	Whether family paid out of pocket for third most frequently used care arrangement	43 (0.86%)	
	H33	CB_H33_SGD_W1	Expenditure on third most frequently used care arrangement	43 (0.86%)	
	H33a	CB_H33_A_W1	Frequency of spending on third most frequently used care arrangement	43 (0.86%)	
Third Most Frequently Used Care Arrangement for Older Children (K1, K2, Primary One)	H34	CB_H34_W1	Whether expenditure on care arrangement covered other children	43 (0.86%)	
	H34a	CB_H34_A_CHILDREN_W1	Number of other children covered	43 (0.86%)	

¹ Percentages were calculated using the full sample (N = 5,005).