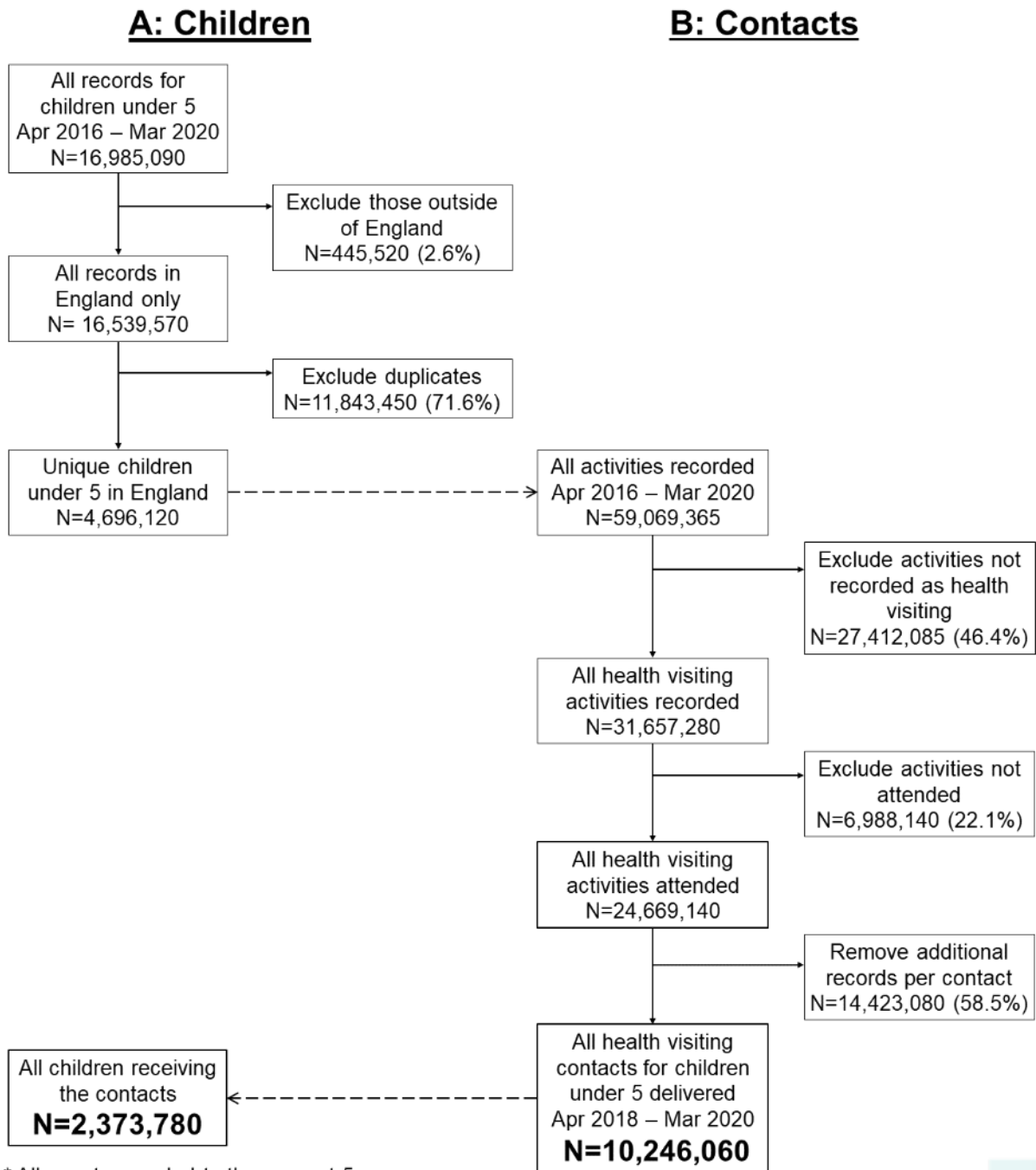# Supplementary Appendices

Supplementary Appendix 1: Identifying the eligible cohort of children (A) and their health visiting contacts (B) in Community Services Dataset from April 2016 to March 2020

A: Children

```
All records for
children under 5
Apr 2016 – Mar 2020
N=16,985,090
        │
        ├──────────────→  Exclude those outside
        │                  of England
        │                  N=445,520 (2.6%)
        ↓
All records in
England only
N= 16,539,570
        │
        ├──────────────→  Exclude duplicates
        │                  N=11,843,450 (71.6%)
        ↓
Unique children
under 5 in England
N=4,696,120
```

B: Contacts

```
All activities recorded
Apr 2016 – Mar 2020
N=59,069,365
        │
        ├──────────────→  Exclude activities not
        │                  recorded as health
        │                  visiting
        │                  N=27,412,085 (46.4%)
        ↓
All health visiting
activities recorded
N=31,657,280
        │
        ├──────────────→  Exclude activities not
        │                  attended
        │                  N=6,988,140 (22.1%)
        ↓
All health visiting
activities attended
N=24,669,140
        │
        ├──────────────→  Remove additional
        │                  records per contact
        │                  N=14,423,080 (58.5%)
        ↓
All health visiting
contacts for children
under 5 delivered
Apr 2018 – Mar 2020
N=10,246,060
```

All children receiving
the contacts
N=2,373,780

* All counts rounded to the nearest 5

Supplementary Appendix 2: Proportion of LA-quarters and local authorities that were assessed as having complete health visiting data in Community Services Dataset between 2016/17 and 2019/20

Year	LA-quarters (N = 596 per year)		Local authorities (N = 149)	
	n	%	n	%
2016/17	24	4.0%	11	7.4%
2017/18	49	8.2%	23	15.4%
2018/19	75	12.6%	39	26.2%
2019/20	89	14.9%	43	28.9%
Overall	237	9.9%	63	42.3%

LA = local authority. Complete data was defined as being within +/-15% of the reference Health Visitor Service Delivery Metrics for the specified local authority and quarter.

Supplementary Appendix 3: Missingness for key variables related to health visiting service delivery in Community Service Dataset for local authorities with complete data, 2016/17 to 2019/20

	Contacts with missing data		Range of missing data by LA		LAs with <20% missing data	
	n	%	Min	Max	n	%
Contact characteristics						
Duration (minutes)	247,110	9.3%	1.3%	100.0%	56	88.9%
Medium (e.g. face-to-face, phone)	177,420	6.7%	2.5%	99.9%	50	79.4%
Group therapy contact (yes/no)	416,420	15.6%	0.7%	99.9%	49	77.8%
Person who was the subject of the contact (i.e. patient or proxy)	86,905	3.3%	1.0%	100.0%	55	87.3%
Location of face-to-face contacts	341,340	16.3%	0.5%	99.9%	51	81.0%
Distance from home to contact location	2,286,620	85.7%	0.0%	99.1%	8	12.7%
Staff and service characteristics						
Staff type	2,155,715	80.8%	0.0%	97.8%	5	7.9%
Registration body	2,151,355	80.7%	0.0%	90.4%	4	6.3%
Occupation type	2,599,445	97.5%	0.0%	89.2%	1	1.6%
Job role	2,115,880	79.3%	0.1%	89.4%	5	7.9%
Provider organisation code	0	0.0%	n/a	n/a	63	100.0%
Commissioner organisation code	25,700	1.0%	6.0%	100.0%	61	96.8%

LA = local authority. N = 2,666,845 for contacts; 2,096,650 for face-to-face-contacts; 63 for local authorities.