**MatCH participant recruitment and data linkage flow chart**

updated by Colleen Loos 31/08/21

**Notes for data users:**

The first version of this flow chart was published in the [MatCH Cohort Profile paper](http://dx.doi.org/10.14301/llcs.v9i3.491). However, some additional paper surveys have since been included (n=9 mothers of 19 children), also one mother who had originally consented to data linkage subsequently withdrew consent. Therefore, the flow chart has been updated (see next page). Note that participation figures in the flow chart are colour coded (please select the appropriate figures for the group in your analysis):

* All mothers/children, including those who consented to data linkage only
* Survey mothers and children only

The [match\_main1\_2016\_children] dataset includes the survey records for 5799 children, while their mothers’ data (n=3048) is in [match\_main1\_2016\_mothers].

All invited 8929 women are in the dataset [match\_main1\_invitationlist]. The 24 mothers who consented to ‘data linkage only’ can be identified by the variable [STUDY\_STATUS=2]. Key data on their 43 children is in [match\_dl\_only\_childrencidalias].

**AEDC** is collected every 3 years on children starting school in that year. We have only linked data from the AEDC 2009, 2012 and 2015 collections so far. 2018 data is currently available and we plan to obtain it next year, along with the 2021 collection. By then, all MatCH children should have started school, so that will be the final linkage round. We anticipate that we will get records for another approx. 400 children.

**NAPLAN** is first administered to children in Year 3, at roughly 8 years of age. It is administered again in Years 5, 7, and 9. NAPLAN linkage was conducted in each state from 2019 to early 2020. In states which processed our request promptly, the 2019 data was not available yet, so younger children were not matched. Specifically, both linkage and record extraction were completed for ACT and QLD before 2019 NAPLAN data became available. In NSW, only records to 2018 were available for matching, however, records for 2019 became available before the data were extracted. Therefore, 2019 records were supplied for the existing matched children, and not for any additional children who had completed their first (Year 3) NAPLAN in 2019. Please also note:

* WA and NT did not supply any Year 9 data. We will seek this next time.
* There was no NAPLAN collection in 2020 (due to COVID19).
* NAPLAN collections for 2021 and subsequent years. We expect the youngest MatCH children to be sitting NAPLAN in years 2024-2029.

**Estimates** of numbers of children ‘unlikely to have records’ at the time of linkage are approximate, as they are based on:

* age/ birth years - age at school entry varies by state, and over time; children’s level of maturity may also be a factor.
* numbers residing overseas, or in various states, at the time of *MatCH*, rather than residential location at the time of *eligibility* *for AEDC/ NAPLAN*, which was not ascertainable.

**Flow chart:**

14 247 women born in 1973-78 participated in baseline ALSWH survey in 1996

Not eligible for MatCH (n=5318):

* Died (n=108)
* Withdrew from ALSWH (n=1549)
* Declined to participate in sub-studies (n=105)
* Infertility (n=255)
* No current email or mail address (n=3301)

Women invited for MatCH study (n=8929)

Found to be ineligible (n=110);

* Had no eligible children (n=108)
* Died (n=2)

Did not participate (n=5747 /5771)**a**

35% /34% responded

(3072 /3048 mothers with 5842 /5799 children)**b**

* Agreed to child record linkage but omitted required details (n=13 for 25 children)
* Did not agree to child record linkage (n=359 women for 651 children)
* Did not complete consent form (n=440 for 866 children)

Mothers agreed to external data linkage (n=2261 /2237 for 4300 /4257 children)

Children without AEDC scores (n=3357 /3321):

* Unlikely to have started school in an AEDC collection year**c** (n=3164 /3130)
* May have started school in an AEDC collection year but not matched (n=193 /191)

Children without NAPLAN scores (n=1784 /1763):

* Record linked, but no scores**d** (n=52 /51)
* Unlikely to have NAPLAN record yet**e** (n=1407 /1395)
* May have NAPLAN record, but not matched (n=325 /317)

MatCH record linkage:

* AEDC (n=943 /936 children from 807 /801 mothers)
* NAPLAN (2516 /2494 children from 1591 /1572 mothers)

Abbreviations; AEDC: the Australian Early Development Census; NAPLAN: National Assessment Program – Literacy and Numeracy; ALSWH: Australian Longitudinal Study on Women’s Health, MatCH: Mothers and their Children’s Health.

**a** Of 5747 /5771 women who did not participate at all /in surveys, 2551 had never reported any eligible births in ALSWH Survey Wave 3 (2003) to Wave 7 (2015, when aged 37-42 years). Thus, they were likely to have been ineligible for MatCH.

**b** 24 women did not complete the survey, but they agreed to external record linkage for 43 children.

**c** Birth year 2003, 2006 or 2009 (n=3077 /3043) or residing overseas at time of MatCH survey (n=87 /87). (Note that most children born in 2003 would have been aged over 12 years at time of survey and thus ineligible for MatCH).

**d** Child coded absent in all matched NAPLAN record/s.

**e** Aged less than 8 years at most recent linked NAPLAN (May 2018 for children resident in ACT, NSW or QLD at time of survey, n=685 /685; May 2019 for children resident in other states, n=636 /624) or residing overseas at time of MatCH survey (n=86 /86).

*(Note that there was one mother who consented and supplied complete details for all but one child. She is counted in both n=2261 and n=13, above.)*