

## Supplementary Materials

**Table 1-X** Comparison of demographic characteristics between Australian Census data and both the whole NSW-CDS child cohort and the subcohort with linked parental data (i.e., births registered in NSW).

Demographic variable	General population <sup>1</sup>		NSW-CDS child cohort							
			Whole cohort (n=87 026)		Whole cohort, excluding special needs children <sup>3</sup> (n=83 250)		Births with linked parental data <sup>2</sup> (n=72 245)		Births registered in NSW, excluding special needs <sup>4</sup> (n=69 116)	
	NSW %	AUS %	n	%	n	%	n	%	n	%
<b>Age (years)</b>										
<5			4132	4.75	3977	4.8	3144	4.35	3036	4.39
5 -6			68 275	78.45	65 782	79.0	56 967	78.85	54 885	79.41
≥6			14 619	16.70	13 491	16.2	12 134	16.80	11 195	16.20
<b>Sex</b>										
Male	51.50	51.40	44 729	51.40	42 089	50.56	37 116	51.38	34 931	50.54
Female	48.50	48.60	42 297	48.60	41 161	49.44	35 129	48.62	34 185	49.46
<b>ESL</b>										
Yes			15 573	17.89	14 803	17.78	11 594	16.05	10 993	15.91
No			71 453	82.11	68 447	82.22	60 651	83.95	58 123	84.09
<b>ARIA</b>										
Major Cities	72.81	72.90	62 556	71.88	59 865	71.91	53 171	73.60	50 837	73.55
Inner Regional	20.05	20.24	16 674	19.16	15 943	19.15	13 088	18.12	12 547	18.15
Outer Regional	6.48	6.33	6 771	7.78	6452	7.75	5239	7.25	5009	7.25
Remote	0.51	0.46	890	1.02	861	1.03	660	0.91	639	0.92
Very Remote	0.15	0.06	135	0.16	129	0.16	87	0.12	84	0.12
<b>SEIFA</b>										
Q1 ( most disadvantaged)	20.00	20.00	20 951	24.07	19 862	23.86	17 067	23.63	16 199	23.44
Q2	20.00	20.00	19 336	22.22	18 380	22.08	15 634	21.64	14 877	21.53
Q3	20.00	20.00	12 489	14.35	11 971	14.38	10 458	14.48	10 015	14.49
Q4	20.00	20.00	12 201	14.02	11 710	14.07	10 453	14.47	10 030	14.51
Q5 ( least disadvantaged)	19.00	20.00	22 034	25.30	21 312	25.60	18 623	25.78	17 985	26.03

<sup>1</sup>Comparative population of children aged 5-9 years in 2011 (NSW-CDS child cohort ~7 years in 2011) derived from the Australian Bureau of Statistics (ABS) and Australian Institute of Health and Welfare.[6-8,12-13].

<sup>2</sup> Children for whom it is possible to link parental data (i.e., child births registered in NSW); Excludes <sup>3</sup>3776 and <sup>4</sup>3129 children with special needs for whom AEDC developmental indices are unavailable; ESL = English as a second language (excluding children who are proficient in English); ARIA = Accessibility/Remoteness Index of Australia; SEIFA = Socio-Economic Indexes for Areas.

## Supplementary Materials

**Table 2-X** Comparison of AEDC scores between the whole NSW-CDS child cohort and a sub-cohort with linked parental records

AEDC domains and sub-domains	NSW-CDS child cohort (n=83 250) <sup>1</sup>		Sub-cohort with linked parental records (n=69 116) <sup>2</sup>	
	n	%	n	%
<b>Physical health and well-being</b>				
Vulnerable: 0-10th percentile	7166	8.6	5639	8.2
At risk: 11-25th percentile	10 663	12.9	8817	12.8
On track: 26-50th percentile	17 652	21.3	14 584	21.2
On track: 51-100th percentile	47 410	57.2	39 899	57.9
Physical readiness for school day				
Not vulnerable	75 445	91.0	63 198	91.7
Vulnerable	7435	9.0	5734	8.3
Physical independence				
Not vulnerable	76 687	92.5	63 889	92.7
Vulnerable	6200	7.5	5046	7.3
Gross and fine motor skills				
Not vulnerable	77 510	93.5	64 601	93.7
Vulnerable	5377	6.5	4335	6.3
<b>Social competence</b>				
Vulnerable: 0-10th percentile	7268	8.8	5750	8.3
At risk: 11-25th percentile	11 653	14.1	9525	13.8
On track: 26-50th percentile	19 061	23.0	15 716	22.8
On track: 51-100th percentile	44 895	54.2	37 937	55.0
Overall social competence				
Not vulnerable	78 068	94.2	65 154	94.5
Vulnerable	4801	5.8	3767	5.5
Responsibility and respect				
Not vulnerable	75 498	91.1	63 056	91.5
Vulnerable	7375	8.9	3869	8.5
Approaches to learning				
Not vulnerable	76 256	92.0	63 714	92.4
Vulnerable	6615	8.0	5209	7.6
Readiness to explore new things				
Not vulnerable	75 318	91.2	62 806	91.5
Vulnerable	7236	8.8	5856	8.5
<b>Emotional maturity</b>				
Vulnerable: 0-10th percentile	6134	7.4	4906	7.1
At risk: 11-25th percentile	11 805	14.3	9647	14.0
On track: 26-50th percentile	20 383	24.7	16 773	24.4
On track: 51-100th percentile	44 230	53.6	37 354	54.4
Prosocial and helping behaviour				
Not vulnerable	74 250	92.2	62 031	92.6
Vulnerable	6241	7.8	4985	7.4
Anxious and fearful behaviour				
Not vulnerable	73 627	89.2	61 321	89.3
Vulnerable	8876	10.8	7326	10.7
Aggressive behaviour				
Not vulnerable	75 434	91.4	62 935	91.7
Vulnerable	7095	8.6	5729	8.3
Hyperactive and inattentive behaviour				
Not vulnerable	73 629	89.2	61 448	89.5
Vulnerable	8922	10.8	7231	10.5

## Supplementary Materials

AEDC domains and sub-domains	NSW-CDS child cohort (n=83 250) <sup>1</sup>		Sub-cohort with linked parental records (n=69 116) <sup>2</sup>	
	n	%	n	%
<b>Language and cognitive skills</b>				
Vulnerable: 0-10th percentile	4848	5.9	3707	5.4
At risk: 11-25th percentile	7892	9.5	6272	9.1
On track: 26-50th percentile	16 059	19.4	13 266	19.3
On track: 51-100th percentile	54 031	65.2	45 643	66.3
Basic literacy				
Not vulnerable	77 453	93.5	64 785	94.1
Vulnerable	5353	6.5	4086	5.9
Interest in literacy/numeracy and memory				
Not vulnerable	77 491	93.8	64 642	94.0
Vulnerable	5155	6.2	4104	6.0
Advanced literacy				
Not vulnerable	78 578	95.0	65 599	95.3
Vulnerable	4145	5.0	3203	4.7
Basic numeracy				
Not vulnerable	74 962	90.7	62 842	91.4
Vulnerable	7708	9.3	5916	8.6
<b>Communication and general knowledge</b>				
Vulnerable: 0-10th percentile	7589	9.2	5689	8.3
At risk: 11-25th percentile	13 085	15.8	10 548	15.3
On track: 26-50th percentile	15 899	19.2	13 155	19.1
On track: 51-100th percentile	46 306	55.9	39 535	57.4
<b>Number of AEDC domains rated “vulnerable” (0-10<sup>th</sup> percentile)</b>				
No domains	65 264	78.7	55 084	79.9
One domain	9117	11.0	7224	10.5
Two domains	4298	5.2	3411	4.9
Three domains	2221	2.7	1707	2.5
Four domains	1346	1.6	1046	1.5
Five domains	649	0.8	468	0.7

Note: Excludes <sup>1</sup>3776 and <sup>2</sup>3129 children with special needs for whom AEDC developmental indices are unavailable, special needs on the AEDC indexes students with a medically diagnosed physical, intellectual or chronic medical condition which requires additional assistance.

Note: Range missing on any domain or sub-domain is from 180 - 2759.

## Supplementary Materials

**Table 3-X** Distribution of causes of admission to a hospital for children, mothers and fathers by ICD10-AM chapters <sup>a b</sup>

Chapter	ICD10-AM Title	Blocks	Children		Mothers		Fathers	
			<i>n</i> < 1 yr old	<i>n</i> >1 yr old	<i>n</i> (mothers)	<i>n</i> (children)	<i>n</i> (fathers)	<i>n</i> (children)
I	Certain infectious and parasitic diseases	A00–B99	4373	7984	8709	8722	3417	3420
II	Neoplasms	C00–D48	305	418	5056	5062	2405	2408
III	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50–D89	234	507	4067	4075	628	629
IV	Endocrine, nutritional and metabolic diseases	E00–E90	926	3262	5347	5360	2554	2565
V	Mental and behavioural disorders	F00–F99	262	589	6122	6150	3448	3462
VI	Diseases of the nervous system	G00–G99	620	2117	3061	3064	2537	2545
VII	Diseases of the eye and adnexa	H00–H59	636	980	947	948	901	907
VIII	Diseases of the ear and mastoid process	H60–H95	551	4454	568	568	477	478
IX	Diseases of the circulatory system	I00–I99	244	325	3273	3276	3032	3047
X	Diseases of the respiratory system	J00–J99	4752	12850	6711	6726	4247	4265
XI	Diseases of the digestive system	K00–K93	1756	3982	17 519	17 578	13 135	13 197
XII	Diseases of the skin and subcutaneous tissue	L00–L99	1125	1897	3366	3368	2883	2886
XIII	Diseases of the musculoskeletal system and connective tissue	M00–M99	146	634	6405	6421	6370	6400
XIV	Diseases of the genitourinary system	N00–N99	1052	1591	16 397	16 511	2881	2889
XV	Pregnancy, childbirth and the puerperium	O00–O99	2	0	70 501	71 440	2	2
XVI	Certain conditions originating in the perinatal period	P00–P96	23 326	75	3	3	18	18
XVII	Congenital malformations, deformations and chromosomal abnormalities	Q00–Q99	8049	1747	1190	1191	330	330
XVIII	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00–R99	5801	5484	16 208	16 257	7829	7853
XIX	Injury, poisoning and certain other consequences of external causes	S00–T98	820	5916	6148	6160	10 474	10 524
XX	External causes of morbidity and mortality	V01–Y98	0	0	1096	1096	2063	2065
XXI	Factors influencing health status and contact with health services	Z00–Z99	72 334	3526	70 499	71 218	18 741	18 809
XXII	Codes for special purposes	U00–U99	0	0	5288	5293	9779	9800

ICD-10 AM – International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification.

<sup>a</sup> Individuals may have multiple admissions, as well as multiple diagnoses across admissions.

<sup>b</sup> Number of children whose mothers/fathers had an hospital admission with that particular cause/diagnoses.

## Supplementary Materials

**Table 4-X.** Distribution of causes of emergency department presentations for children by ICD10-AM

Chapter	ICD10-AM Title	Blocks	<i>n</i>	
			< 1 yr old	>1 yr old
I	Certain infectious and parasitic diseases	A00–B99	235	7213
II	Neoplasms	C00–D48	2	35
III	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50–D89	0	98
IV	Endocrine, nutritional and metabolic diseases	E00–E90	6	327
V	Mental and behavioural disorders	F00–F99	0	48
VI	Diseases of the nervous system	G00–G99	7	223
VII	Diseases of the eye and adnexa	H00–H59	12	713
VIII	Diseases of the ear and mastoid process	H60–H95	62	3314
IX	Diseases of the circulatory system	I00–I99	2	157
X	Diseases of the respiratory system	J00–J99	415	11 129
XI	Diseases of the digestive system	K00–K93	77	2496
XII	Diseases of the skin and subcutaneous tissue	L00–L99	91	2646
XIII	Diseases of the musculoskeletal system and connective tissue	M00–M99	10	2041
XIV	Diseases of the genitourinary system	N00–N99	8	591
XV	Pregnancy, childbirth and the puerperium	O00–O99	0	4
XVI	Certain conditions originating in the perinatal period	P00–P96	0	8
XVII	Congenital malformations, deformations and chromosomal abnormalities	Q00–Q99	4	13
XVIII	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00–R99	450	9778
XIX	Injury, poisoning and certain other consequences of external causes	S00–T98	223	13 843
XX	External causes of morbidity and mortality	V01–Y98	0	0
XXI	Factors influencing health status and contact with health services	Z00–Z99	716	28 089
XXII	Codes for special purposes	U00–U99	0	0

## Supplementary Materials

**Table 5-X** Distribution of causes of emergency department presentations for mothers and fathers by ICD10-AM and comparable ICD9 chapters <sup>a b</sup>

ICD10-AM					ICD-9				
Chapter / Title	Mothers		Fathers		Chapter / Title	Mothers		Fathers	
	<i>n</i> mothers	<i>n</i> children	<i>n</i> fathers	<i>n</i> children		<i>n</i> mothers	<i>n</i> children	<i>n</i> fathers	<i>n</i> children
<b>I.</b> Certain infectious and parasitic diseases	253	254	222	223	<b>I</b> Infectious and parasitic diseases	2146	2147	1528	1528
<b>II.</b> Neoplasms	2	2	3	3	<b>II</b> Neoplasms	34	34	46	46
<b>III.</b> Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	6	6	9	9	<b>IV</b> Diseases of the blood and blood-forming organs	76	76	47	47
<b>IV.</b> Endocrine, nutritional and metabolic diseases	41	41	43	44	<b>III</b> Endocrine, nutritional and metabolic diseases, and immunity disorders	159	159	244	245
<b>V.</b> Mental and behavioural disorders	229	230	158	158	<b>V</b> Mental disorders	1509	1512	1274	1275
<b>VI.</b> Diseases of the nervous system	139	139	58	58	<b>VI</b> Diseases of the nervous system	703	703	381	382
<b>VII.</b> Diseases of the eye and adnexa	132	132	237	238	<b>VII</b> Diseases of the sense organs	1262	1265	1695	1698
<b>VIII.</b> Diseases of the ear and mastoid process	180	180	130	131					
<b>IX.</b> Diseases of the circulatory system	99	99	124	124	<b>VIII</b> Diseases of the circulatory system	730	730	832	833
<b>X.</b> Diseases of the respiratory system	729	730	487	490	<b>IX</b> Diseases of the respiratory system	2628	2629	1964	1967
<b>XI.</b> Diseases of the digestive system	515	515	464	464	<b>X</b> Diseases of the digestive system	3178	3181	2467	2467
<b>XII.</b> Diseases of the skin and subcutaneous tissue	216	216	256	256	<b>XIII</b> Diseases of the skin and subcutaneous tissue	1079	1081	1377	1380
<b>XIII.</b> Diseases of the musculoskeletal system and connective tissue	425	428	537	538	<b>XIV</b> Diseases of the musculoskeletal system and connective tissue	2388	2391	3261	3264
<b>XIV.</b> Diseases of the genitourinary	559	560	120	120	<b>XI</b> Diseases of the genitourinary	3988	3993	692	692

## Supplementary Materials

system					system				
<b>XV.</b> Pregnancy, childbirth and the puerperium	401	403	0	0	<b>XII</b> Complications of pregnancy, childbirth, and the puerperium	74	74	3	3
<b>XVI.</b> Certain conditions originating in the perinatal period	0	0	0	0	<b>XVI</b> Certain conditions originating in the perinatal period	0	0	0	0
<b>XVII.</b> Congenital malformations, deformations and chromosomal abnormalities	0	0	0	0	<b>XV</b> Congenital anomalies	7331	7344	68	68
<b>XVIII.</b> Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	1711	1718	1312	1323	<b>XVII</b> Symptoms, signs, and ill-defined conditions	6504	6518	5919	5925
<b>XIX.</b> Injury, poisoning and certain other consequences of external causes	1349	1355	2356	2369	<b>XVIII</b> Injury and poisoning	6504	6518	11 678	11 717
<b>XX.</b> External causes of morbidity and mortality	128	129	129	129	<b>XIX</b> External causes of injury and supplemental classification	4711	4714	4429	4434
<b>XXI.</b> Factors influencing health status and contact with health services	1017	1020	956	957					
<b>XXII.</b> Codes for special purposes	0	0	0	0					

ICD-10 AM – International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification.

<sup>a</sup> Individuals may have multiple admissions, as well as multiple diagnoses across admissions.

<sup>b</sup> Number of children whose mothers/fathers had an hospital admission with that particular cause/diagnoses.

## Supplementary Materials

**Table 6-X** Number of Criminal Offences for Mothers and Fathers by Type

<b>Australian Standard Offence Code</b>	<b><i>n</i> mothers<sup>1</sup></b>	<b><i>n</i> fathers<sup>2</sup></b>
01 Homicide and related offenses	26	89
02 Acts intended to cause injury	1793	6853
03 Sexual assault and related offences	7	443
04 Dangerous or negligent acts endangering persons	556	3044
05 Abduction, harassment and other offences against the person	212	1229
06 Robbery, extortion and related offences	123	530
07 Unlawful entry with intent/burglary, break and enter	309	1419
08 Theft and related offences	1870	3519
09 Fraud, deception and related offences	877	1637
10 Illicit drug offences	842	3514
11 Prohibited and regulated weapons and explosive offences	81	848
12 Property damage	742	3218
13 Public order offences	1125	3945
14 Traffic and Vehicle Regulation	2781	11020
15 Offences against justice procedures, government security & government operations	1302	4532
16 Miscellaneous offences	273	753

<sup>1</sup> Number of children whose mothers committed such offence.

<sup>2</sup> Number of children whose/fathers committed such offence.