

Supplementary Table 1: ICD-10 chapter to Read Diagnosis code chapter descriptions and mapping

ICD-10 Chapter	ICD-10 description	ICD codes (inclusive)	Read diagnosis chapter description	Read diagnosis chapter code (first character)
1	Certain infectious and parasitic diseases	A00–B99	Infectious and parasitic diseases	A
2	Neoplasms	C00–D48	Neoplasms	B
3	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50–D89	Diseases of the blood and blood-forming organs	D
4	Endocrine, nutritional and metabolic diseases	E00–E90	Endocrine, nutritional and metabolic diseases	C
5	Mental and behavioural disorders	F00–F99	Mental disorders	E
6	Diseases of the nervous system	G00–G99	Nervous system and sense organ diseases	F
7	Diseases of the eye and adnexa	H00–H59	Nervous system and sense organ diseases	F
8	Diseases of the ear and mastoid process	H60–H95	Nervous system and sense organ diseases	F
9	Diseases of the circulatory system	I00–I99	Circulatory system diseases	G
10	Diseases of the respiratory system	J00–J99	Respiratory system diseases	H
11	Diseases of the digestive system	K00–K93	Digestive system diseases	J
12	Diseases of the skin and subcutaneous tissue	L00–L99	Skin and subcutaneous tissue diseases	M
13	Diseases of the musculoskeletal system and connective tissue	M00–M99	Musculoskeletal and connective tissue diseases	N
14	Diseases of the genitourinary system	N00–N99	Genitourinary system diseases	K
17	Congenital malformations, deformations and chromosomal abnormalities	Q00–Q99	Congenital anomalies	P
19	Injury, poisoning and certain other consequences of external causes	S00–T98	Injury and poisoning	S
20	External causes of morbidity and mortality	V01–Y98	External causes of morbidity and mortality	U

Supplementary Table 2: Type of healthcare interaction two years prior to care proceedings by study group and parental type

Variable	Mothers, n (%)			Fathers, n (%)		
	Cohort	Comparison	p-value	Cohort	Comparison	p-value
Emergency hospital admission	1699 (33.6)	2817 (15.3)	<0.001	696 (18.5)	1070 (7.8)	<0.001
Elective hospital admission	575 (11.4)	2314 (12.6)	0.019	273 (7.3)	1259 (9.2)	<0.001
Maternity hospital admission	2757 (54.5)	5758 (31.3)	<0.001	7 (0.2)	0 (0.0)	<0.001
Emergency department attendance	3172 (62.7)	6836 (37.2)	<0.001	2062 (54.9)	5016 (36.8)	<0.001
Emergency department urgent attendance	1586 (31.3)	2505 (13.6)	<0.001	855 (22.7)	1429 (10.5)	<0.001
Outpatient appointment	3825 (75.6)	10385 (56.5)	<0.001	1321 (35.1)	3794 (27.8)	<0.001
GP records	4694 (92.7)	16123 (87.8)	<0.001	3246 (86.4)	11233 (82.4)	<0.001

*p-values indicate differences between cohort and comparison groups by parent type.

Supplementary Table 3: Emergency hospital admissions health conditions by study group and parental type

Variable	Mothers, n (%)			Fathers, n (%)		
	Cohort	Comparison	p-value	Cohort	Comparison	p-value
Infectious diseases	194 (3.8)	279 (1.5)	<0.001	62 (1.6)	87 (0.6)	<0.001
Neoplasms	13 (0.3)	37 (0.2)	0.559	<5 (0.1)	7 (0.1)	0.794
Blood diseases	59 (1.2)	78 (0.4)	<0.001	21 (0.6)	15 (0.1)	<0.001
Endocrine diseases	143 (2.8)	248 (1.4)	<0.001	62 (1.6)	109 (0.8)	<0.001
Mental disorders	880 (17.4)	739 (4.0)	<0.001	425 (11.3)	380 (2.8)	<0.001
Nervous system diseases	114 (2.3)	161 (0.9)	<0.001	48 (1.3)	71 (0.5)	<0.001
Eye diseases	23 (0.5)	55 (0.3)	0.120	11 (0.3)	28 (0.2)	0.419
Ear diseases	11 (0.2)	27 (0.1)	0.366	<5 (0.1)	12 (0.1)	0.979
Circulatory system diseases	107 (2.1)	161 (0.9)	<0.001	75 (2.0)	152 (1.1)	<0.001
Respiratory system diseases	339 (6.7)	478 (2.6)	<0.001	136 (3.6)	183 (1.3)	<0.001
Digestive system diseases	225 (4.4)	433 (2.4)	<0.001	127 (3.4)	208 (1.5)	<0.001
Skin system diseases	81 (1.6)	84 (0.5)	<0.001	51 (1.4)	92 (0.7)	<0.001
Musculoskeletal diseases	144 (2.8)	241 (1.3)	<0.001	70 (1.9)	105 (0.8)	<0.001
Genitourinary system diseases	283 (5.6)	488 (2.7)	<0.001	40 (1.1)	88 (0.6)	0.011
Congenital conditions	16 (0.3)	36 (0.2)	0.150	6 (0.2)	5 (0.0)	0.022
Injury and poisoning	418 (8.3)	266 (1.4)	<0.001	297 (7.9)	294 (2.2)	<0.001
Causes of morbidity and mortality	479 (9.5)	303 (1.6)	<0.001	304 (8.1)	306 (2.2)	<0.001

*p-values indicate differences between cohort and comparison groups by parent type.

Supplementary Table 4: GP diagnosis health conditions by study group and parental type

Variable	Mothers, n (%)			Fathers, n (%)		
	Cohort	Comparison	p-value	Cohort	Comparison	p-value
Infectious diseases	802 (15.8)	2541 (13.8)	<0.001	286 (7.6)	991 (7.3)	0.499
Neoplasms	101 (2.0)	603 (3.3)	<0.001	38 (1.0)	295 (2.2)	<0.001
Blood diseases	131 (2.6)	325 (1.8)	<0.001	7 (0.2)	23 (0.2)	0.994
Endocrine diseases	198 (3.9)	645 (3.5)	0.190	77 (2.0)	344 (2.5)	0.106
Mental disorders	1932 (38.2)	2503 (13.6)	<0.001	998 (26.5)	1136 (8.3)	<0.001
Nervous system diseases	799 (15.8)	2989 (16.3)	0.416	405 (10.8)	1470 (10.8)	1.000
Circulatory system diseases	250 (4.9)	825 (4.5)	0.190	144 (3.8)	459 (3.4)	0.184
Respiratory system diseases	1430 (28.2)	4883 (26.6)	0.019	570 (15.2)	2299 (16.9)	0.014
Digestive system diseases	672 (13.3)	1940 (10.6)	<0.001	364 (9.7)	1094 (8.0)	0.001
Skin system diseases	1016 (20.1)	4019 (21.9)	0.006	538 (14.3)	1967 (14.4)	0.884
Musculoskeletal diseases	978 (19.3)	3527 (19.2)	0.864	660 (17.6)	2284 (16.7)	0.251
Genitourinary system diseases	1160 (22.9)	3814 (20.8)	0.001	147 (3.9)	575 (4.2)	0.432
Congenital conditions	26 (0.5)	57 (0.3)	0.043	13 (0.3)	37 (0.3)	0.560
Injury and poisoning	985 (19.5)	1649 (9.0)	<0.001	641 (17.1)	1464 (10.7)	<0.001
Causes of injury and poisoning	400 (7.9)	627 (3.4)	<0.001	182 (4.8)	329 (2.4)	<0.001
Causes of morbidity and mortality	322 (6.4)	165 (0.9)	<0.001	142 (3.8)	117 (0.9)	<0.001

*p-values indicate differences between cohort and comparison groups by parent type.