

Appendix 2 Tables for Western Australia

Table A11: Duplicates in the residential aged care extract using different linkage keys, by type of resident, Western Australia, 1999–00 (admissions, number and per cent)

Linkage key	Permanent	Respite	Leave	All	Permanent	Respite	Leave	All
	Number				Per cent			
Exact dates								
Linkage key = Date of birth, sex and admission date								
Unique	3,610	3,184	1,290	8,076	99.9	100.0	100.0	99.9
2	2	—	—	10	0.1	—	—	0.1
All	3,612	3,184	1,290	8,086	100.0	100.0	100.0	100.0
Linkage key = Date of birth, sex admission date and postcode								
Unique	3,610	3,184	1,290	8,080	99.9	100.0	100.0	99.9
2	2	—	—	6	0.1	—	—	0.1
All	3,612	3,184	1,290	8,086	100.0	100.0	100.0	100.0
Within 3 days								
Linkage key = Date of birth, sex and admission date								
Unique	3,605	3,177	1,287	8,007	99.8	99.8	99.7	99.0
2	7	7	3	79	0.2	0.2	0.2	1.0
All	3,612	3,184	1,290	8,086	100.0	100.0	100.0	100.0
Linkage key = Date of birth, sex admission date and postcode								
Unique	3,610	3,184	1,288	8,048	99.9	100.0	99.8	99.5
2	2	—	2	38	0.1	—	0.2	0.5
All	3,612	3,184	1,290	8,086	100.0	100.0	100.0	100.0

Note: Duplicates among 'All' records include cases with the same linkage key but a different type of resident entry. Consequently the number of unique linkage keys among 'All' records is larger than the sum of the duplicates in the three resident entry types.

Table A12: Duplicates in the hospital morbidity extract using different linkage keys, Western Australia, 1999–00 (separations)

Number of duplicates	Linkage key					
	Date of birth and sex only		Date of birth, sex and postcode		Date of birth, sex and SLA	
	Exact date	Within 3 days	Exact date	Within 3 days	Exact date	Within 3 days
	Number					
Unique	81,920	78,105	83,102	82,070	83,128	82,186
2	1,542	5,096	382	1,343	356	1,234
3	18	268	—	70	—	63
4	4	15	—	1	—	1
All	83,484	83,484	83,484	83,484	83,484	83,484
	Per cent					
Unique	98.1	93.6	99.5	98.3	99.6	98.4
2	1.8	6.1	0.5	1.6	0.4	1.5
3	0.0	0.3	—	0.1	—	0.1
4	0.0	0.0	—	0.0	—	0.0
All	100.0	100.0	100.0	100.0	100.0	100.0

Note: SLA is derived from postcode and SLA data provided in the hospital morbidity data—see footnote 4.

Table A13: The effect of age on the per cent of unique linkage keys in the hospital morbidity data, using different linkage keys, Western Australia, 1999–00 (separations)

Linkage key	65–69	70–74	75–79	80–84	85–89	90–94	95+	All
Exact date	Number with unique linkage keys							
Date of birth and sex	15,703	18,492	18,868	14,295	9,886	3,881	795	81,920
Date of birth, sex and postcode	15,912	18,786	19,201	14,508	10,003	3,895	797	83,102
Date of birth, sex and SLA	15,910	18,792	19,209	14,510	10,009	3,901	797	83,128
Within 3 days								
Date of birth and sex	14,941	17,487	17,876	13,672	9,539	3,806	784	78,105
Date of birth, sex and postcode	15,686	18,534	18,996	14,329	9,877	3,861	787	82,070
Date of birth, sex and SLA	15,703	18,566	19,024	14,346	9,891	3,869	787	82,186
All records	15,980	18,874	19,279	14,578	10,055	3,919	799	83,484
Exact date	Per cent with unique linkage keys							
Date of birth and sex	98.3	98.0	97.9	98.1	98.3	99.0	99.5	98.1
Date of birth, sex and postcode	99.6	99.5	99.6	99.5	99.5	99.4	99.7	99.5
Date of birth, sex and SLA	99.6	99.6	99.6	99.5	99.5	99.5	99.7	99.6
Within 3 days								
Date of birth and sex	93.5	92.7	92.7	93.8	94.9	97.1	98.1	93.6
Date of birth, sex and postcode	98.2	98.2	98.5	98.3	98.2	98.5	98.5	98.3
Date of birth, sex and SLA	98.3	98.4	98.7	98.4	98.4	98.7	98.5	98.4

Note: SLA is derived from postcode and SLA data provided in the hospital morbidity data—see footnote 4.

Table A14: Duplicates in the linked data using different linkage keys, Western Australia, 1999-00

Number of records linking	Exact date match		Within 3 days	
	Number	Per cent	Number	Per cent
Hospital records linked to one residential aged care record				
<i>Linkage key = Date of birth, sex and date of separation/admission</i>				
1	3,306	99.8	3,658	99.0
2	6	0.2	38	1.0
Total	3,312	100.0	3,696	100.0
<i>Linkage key = Date of birth, sex and date of separation/admission and postcode</i>				
1	1,957	99.9	2,052	99.7
2	2	0.1	6	0.3
Total	1,959	100.0	2,058	100.0
<i>Linkage key = Date of birth, sex and date of separation/admission and SLA group</i>				
1	2,341	99.9	2,454	99.5
2	2	0.1	12	0.5
Total	2,343	100.0	2,466	100.0
Residential aged care records linked to one hospital record				
<i>Linkage key = Date of birth, sex and date of separation/admission</i>				
1	3,221	97.3	3,400	92.0
2	88	2.7	290	7.9
3	3	0.1	6	0.2
Total	3,312	100.0	3,696	100.0
<i>Linkage key = Date of birth, sex and date of separation/admission and postcode</i>				
1	1,947	99.4	2,020	98.2
2	12	0.6	38	1.9
Total	1,959	100.0	2,058	100.0
<i>Linkage key = Date of birth, sex and date of separation/admission and SLA group</i>				
1	2,329	99.4	2,418	98.1
2	14	0.6	48	2.0
Total	2,343	100.0	2,466	100.0
All duplicates				
Linkage key = Date of birth, sex and date of separation/admission				
Unique links	3,215	97.1	3,362	91.0
Non-unique links	97	2.9	334	9.0
Total	3,312	100.0	3,696	100.0
Linkage key = Date of birth, sex and date of separation/admission and postcode				
Unique links	1,945	99.3	2,014	97.9
Non-unique links	14	0.7	44	2.1
Total	1,959	100.0	2,058	100.0
Linkage key = Date of birth, sex and date of separation/admission and SLA group				
Unique links	2,327	99.3	2,406	97.6
Non-unique links	16	0.7	60	2.4
Total	2,343	100.0	2,466	100.0

Note: If a record in one extract links to more than one record in the other extract then the linked database contains records for each link. For example, one residential aged care admission linking to two hospital separations results in two linked records and vice versa.

Table A15: The effect of age on the per cent of unique linkage keys in the linked data, using different linkage keys, Western Australia, 1999-00 (linked records)

Linkage key	65-69	70-74	75-79	80-84	85-89	90-94	95+	Total
Exact date		Number with unique keys						
Date of birth and sex	134	329	551	810	853	452	86	3,215
Date of birth, sex and postcode	76	198	319	502	538	257	55	1,945
Date of birth, sex and SLA group	89	236	383	587	636	326	70	2,327
Within 3 days								
Date of birth and sex	151	347	584	839	886	466	89	3,362
Date of birth, sex and postcode	77	205	334	526	549	265	58	2,014
Date of birth, sex and SLA group	91	243	403	611	648	336	74	2,406
Exact date		Total number of linked records						
Date of birth and sex	134	335	577	839	883	458	86	3,312
Date of birth, sex and postcode	76	198	321	504	544	261	55	1,959
Date of birth, sex and SLA group	89	236	385	589	644	330	70	2,343
Within 3 days								
Date of birth and sex	161	381	664	935	974	490	91	3,696
Date of birth, sex and postcode	79	205	342	536	567	271	58	2,058
Date of birth, sex and SLA group	93	245	413	625	672	344	74	2,466
Exact date		Per cent with unique linkage keys						
Date of birth and sex	100.0	98.2	95.5	96.5	96.6	98.7	100.0	97.1
Date of birth, sex and postcode	100.0	100.0	99.4	99.6	98.9	98.5	100.0	99.3
Date of birth, sex and SLA group	100.0	100.0	99.5	99.7	98.8	98.8	100.0	99.3
Within 3 days								
Date of birth and sex	93.8	91.1	88.0	89.7	91.0	95.1	97.8	91.0
Date of birth, sex and postcode	97.5	100.0	97.7	98.1	96.8	97.8	100.0	97.9
Date of birth, sex and SLA group	97.8	99.2	97.6	97.8	96.4	97.7	100.0	97.6

Table A16: Hospital separation mode for exact date linked data, unlinked data and all hospital data, by linkage key used, Western Australia, 1999–00

Separation mode	Linked data: type of entry into residential aged care				Unlinked hospital data	All hospital data
	Permanent admissions	Respite admissions	Return from leave	All linked entries		
	Number					
Linkage key = date of birth, sex and exact day						
To another hospital	23	11	2	36	5,703	5,739
To nursing home	1,014	164	96	1,274	818	2,092
To other health care accommodation	202	258	54	514	474	988
Unknown	—	—	—	—	130	130
Other	354	403	728	1,485	73,050	74,535
All	1,593	836	880	3,309	80,175	83,484
Linkage key = date of birth, sex, exact day and SLA group						
To another hospital	13	7	2	22	5,717	5,739
To nursing home	727	126	53	906	1,186	2,092
To other health care accommodation	147	201	40	388	600	988
Unknown	—	—	—	—	130	130
Other	229	309	488	1,026	73,509	74,535
All	1,116	643	583	2,342	81,142	83,484
	Row per cent					
Linkage key = date of birth, sex and exact day						
To another hospital	0.4	0.2	0.0	0.6	99.4	100.0
To nursing home	48.5	7.8	4.6	60.9	39.1	100.0
To other health care accommodation	20.4	26.1	5.5	52.0	48.0	100.0
Unknown	—	—	—	—	100.0	100.0
Other	0.5	0.5	1.0	2.0	98.0	100.0
All	1.9	1.0	1.1	4.0	96.0	100.0
Linkage key = date of birth, sex, exact day and SLA group						
To another hospital	0.2	0.1	0.0	0.4	99.6	100.0
To nursing home	34.8	6.0	2.5	43.3	56.7	100.0
To other health care accommodation	14.9	20.3	4.0	39.3	60.7	100.0
Unknown	—	—	—	—	100.0	100.0
Other	0.3	0.4	0.7	1.4	98.6	100.0
All	1.3	0.8	0.7	2.8	97.2	100.0
	Column per cent					
Linkage key = date of birth, sex and exact day						
To another hospital	1.4	1.3	0.2	1.1	7.1	6.9
To nursing home	63.7	19.6	10.9	38.5	1.0	2.5
To other health care accommodation	12.7	30.9	6.1	15.5	0.6	1.2
Unknown	—	—	—	—	0.2	0.2
Other	22.2	48.2	82.7	44.9	91.1	89.3
All	100.0	100.0	100.0	100.0	100.0	100.0
Linkage key = date of birth, sex, exact day and SLA group						
To another hospital	1.2	1.1	0.3	0.9	7.0	6.9
To nursing home	65.1	19.6	9.1	38.7	1.5	2.5
To other health care accommodation	13.2	31.3	6.9	16.6	0.7	1.2
Unknown	—	—	—	—	0.2	0.2
Other	20.5	48.1	83.7	43.8	90.6	89.3
All	100.0	100.0	100.0	100.0	100.0	100.0

Notes

1. SLA group is derived from postcode. For a particular postcode, the corresponding SLA group includes all SLAs which have some residents in that postcode.
2. The linked data in this table is based on the number of unique hospital records linked; excess links have been excluded.

Table A17: Place of assessment for exact date linked and unlinked residential aged care data, by linkage key used, Western Australia, 1999–00

Place of assessment	Linked data			Unlinked			All RACS data		
	Permanent	Respite	All	Permanent	Respite	All	Permanent	Respite	All
Number									
Linkage key = date of birth, sex and exact date									
Aged care facility	77	46	123	207	157	364	284	203	487
At home	203	166	369	972	1,675	2,647	1,175	1,841	3,016
Hospital	1,194	580	1,774	744	399	1,143	1,938	979	2,917
Other	99	32	131	116	129	245	215	161	376
Total	1,573	824	2,397	2,039	2,360	4,399	3,612	3,184	6,796
Linkage key = date of birth, sex, exact date and SLA group									
Aged care facility	39	56	95	245	147	392	284	203	487
At home	123	148	271	1,052	1,693	2,745	1,175	1,841	3,016
Hospital	457	853	1,310	1,481	126	1,607	1,938	979	2,917
Other	21	58	79	194	103	297	215	161	376
Total	640	1,115	1,755	2,972	2,069	5,041	3,612	3,184	6,796
Per cent									
Linkage key = date of birth, sex and exact date									
Aged care facility	4.9	5.6	5.1	10.2	6.7	8.3	7.9	6.4	7.2
At home	12.9	20.1	15.4	47.7	71.0	60.2	32.5	57.8	44.4
Hospital	75.9	70.4	74.0	36.5	16.9	26.0	53.7	30.7	42.9
Other	6.3	3.9	5.5	5.7	5.5	5.6	6.0	5.1	5.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Linkage key = date of birth, sex, exact date and SLA group									
Aged care facility	6.1	5.0	5.4	8.2	7.1	7.8	7.9	6.4	7.2
At home	19.2	13.3	15.4	35.4	81.8	54.5	32.5	57.8	44.4
Hospital	71.4	76.5	74.6	49.8	6.1	31.9	53.7	30.7	42.9
Other	3.3	5.2	4.5	6.5	5.0	5.9	6.0	5.1	5.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes

1. SLA group is derived from postcode. For a particular postcode, the corresponding SLA group includes all SLAs which have some residents in that postcode.
2. Admissions to residential aged care relating to hospital leave have been excluded.
3. The linked data in this table is based on the number of unique residential aged care records linked; excess links have been excluded.

Table A18: Comparison of marital status in hospital data and marital status in aged care data by exact date linkage key used, linked data set, Western Australia, 1999–00

Residential aged care	Hospital morbidity data					All
	Never married	Married including de facto	Widowed	Divorced or separated	Not stated	
	Number					
Linkage key = date of birth, sex and exact date						
Never married	193	6	15	3	14	231
Married including de facto	6	783	50	9	8	856
Widowed	31	176	1,681	70	55	2,013
Divorced or separated	24	23	29	119	3	198
Unknown	5	4	5	—	—	14
All	259	992	1,780	201	80	3,312
Linkage key = date of birth, sex, exact date and SLA group						
Never married	136	1	6	3	7	153
Married including de facto	1	584	31	4	6	626
Widowed	22	109	1,195	54	42	1,422
Divorced or separated	16	13	17	83	1	130
Unknown	4	4	4	—	—	12
All	179	711	1,253	144	56	2,343
	Per cent					
Linkage key = date of birth, sex and exact date						
Never married	5.8	0.2	0.5	0.1	0.4	7.0
Married including de facto	0.2	23.6	1.5	0.3	0.2	25.8
Widowed	0.9	5.3	50.8	2.1	1.7	60.8
Divorced or separated	0.7	0.7	0.9	3.6	0.1	6.0
Unknown	0.2	0.1	0.2	—	—	0.4
All	7.8	30.0	53.7	6.1	2.4	100.0
Linkage key = date of birth, sex, exact date and SLA group						
Never married	5.8	0.0	0.3	0.1	0.3	6.5
Married including de facto	0.0	24.9	1.3	0.2	0.3	26.7
Widowed	0.9	4.7	51.0	2.3	1.8	60.7
Divorced or separated	0.7	0.6	0.7	3.5	0.0	5.5
Unknown	0.2	0.2	0.2	—	—	0.5
All	7.6	30.3	53.5	6.1	2.4	100.0

Note: SLA group is derived from postcode. For a particular postcode, the corresponding SLA group includes all SLAs which have some residents in that postcode.