

Supplemental Online Table A Countries of Birth included in Refugee and Asylum Seekers (RAS)

	Arrivals (Census)	ERP	Percent ERP recently arrived on Humanitarian visas				Criteria met	Include	Exclude			
			Humanitarian arrivals									
			2011	2002-2011	2002-2012							
Afghanistan	3287	2489	2865		87%	TRUE	✓					
Bhutan	704	688	841		119%	TRUE	✓					
Burma (Myanmar)	723	576	724		100%	TRUE	✓					
Burundi	488	447	492		101%	TRUE	✓					
China (ex SARs & Taiwan Province)	15932	13247	174		1%	FALSE		✓				
Congo	750	697	839		112%	TRUE	✓					
Egypt	1232	394	133		11%	FALSE		✓				
Eritrea	174	58	129		74%	TRUE	✓					
Ethiopia	581	384	410		71%	TRUE	✓					
Ghana	213	145	82		38%	TRUE		✓				
Guinea	121	112	130		107%	TRUE	✓					
Iran	2821	1523	1027		36%	TRUE		✓				
Iraq	1319	797	724		55%	TRUE	✓					
Kenya	1162	832	439		38%	TRUE		✓				
Liberia	541	528	650		120%	TRUE	✓					
Malawi	82	45	39		48%	TRUE		✓				
Nepal	1037	949	369		36%	FALSE		✓				
Pakistan	1358	1079	263		19%	FALSE		✓				
Rwanda	86	82	94		109%	TRUE	✓					
Sierra Leone	208	198	212		102%	TRUE	✓					
Somalia	253	214	231		91%	TRUE	✓					
Sudan	1805	1630	1910		106%	TRUE	✓					
Tanzania	454	346	358		79%	TRUE	✓					
Togo	55	53	56		102%	TRUE	✓					
Uganda	234	173	179		76%	TRUE	✓					
Uzbekistan	205	135	84		41%	TRUE		✓				
Total	35825	27821	13454		38%							

Note:

European entrants excluded hence Former Yugoslav Republic of Macedonia (Ranked 20) was omitted.

Congo includes: Congo; Congo Republic and Democratic Republic of Congo.

Supplemental Online Table B A summary of population by vulnerability group (Adelaide metropolitan area, ages 20 or more)

	Estimated Resident Population*			Change	
	Census 2006	Census 2011	Mean	Absolute	Relative
RASC	3,668	7,482	5,575	3,814	104.0%
Aboriginal	8,665	10,141	9,403	1,476	17.0%
Aged 75 or more	89,284	93,080	91,182	3,796	4.3%
All others	781,936	827,670	804,803	45,734	5.8%
Total	883,553	938,373	910,963	54,820	6.2%

*Based on SA Government Regions of: Eastern Adelaide, Northern Adelaide, Southern Adelaide, Western Adelaide and Adelaide Hills

Supplemental Online Table C ICD-10 diagnosis codes used for identifying ED presentations for ambulatory care sensitive conditions (ACSC)

Category	Conditions	ICD-10-AM codes
Acute	Acute pneumonia	J153,J154,J157,J160
	Cellulitis	L02,L03,L04,L08,L88,L980,L983
	Convulsions	G40,G41,R56
	Dental	K02,K03,K04,K05,K06,K08,K12,K13,K098,K099,K140
	Eclampsia	O15
	Ears, nose throat infections	H66,J02,J03,J06,J312
	Gangrene	I7024,E0952,R02
	Perforated/bleeding ulcer	K250,K251,K252,K254,K255,K256,K260,K261,K262,K264,K265,K266, K270,K271,K272,K274,K275,K276,K280,K281,K282,K284,K285,K286
	Pelvic inflammatory disease	N70,N73,N74
	Urinary tract infections	N10-N12,N136,N151,N159,N289,N390,N399
Chronic	Asthma	J45, J46
	Bronchiactisis	J47
	Congestive cardiac failure	I50, I11.0, J81
	Diabetes complications	E10–E14.9
	COPD	J20, J41, J42, J43, J44, J47
	Angina	I20, I24.0, I24.8, I24.9
	Iron deficiency anaemia	D50.1, D50.8, D50.9
	Hypertension	I10, I11.9
	Nutritional deficiencies	E40, E41, E42, E43, E55.0, E64.3
	Rheumatic heart disease	I00 to I09
Vaccine	Influenza	J10-J14
	Other vaccine	A35-A37,A80,B01,B05,B06,B169,B180,B181,B26,G000

Supplemental Online Table D Persons with ACSC and GP-type presentations to South Australian metropolitan public hospital EDs, 2005-06 to 2010-11

	Refugee & Asylum Seeker Countries			Aboriginal			Aged 75 or more			All others		
	N	% of individuals presenting	Rate per 1,000 population	N	% of individuals presenting	Rate per 1,000 population	N	% of individuals presenting	Rate per 1,000 population	N	% of individuals presenting	Rate per 1,000 population
Persons presenting for ACSC	734	19.6%	131.7	1,454	28.5%	154.6	18,823	27.8%	206.4	57,670	16.6%	71.7
Persons presenting with acute ACSC	619	16.5%	111.0	1,183	23.2%	125.8	9,739	14.4%	106.8	41,505	12.0%	51.6
Cellulitis	87	2.3%	15.6	401	7.9%	42.6	2,836	4.2%	31.1	11,956	3.4%	14.9
Dental conditions	147	3.9%	26.4	298	5.8%	31.7	268	0.4%	2.9	7,445	2.1%	9.3
Urinary tract infections/ pyelonephritis	181	4.8%	32.5	284	5.6%	30.2	5,623	8.3%	61.7	10,994	3.2%	13.7
All other acute ACSC	27	0.7%	4.8	161	3.2%	17.1	808	1.2%	8.9	4,280	1.2%	5.3
Persons presenting with chronic ACSC	105	2.8%	18.8	391	7.7%	41.6	10,916	16.1%	119.7	16,965	4.9%	21.1
Angina	15	0.4%	2.7	119	2.3%	12.7	2,984	4.4%	32.7	4,998	1.4%	6.2
Asthma	36	1.0%	6.5	126	2.5%	13.4	521	0.8%	5.7	5,585	1.6%	6.9
Bronchiectasis	3	0.1%	0.5	1	0.0%	0.1	70	0.1%	0.8	122	0.0%	0.2
Congestive cardiac failure	7	0.2%	1.3	69	1.4%	7.3	5,002	7.4%	54.9	2,216	0.6%	2.8
COPD	8	0.2%	1.4	74	1.5%	7.9	2,774	4.1%	30.4	2,909	0.8%	3.6
Diabetes complications	18	0.5%	3.2	43	0.8%	4.6	210	0.3%	2.3	1,120	0.3%	1.4
Hypertension	14	0.4%	2.5	25	0.5%	2.7	642	0.9%	7.0	1,199	0.3%	1.5
All other chronic ACSC	12	0.3%	2.2	15	0.3%	1.6	403	0.6%	4.4	532	0.2%	0.7
Persons presenting for Vaccine ACSC	42	1.1%	7.5	34	0.7%	3.6	238	0.4%	2.6	2,662	0.8%	3.3
Persons presenting for GP-Type	2,362	63.0%	423.7	2,896	56.8%	308.0	15,154	22.4%	166.2	193,249	55.7%	240.1

Note: As a person may present more than one time for more than one category or condition, the sum of persons at category and condition levels may not equal the total number of persons having presented.

Supplemental Online Table E Worked example of excess ED costs per head of population, South Australian public hospitals 2005-06 to 2010-11

a. Excerpt from Table 3

	Mean total cost per presenter	Cost differential (Observed vs Reference)	Presenters per 1,000 population	Rate differential (Observed vs Reference)	Cost of excess presenters per 1,000 population [#]	population ('000s)	potential annual "saving"
ACSC presentations*							
Refugee & Asylum Seeker Countries	\$ 800	-\$ 916	131.7	60.0	\$ 22,524	5.6	\$ 20,929
Aboriginal	\$ 1,581	-\$ 135	154.6	83.0	\$ 161,670	9.4	\$ 253,359
Aged 75 or more	\$ 1,651	-\$ 65	206.4	134.8	\$ 257,950	91.2	\$ 3,920,070
All others	\$ 1,156	Reference	71.7	Reference			\$ 4,194,357
GP-type presentations*							
Refugee & Asylum Seeker Countries	\$ 631	-\$ 1,085	423.7	183.6	\$ 106,573	5.6	\$ 99,023
Aboriginal	\$ 897	-\$ 820	308.0	67.9	\$ 115,384	9.4	\$ 180,822
Aged 75 or more	\$ 649	-\$ 1,067	166.2	-73.9	-\$ 52,827	91.2	
All others	\$ 670	Reference	240.1	Reference			\$ 279,845

* cost is calculated at \$5,007 per Urgency Related Group (v1.4) price weight

[#] Excess cost per 1,000 population= Group presenter numbers at their average cost less presenter numbers in the comparison group at their average cost.

b. Cell references and formulae

	Mean total cost per presenter	Cost differential (Observed vs Reference)	Presenters per 1,000 population	Rate differential (Observed vs Reference)	Cost of excess presenters per 1,000 population [#]	population ('000s)	potential annual "saving"
ACSC presentations*							
Refugee & Asylum Seeker Countries	A1	=A1-A4	D1	=D1-D4	F1=(A1*D1)-(A4*D4)	H1	I1=F1*H1/6
Aboriginal	A2	=A2-A4	D2	=D2-D4	F2=(A2*D2)-(A4*D4)	H2	I2=F2*H2/6
Aged 75 or more	A3	=A3-A4	D3	=D3-D4	F3=(A3*D3)-(A4*D4)	H3	I3=F3*H3/6
All others	A4	Reference	D4	Reference			=sum(I1:I3)
GP-type presentations*							
Aboriginal	A5	=A5-A8	D5	=D5-D8	F5=(A5*D5)-(A8*D8)	H5	I5=F5*H5/6
Aged 75 or more	A6	=A6-A8	D6	=D6-D8	F6=(A6*D6)-(A8*D8)	H6	I6=F6*H6/6
All others	A7	=A7-A8	D7	=D7-D8	F7=(A7*D7)-(A8*D8)	H7	
	A8	Reference	D8	Reference			=sum(I5:I6)