



*Describing remote health
and well-being in Australia*

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Scope of presentation

- Relates to statistical reporting for Australia generally.
- What is remote anyway?
- Characteristics of Remote area populations.
- Difficulties: lack of data for those areas, Indigenous data issues, issues of different service delivery models, migration of the frail aged.
- Selected remote area statistics.



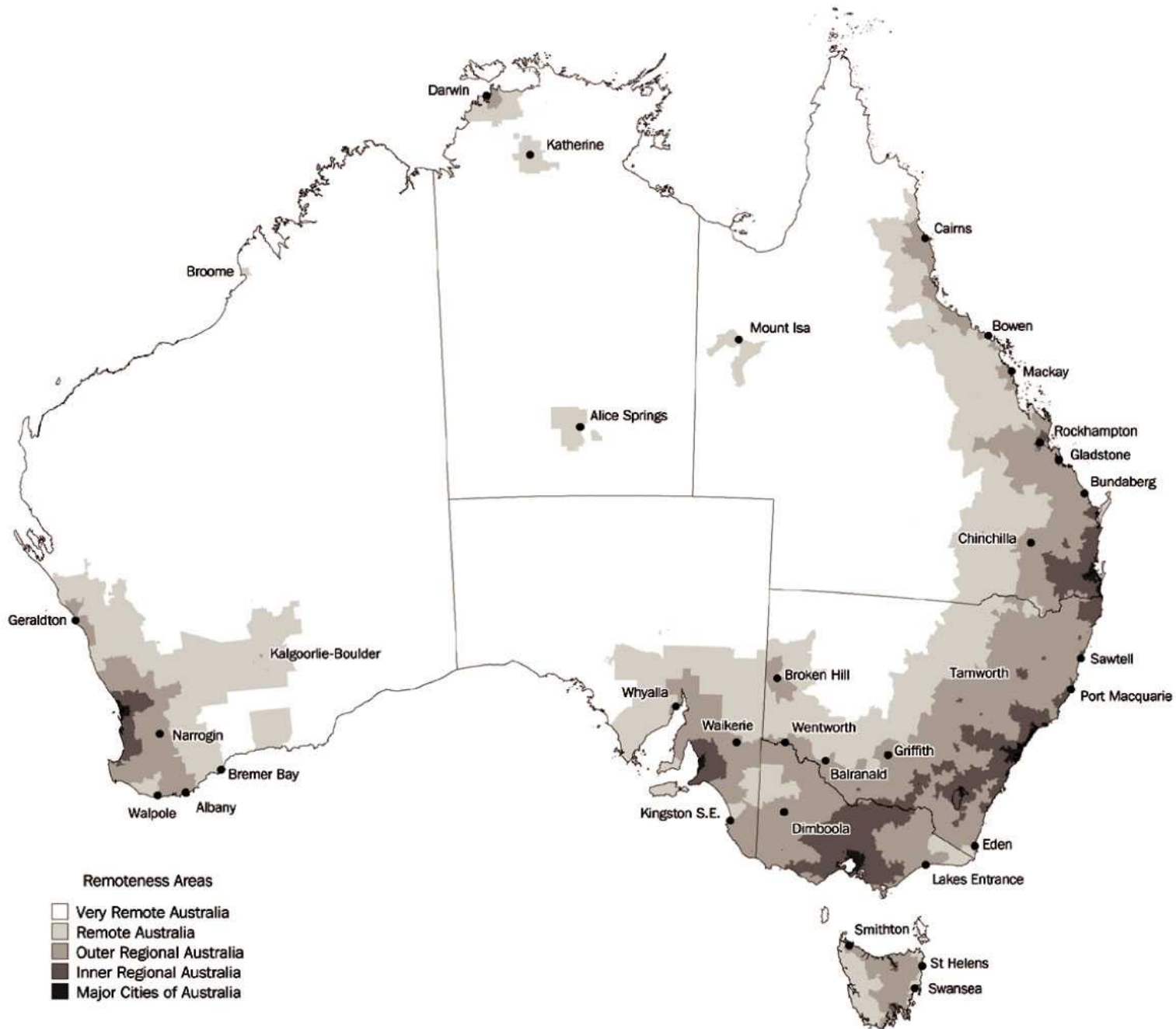
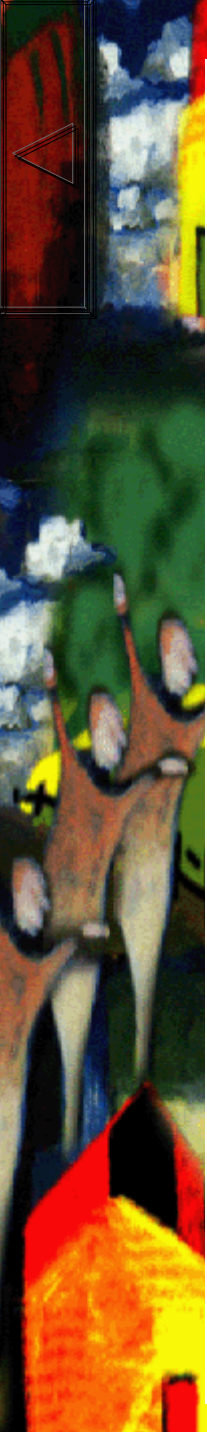
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What is remote?

- Typically up to the 3% of the population .
- RRMA, ARIA, ASGC Remoteness?
(see A guide to remoteness classifications).
- We use ASGC Remoteness (MC, IR, OR, **R**, **VR**).



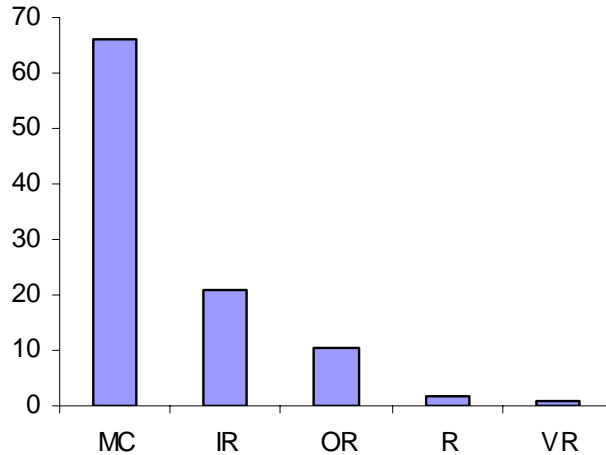


Characteristics of Remote populations

- About 3% of Australian population
- Substantial Indigenous populations
- Lower average education and income levels
- Age structure (more kids, fewer aged)
- Sex (more males than females (NI))
- Migration (of young adults and frail elderly)
- Distance, aggregation and dispersal (access)

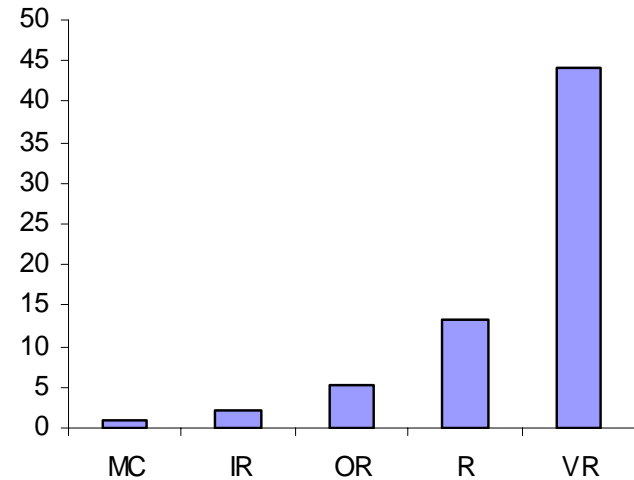
Population

Per cent



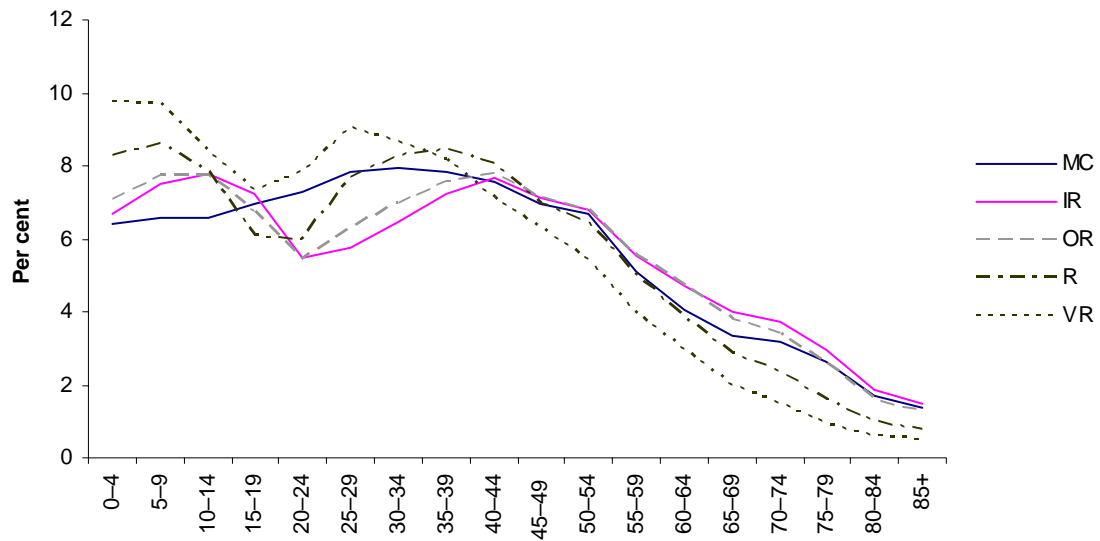
Population distribution

Per cent

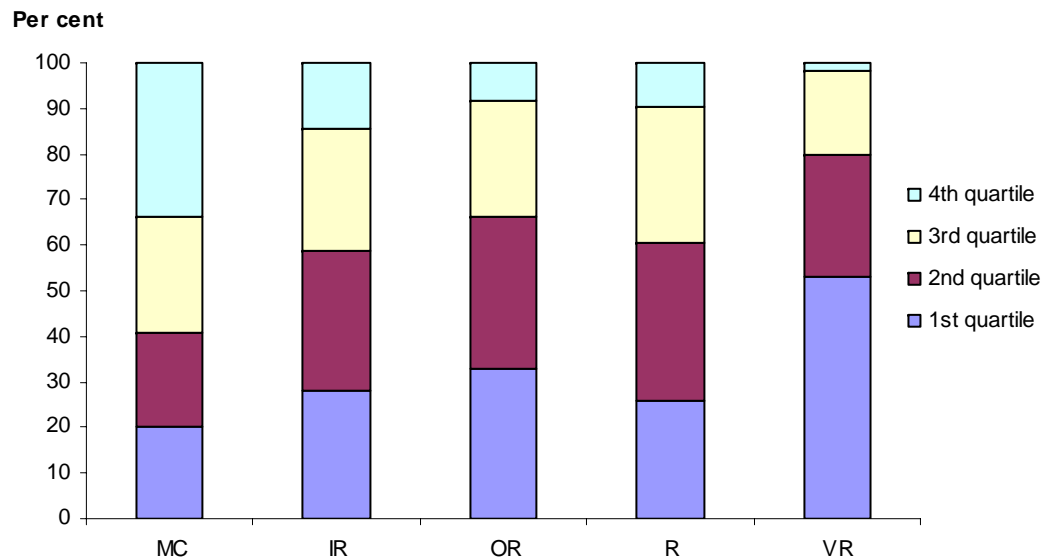


Percent Indigenous

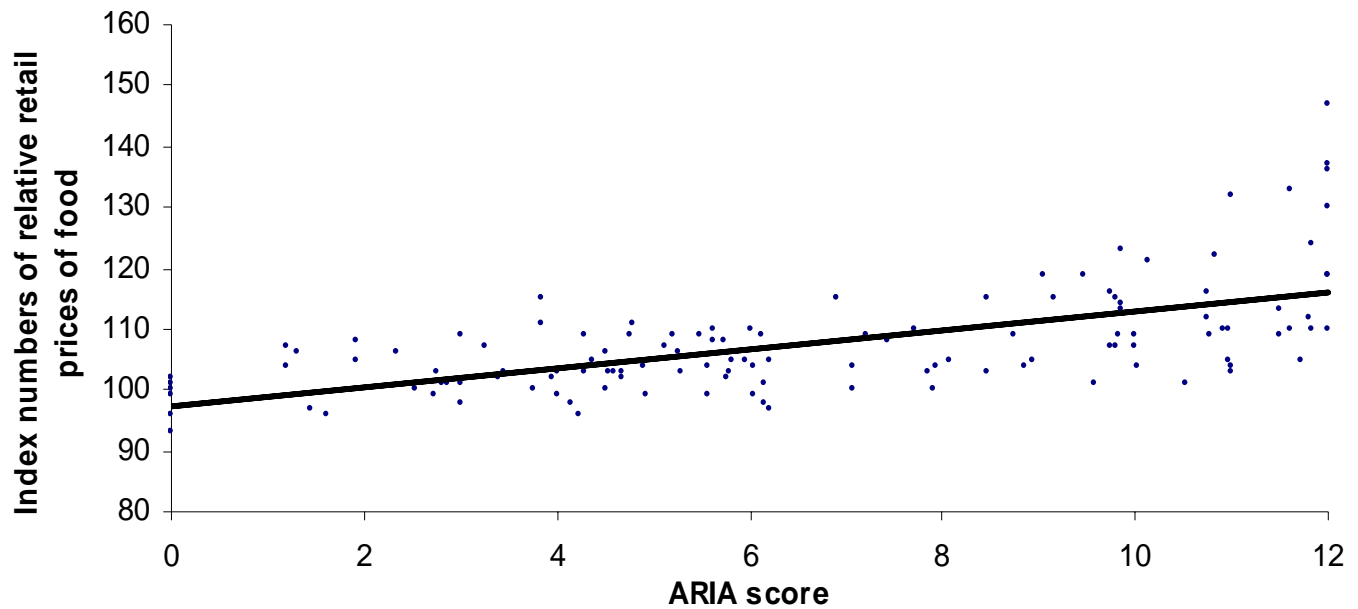
Age distribution



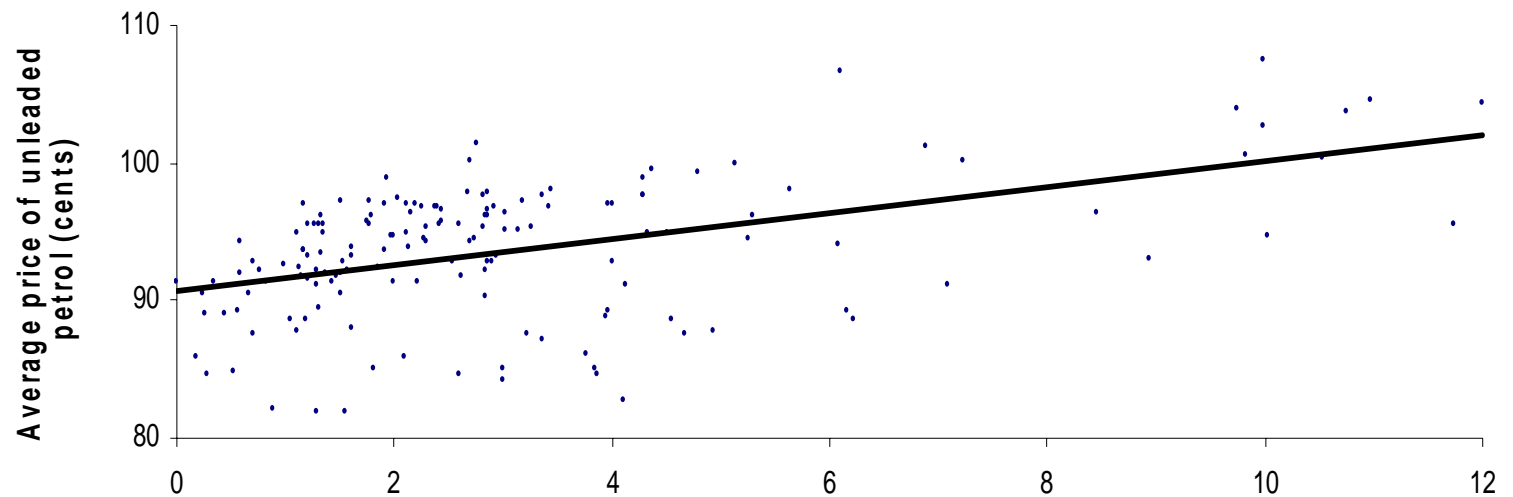
Socioeconomic status



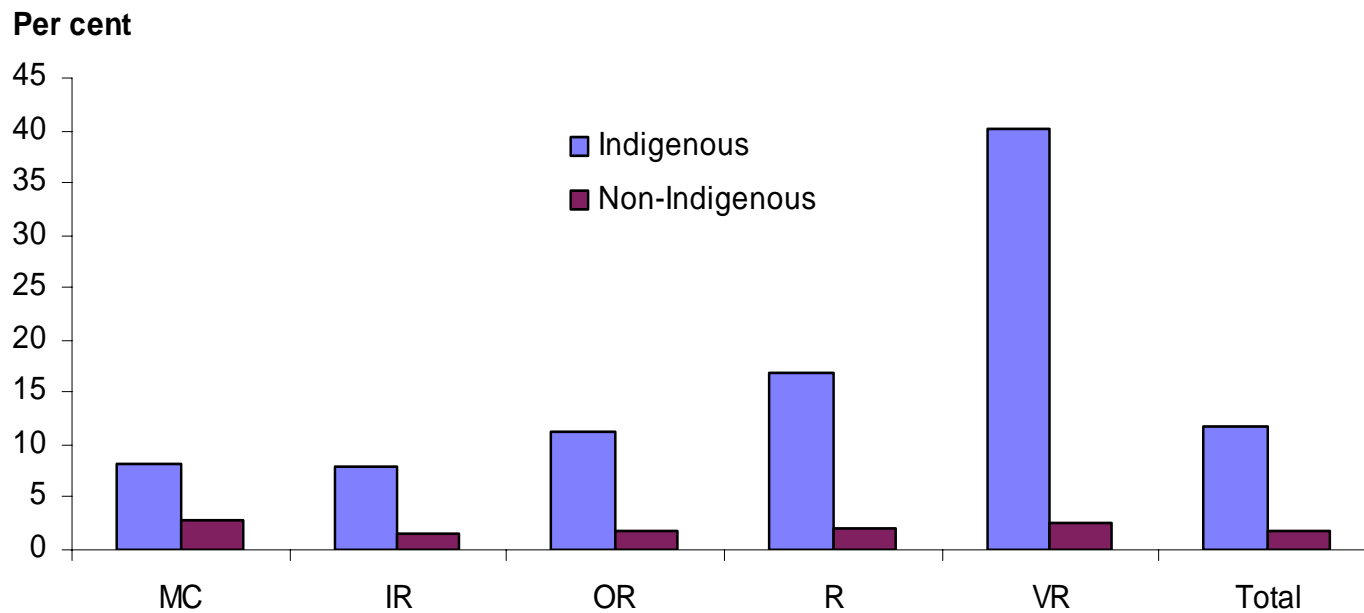
Food prices



Petrol prices



Household “crowding”





Difficulties reporting for remote areas

- lack of data for these areas
- accuracy of the Indigenous identifier
- different service delivery models
- migration of the frail aged

Remote area reporting capacity

Issue	Data	Indigenous	Service delivery	migration
Chronic diseases	X			
Injury	X			
Mental health	X			
Oral health	OK		X	
Communicable diseases	OK		X	
Birth outcomes	OK		x	
Severity and type of disability	X			
Days off work or away from usual activity because of illness	X			
Life expectancy	OK		X	X
Self-assessed health	X			
Self-assessed happiness	X			
Overall death rates	OK		X	X
Perinatal mortality	OK		X	
Age-specific mortality	OK		X	X
Premature mortality	OK		X	X
Leading causes of death and 'excess' death	OK		X	X

Issue	Data	Indigenous	Service delivery	migration
Reticulated water with adequate fluoride	OK	X		
Education of adult population	OK			
School retention & progression to university	OK			(X)
Employment	OK			
Household income	ok			
Gap between rich and poor	ok			
Sources of income	OK			
SEIFA	OK	X		
Demography	OK			
Dependency ratio	OK			
Internal migration	OK			
Fertility	OK	X		
Community safety (homicide rate)	OK	X		
Individuals perception of risk	(OK)	X		
Housing tenure	OK			
Crowding in households	OK			
Car ownership	OK			

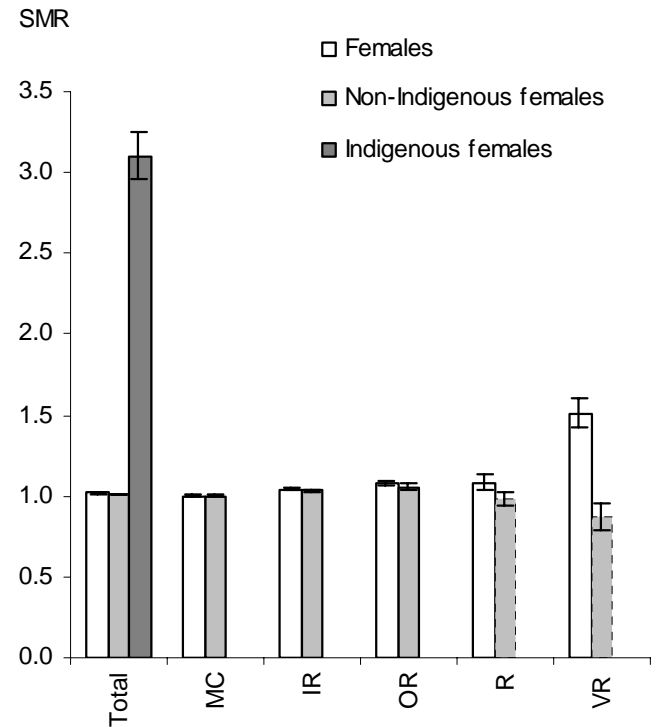
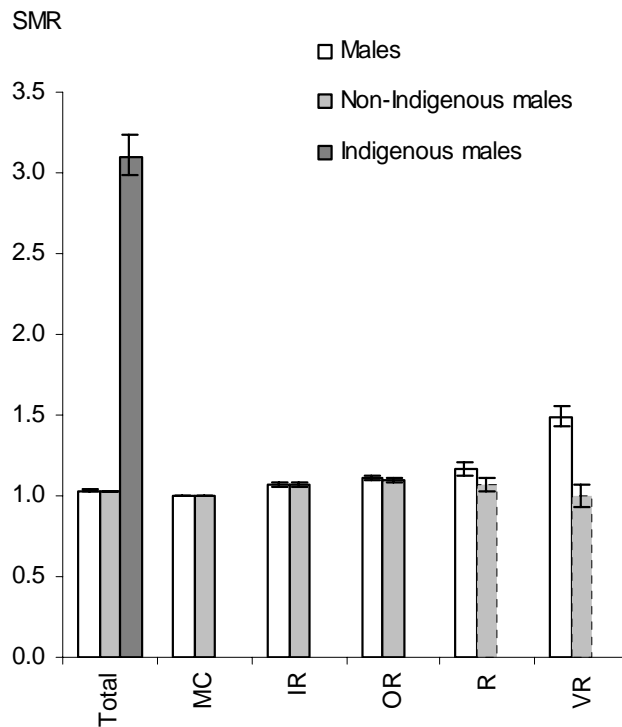


Issue	Data	Indigenous	Service delivery	migration
Cost of living	X			
Smoking rates	X			
Harmful consumption of alcohol	X			
Illicit drug use	(OK)		X	
Physical inactivity	X			
Nutrition	X			
Overweight and obesity	X			

Issue	Data	Indigenous	Service delivery	migration
Immunisation in reducing incidence of infectious disease	OK	?		
Screening in reducing mortality due to breast and cervical cancer	X			
Medical and surgical misadventure	OK	X		
Prevalence of female GPs	OK			
Rate of hospital specialist procedure	OK	X		X
Rate of non-hospital specialist consultation	(OK)	?		X
Options for aged care	OK	?	(X)	X
Waiting times for elective surgery	OK	X		
Rates of GP consultation for a range of reasons	(OK)	?	(X)	X
Bulk billing	(OK)	?		
Supply of health workers	OK		X	
Level of hospital service available	OK			
Rate of hospital admission	OK	X	X	X
Rate of GP and primary medical care consultation	(OK)	X	(X)	X

Issue	Data	Indigenous	Service delivery	migration
Rate of dental consultation by reason	X			
Rate of GP consultation for mental health reasons	OK	?		X
Rate of prescription	OK	?	X	X
Access to disability services	(OK)	?		(X)
Rate of care planning and case conferencing	(OK)	X		X
Accreditation of hospitals	OK			
Rate of surgical and medical misadventure	OK	X	X	X
Numbers of student health workers from rural areas	OK	X		(X)
Hours worked by health workers	OK			
Age of health workers	OK			

Selected statistics- Death rates



Age specific death rates -1

Age group (years)	MC rate	Male				Female				
		IR	OR	R	VR	IR	OR	R	VR	
		(ratio)				(ratio)				
0-4	132	*1.09	*1.29	*1.38	*2.59	110	1.01	1.05	*1.35	*2.94
5-14	15	1.10	1.17	*1.89	*3.68	11	1.06	*1.30	1.55	*4.28
15-24	90	*1.34	*1.45	*2.09	*2.66	35	*1.23	*1.21	*2.16	*2.67
25-44	142	*1.10	*1.20	*1.55	*2.61	66	*1.10	*1.14	*1.55	*3.14
45-64	519	*1.11	*1.22	*1.33	*2.15	312	*1.09	*1.19	*1.40	*2.65
65-74	2552	*1.06	*1.13	*1.19	*1.42	1413	1.02	*1.11	*1.26	*1.68
75+	8470	*1.05	*1.03	*0.93	*0.71	6734	*1.04	*1.04	*0.91	*0.80
Total	..	*1.07	*1.11	*1.17	*1.49	..	*1.04	*1.07	*1.09	*1.51

Age specific death rates -2

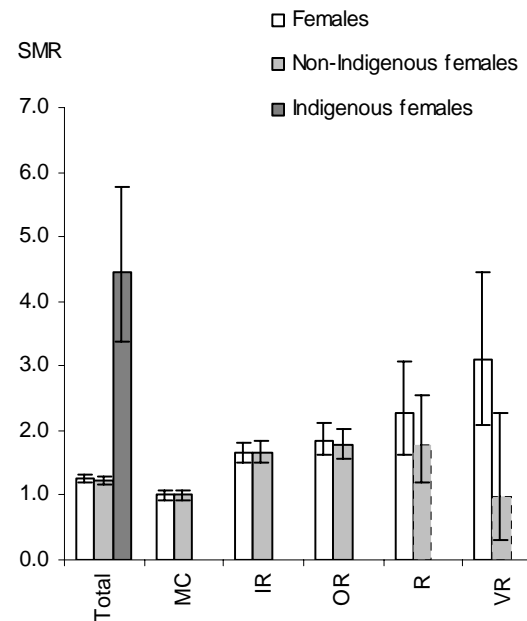
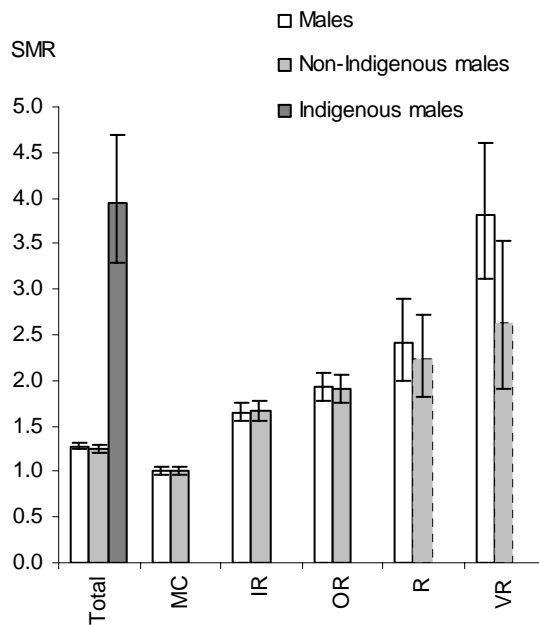
Age group (years)	Male						Female					
	Non-Indigenous					Indigenous	Non-Indigenous					Indigenous
	IR	OR	R	VR	MC rate		IR	OR	R	VR	MC rate	
	(ratio)					(ratio)						
0-4	130	1.08	*1.15	1.14	1.17	*3.0	109	1.00	0.96	1.01	0.86	*2.8
5-14	15	1.12	1.13	1.48	*2.62	*2.9	11	1.09	1.24	1.20	1.92	*3.6
15-24	89	*1.34	*1.39	*1.74	1.46	*3.5	34	*1.25	1.10	1.39	1.53	*3.3
25-44	139	*1.10	*1.12	1.09	1.11	*5.3	65	*1.10	1.03	0.88	0.89	*6.0
45-64	517	*1.11	*1.18	*1.14	*1.24	*4.8	309	*1.08	*1.12	1.10	*1.27	*5.3
65-74	2,550	*1.06	*1.12	*1.15	*1.17	*2.4	1,410	1.02	*1.09	*1.13	0.99	*3.3
75+	8,468	*1.04	*1.05	0.95	*0.70	*1.2	6,732	*1.02	*1.04	*0.91	*0.72	*1.4
Total	..	*1.07	*1.10	*1.07	1.00	*3.1	..	*1.03	*1.06	0.98	*0.87	*3.1
0-64	..	*1.12	*1.17	*1.17	*1.22	*4.4	..	*1.09	*1.09	1.06	1.16	*4.7

Causes of higher death rates in Remote areas

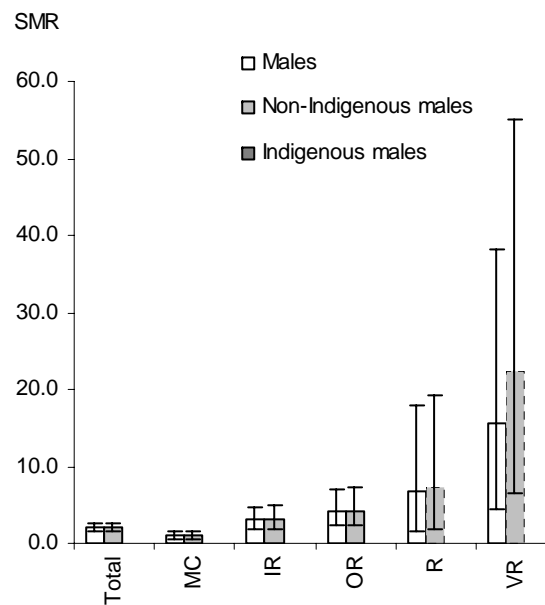
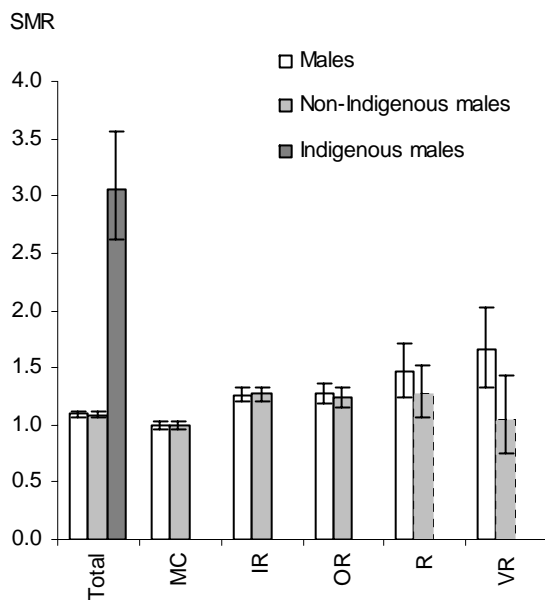
Average annual 'excess' deaths 1997-1999

	Deaths	% of excess
Lung cancer	24	4
All cancers	9	2
Ischaemic heart disease	62	11
'Other' circ disease	44	8
All circulatory disease	116	21
COPD	40	7
Pneumonia	19	3
All respiratory disease	73	13
Motor vehicle accidents	65	12
Suicide	29	5
Interpersonal violence	20	4
'Other' injury	54	10
All injury	167	31
Diabetes	61	11
Renal disease	24	4
'Other' causes n.e.d.	101	18
All other causes	181	33
Total	546	100

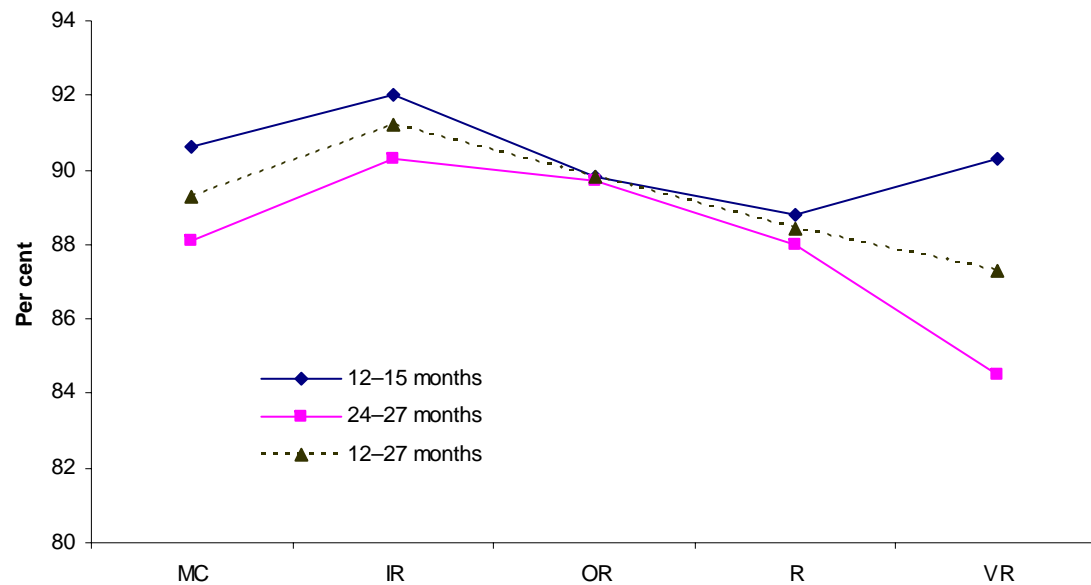
Deaths-Motor vehicle accidents



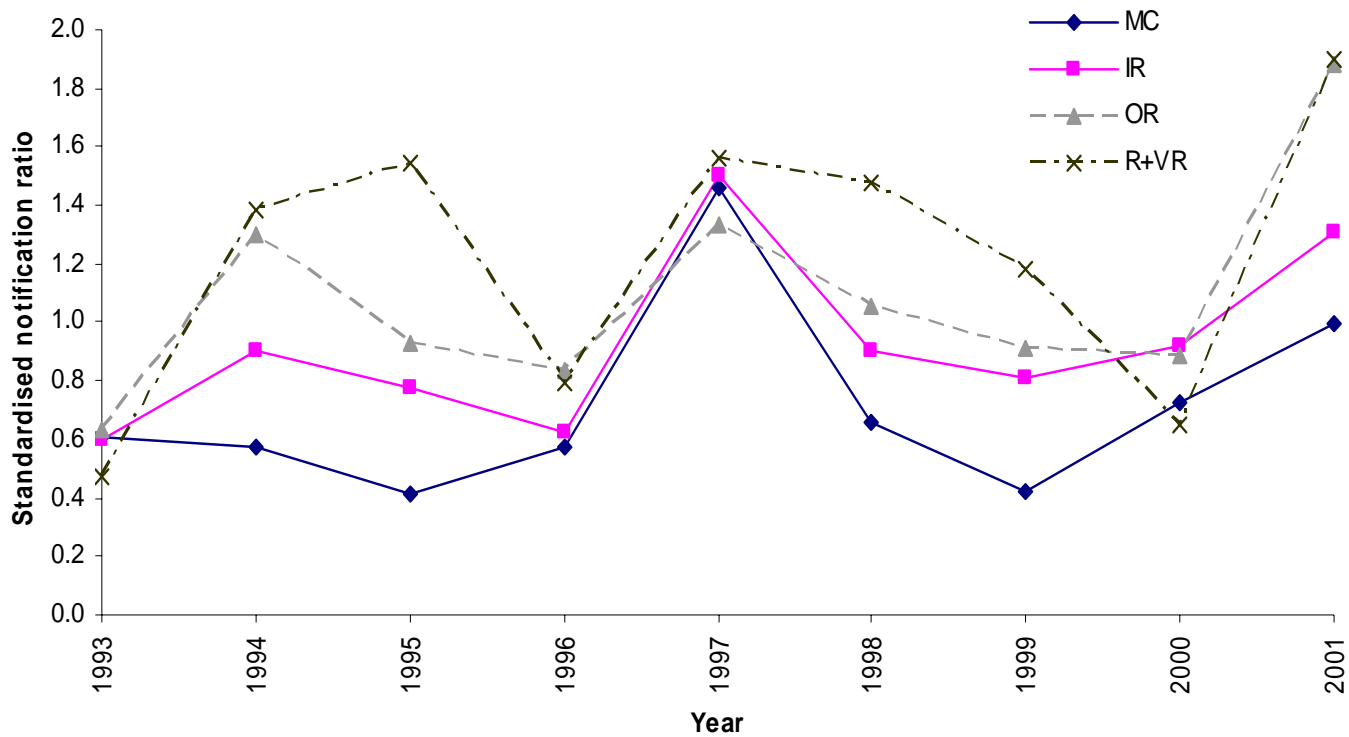
Deaths (males): suicide and accidental shooting



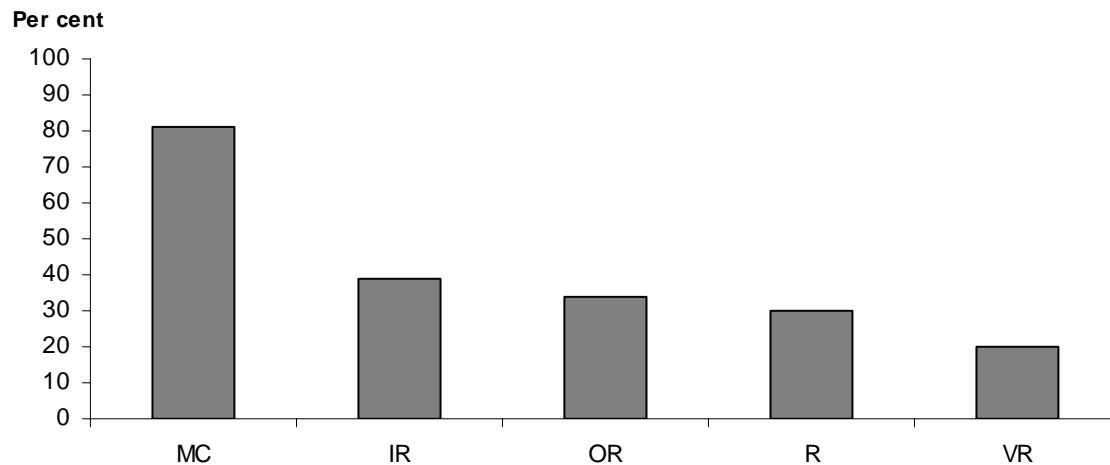
Immunisation rates for children



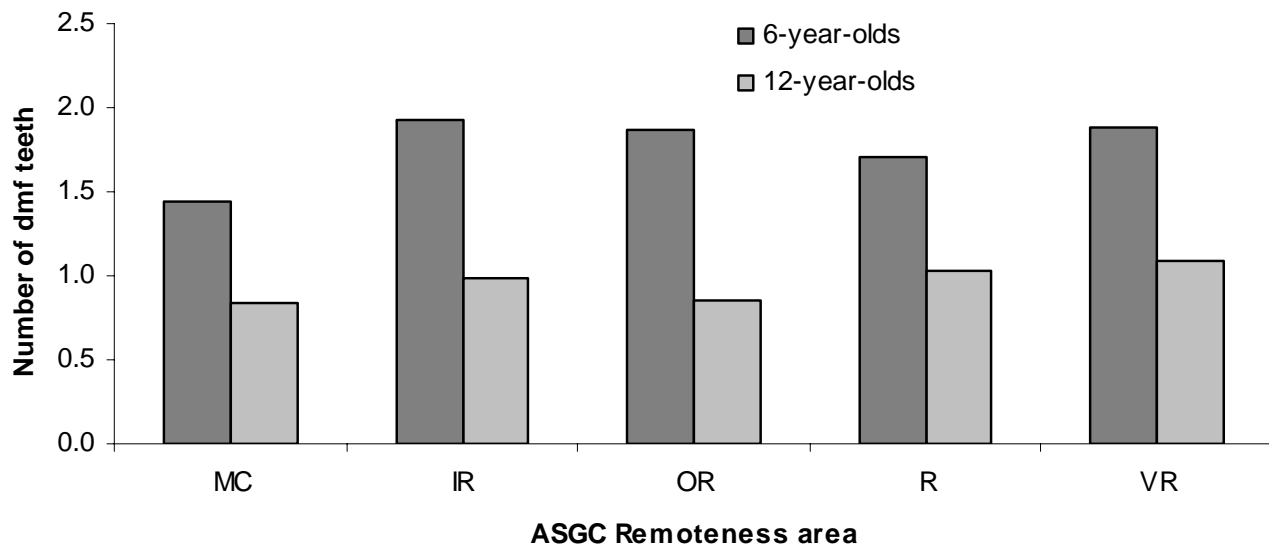
Pertussis notifications



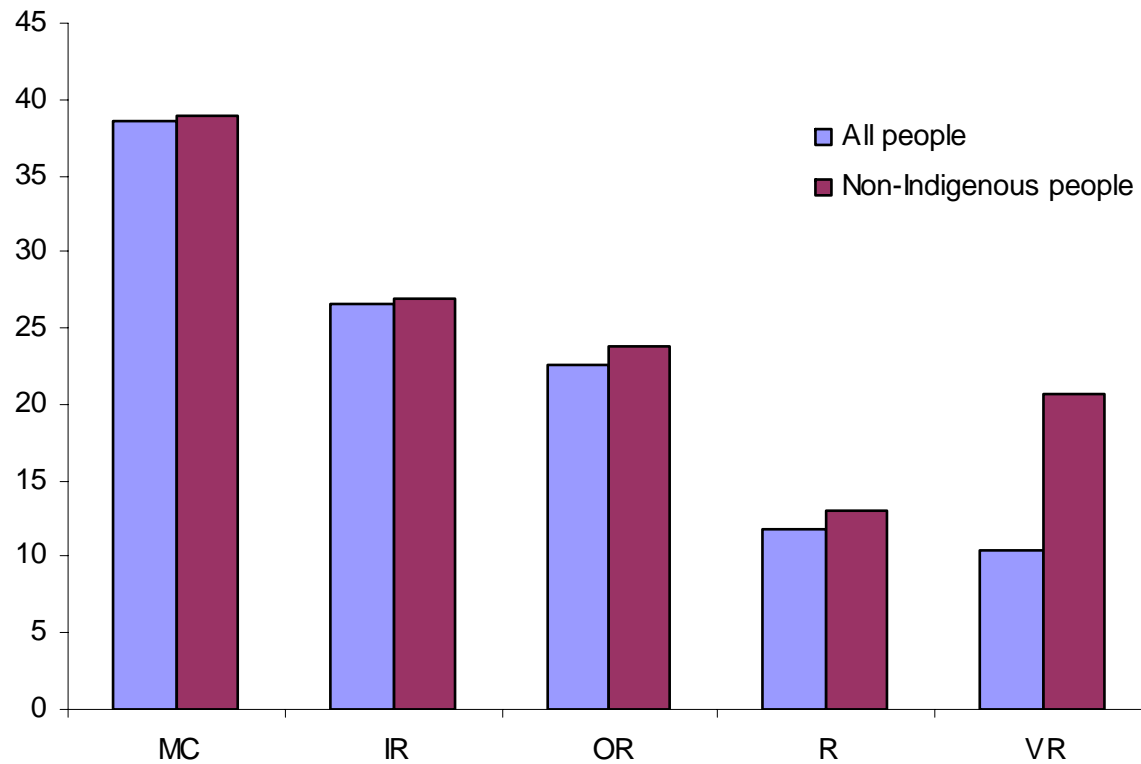
Percentage of water supplies fluoridated



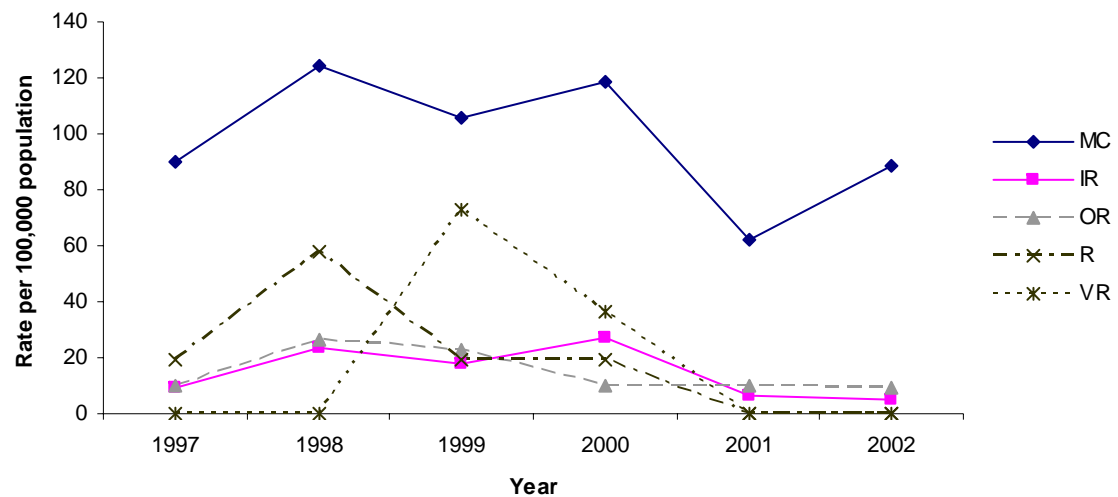
DMF teeth, 6 and 12 year olds



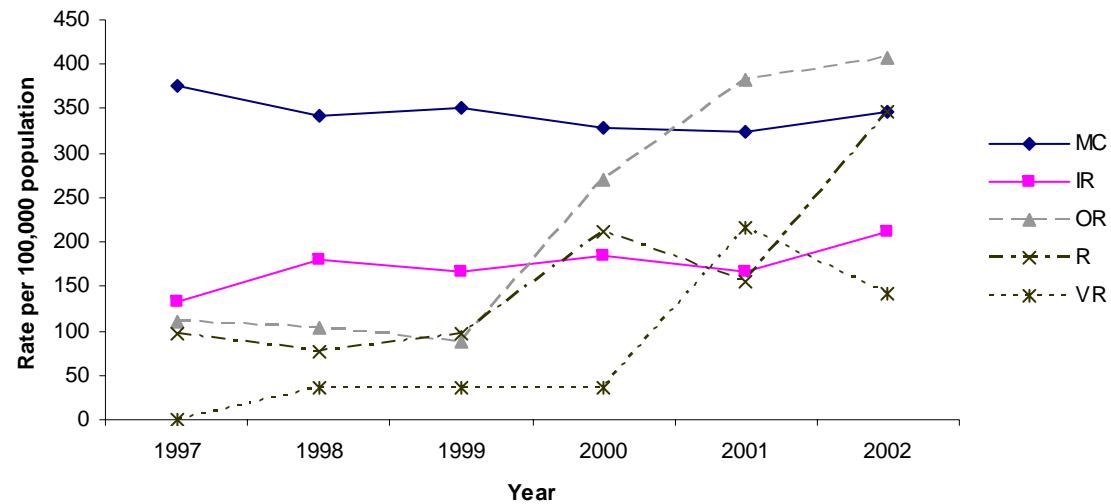
Percentage of young people entering university



School students starting dental degrees



School students starting medical degrees

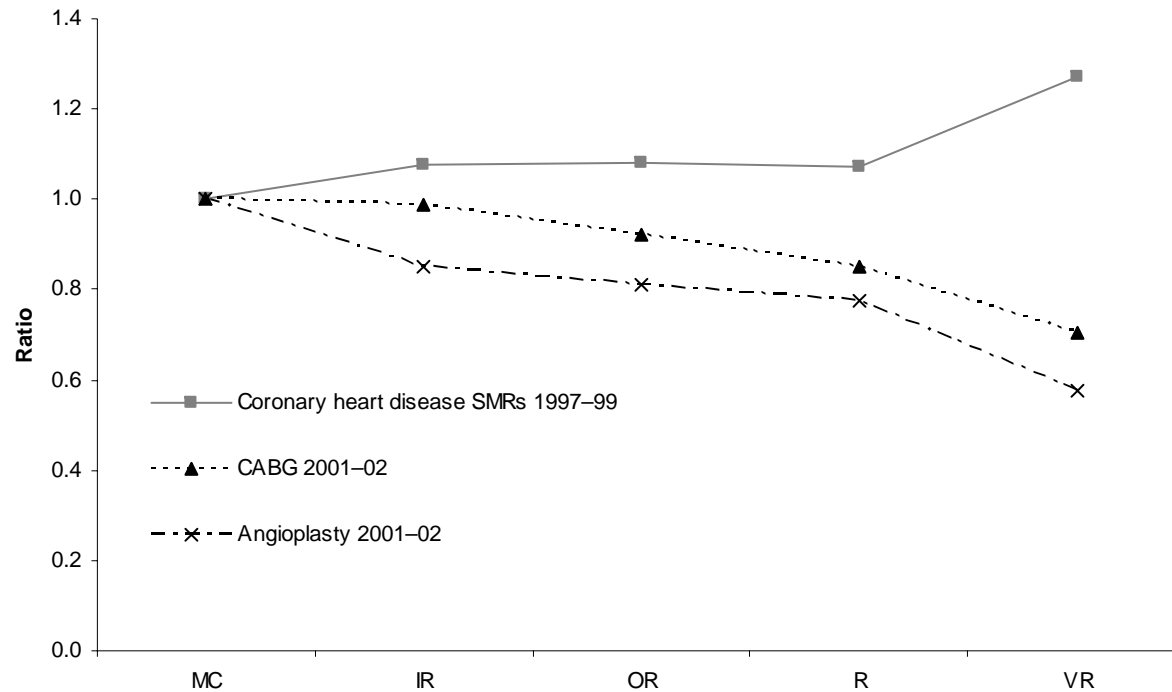


Relative age specific birth rates in each area

Age of mother	MC	IR	OR	R	VR
15-19 ^(a)	1.00	1.59	2.12	3.30	7.05
20-29	1.00	1.44	1.56	1.67	1.59
30-39	1.00	0.88	0.88	0.94	0.80
40-44 ^(b)	1.00	0.73	0.72	0.87	0.86
Total	1.00	1.03	1.14	1.35	1.47

i.

Comparison of coronary death and surgery rates



Hospital procedures 2001/2

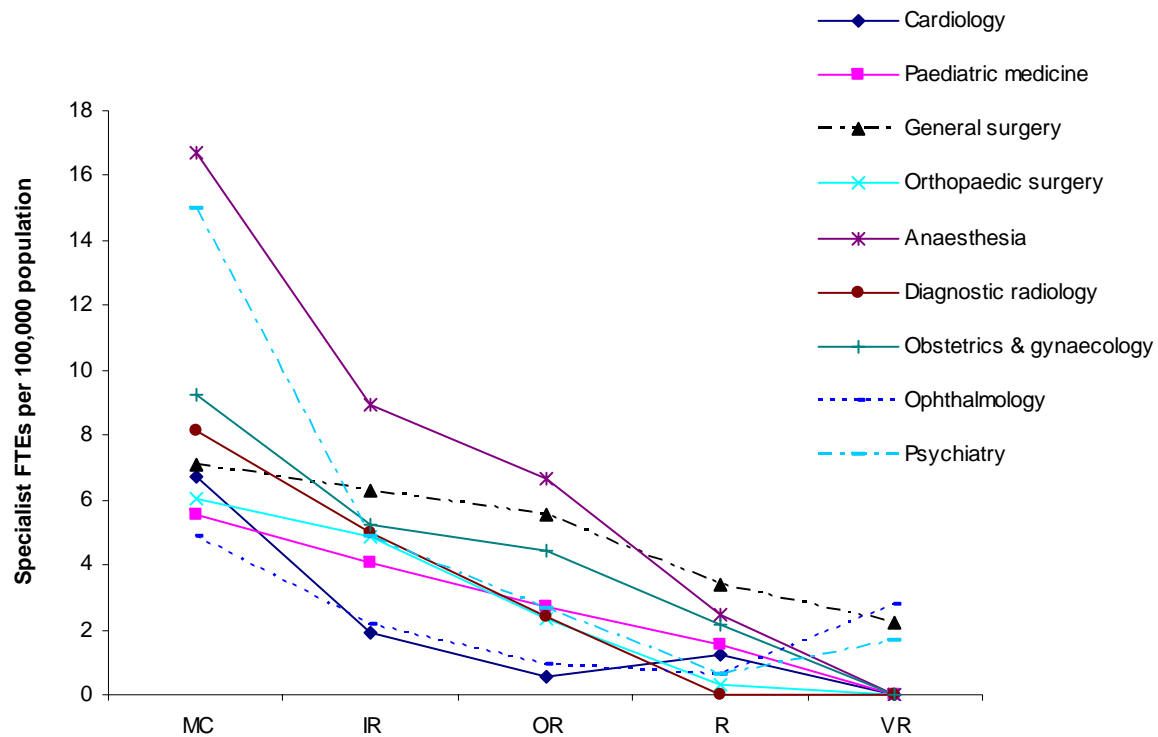
Procedure	MC	IR	OR	R	VR
	Ratio				
Appendectomy	1.00	*1.18	*1.21	*1.29	1.06
Coronary artery bypass graft	1.00	0.99	*0.92	*0.85	*0.70
Coronary angioplasty	1.00	*0.85	*0.81	*0.77	*0.58
Cholecystectomy	1.00	*1.08	*1.04	0.94	*0.88
Diagnostic gastrointestinal endoscopy	1.00	*0.92	*0.84	*0.72	*0.60
Hip replacement	1.00	*1.14	*1.10	1.08	*0.68
Revision of hip replacement	1.00	*1.23	1.14	0.93	*0.49
Hysterectomy, females aged 15–69	1.00	*1.21	*1.16	0.99	*0.77
Lens insertion	1.00	*0.96	*1.07	1.00	1.05
Tonsillectomy	1.00	*1.16	*0.95	*0.88	*0.54
Myringotomy	1.00	*0.90	*0.72	*0.78	*0.50
Knee replacement	1.00	*1.22	*1.11	1.10	*0.71
Prostatectomy	1.00	1.02	1.00	0.93	*0.73
Arthroscopic procedures (includes arthroscopies)	1.00	*1.16	*1.11	*1.24	*0.73

Supply of primary care doctors

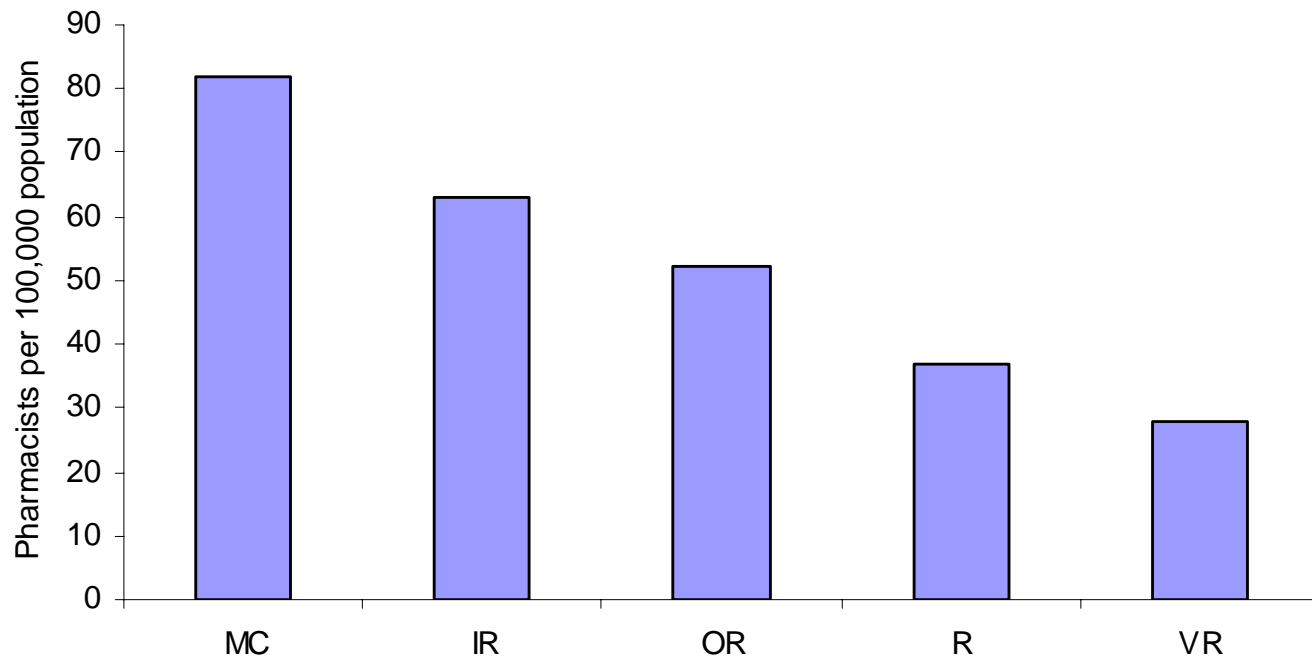
	MC	IR	OR	R	VR	Unknown	Australia
Number of GPs (main location of practice)	15,170	3,706	1,718	248	145	684	21,671
GPs per 100,000 population	118	92	85	76	81	n.a.	112
GPs per 100,000 expected consultations	21.0	16.1	15.2	14.3	15.9	n.a.	19.9
FTE (main location of practice)	17,563	4,629	2,233	327	214	412	25,377
Rate FTE per 100,000 population	136	115	111	101	120	n.a.	131
Rate FTE per 100,000 expected consultations	24.3	20.1	19.7	18.8	23.5	n.a.	23.2
FTE (main and second locations of practice) ^(a)	17,334	4,599	2,215	325	218	686	25,377
Population ('000s)	12,871	4,026	2,014	324	179	n.a.	19,413

i.

Prevalence of specialists



Prevalence of pharmacists





Hours worked

- GPs
 - MCs: 14% worked >60hrs/week
 - Remote: 27-40% worked >60 hrs/week
- Hospital non-specialist drs
 - MCs: 18% worked >60hrs/week
 - Rem: 30% worked >60hrs/week
 - V Rem: 43% worked >60hrs/week



Hours worked

- Registered nurses worked longer hours in VR area
- Physiotherapists worked 35% longer in VR areas
50% worked >50 hrs/week



Hours worked

- Pharmacists

MCs: 25% worked >50 hrs/week

Rem: 40% worked >50 hrs/week

V Rem: 50% worked >50 hrs/week



Unknown

- Smoking?
- Overweight?
- Alcohol?
- Nutrition?
- Physical inactivity?



unknown

- Prevalence of chronic diseases?
- Mental health?
- Disability?
- Screening?
- Rate of prescription?
- Rate of primary care consultation?