



Caries experience in Australian States and Territories

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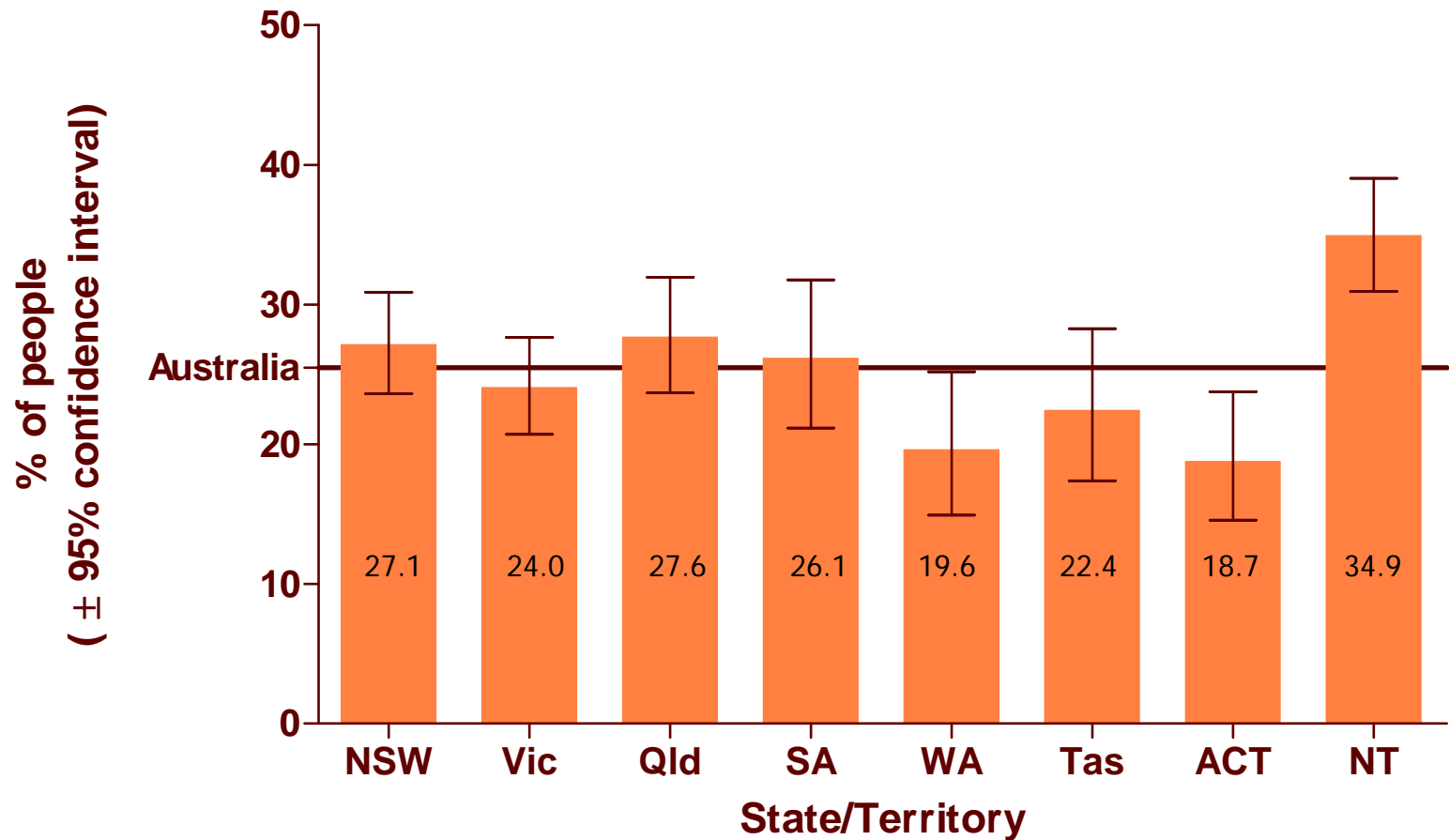
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Untreated dental decay

- The percentage of dentate people who have at least one or more decayed surfaces on the crowns of their teeth.
- Reflects both the prevalence of dental decay in the population and access to dental care for treatment.
- The prevalence of untreated coronal decay in Australia was 25.5%.

Percentage of people with untreated coronal decay



Australian data

- In Australian population untreated coronal decay was related to:
 - ▶ Sex
 - ▶ Aboriginality
 - ▶ Location
 - ▶ Eligibility
 - ▶ Dental insurance
 - ▶ Usual reason for visit



Relative effects between population subgroups in percentage of adults with untreated dental decay

<u>Contrast</u>	Prevalence ratio for contrasted groups							
	NSW	Vic	Qld	SA	WA	Tas	ACT	NT
Age (15-34 vs 55+)	0.8	1.3	2.3*	1.1	1.0	1.4	0.4*	1.2
Male:Female	1.1	1.3	1.1	1.5	2.1*	1.3	0.8	1.2
Non-capital:Capital	1.8*	1.3	1.3	1.8	1.8	1.4	.	1.1
Low:High SES	1.7*	1.5	1.2	2.4*	1.7	1.3	1.3	0.9
Eligible:Ineligible	1.6*	1.6*	1.3	1.9*	0.8	0.7	1.4	1.0
Public: Non-public	(2.1) *	(2.2)*	(1.6)	(2.3) *	(0.7)	(0.3)	(2.4)	(1.1)
Uninsured:Insured	1.6*	1.7*	1.6	1.7	1.5	1.1	1.8	1.0

* statistically significant difference between contrasted groups (non-overlapping 95% CIs)



Untreated root decay

- The percentage of people who had at least one natural tooth and who had one or more surfaces of the roots of their teeth decayed.
- Decay of the root surface requires that the root surface be exposed in the mouth, usually caused by receding gums.
- The prevalence of untreated root decay in Australia was 6.7%.



Percentage of adults with untreated root decay



Australian data

- In Australian population untreated root decay was related to:
 - ▶ Age
 - ▶ Education
 - ▶ Eligibility
 - ▶ Dental insurance
 - ▶ Usual reason for visit



Relative effects between population subgroups in percentage of adults with untreated root decay

<u>Contrast</u>	Prevalence ratio for contrasted groups							
	NSW	Vic	Qld	SA	WA	Tas	ACT	NT
Age	*	*	*	*	.	*	*	*
Male:Female	1.3	1.0	1.9	1.9	2.0	0.8	1.5	2.7*
Non-capital:Capital	1.6	1.3	1.5	1.1	0.9	2.9	.	1.1
Low:High SES	2.1*	1.4	1.8	1.9	2.5	2.0	1.5	0.8
Eligible:Ineligible	2.5*	1.4	1.5	1.7	2.4	1.5	1.8	1.6
Public: Non-public	4.1 *	1.8	2.1	1.6	1.3	1.2	0.5	1.6
Uninsured:Insured	2.6*	1.2	2.0	1.8	1.5	1.8	0.9	1.1

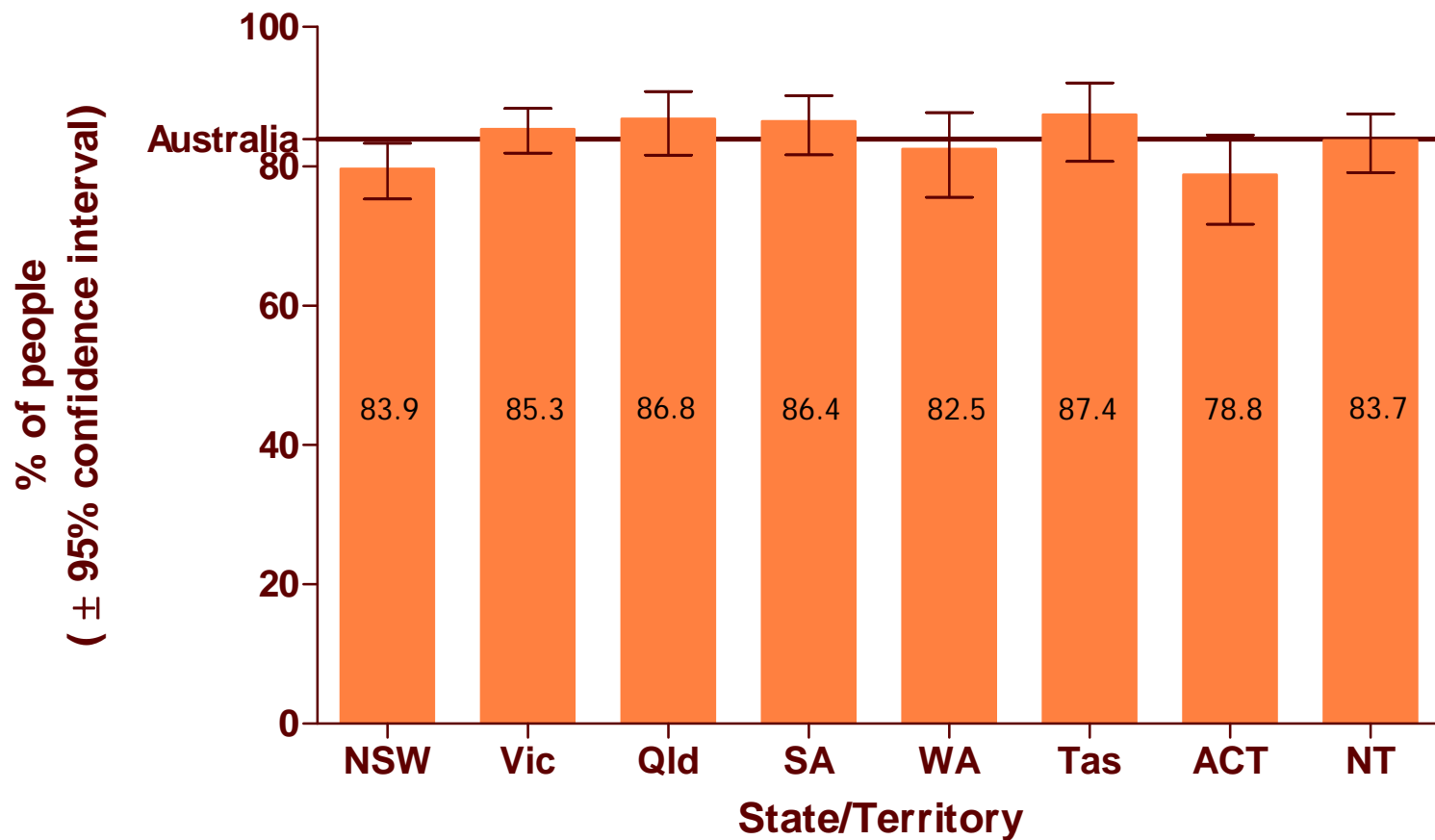
* statistically significant difference between contrasted groups (non-overlapping 95% CIs)



At least one filled tooth

- Fillings leave a permanent mark on the tooth and are one measure of people's lifetime experience of decay.
- Filled teeth also indicated patterns of dental treatment and access to dental care.
- The prevalence of filled teeth in Australia is 83.9%.

Percentage of adults with at least one filled tooth



Australian data

- In Australian population percentage of people with at least one filled tooth was related to:
 - ▶ Age
 - ▶ Dental insurance



Relative effects between population subgroups in percentage of adults with at least one filled tooth

<u>Contrast</u>	Prevalence ratio for contrasted groups							
	NSW	Vic	Qld	SA	WA	Tas	ACT	NT
Age	*	*	*	*	*	*	*	*
Male:Female	1.0	1.0	0.9	0.9	0.9	1.0	0.9	0.9
Non-capital:Capital	0.9	1.1	1.0	1.1	1.0	1.0	.	0.9
Low:High SES	0.9	0.9	1.0	1.1	1.0	1.0	1.0	0.9
Eligible:Ineligible	1.0	1.0	1.1	1.0	1.0	0.8*	1.1	0.9
Public: Non-public	(0.9)	(0.9)	(1.0)	(1.0)	(1.2)	(0.7)*	(0.9)	(0.9)
Uninsured:Insured	0.9*	1.0	1.0	1.0	0.8*	0.9	0.9	0.8

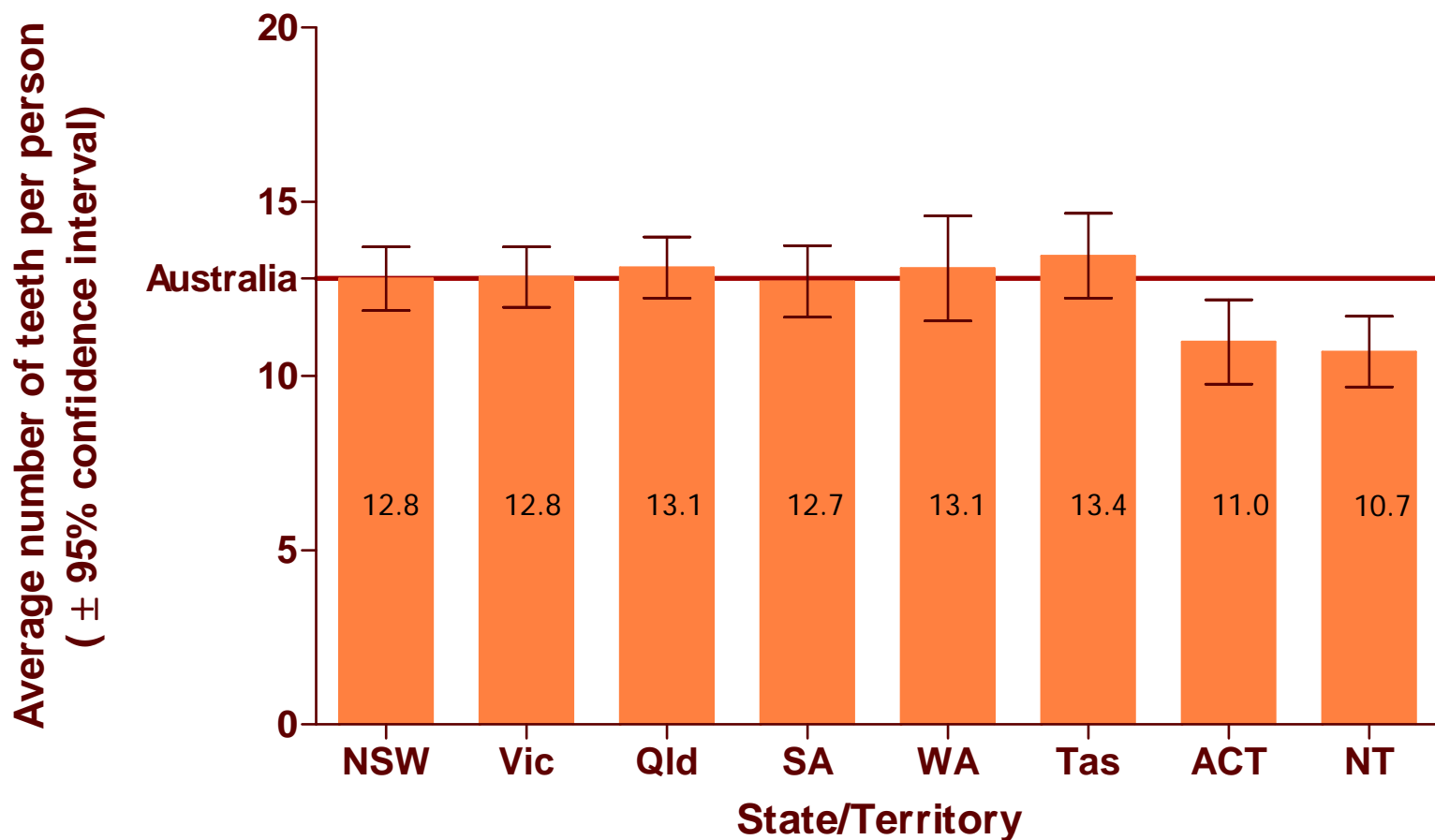
* statistically significant difference between contrasted groups (non-overlapping 95% CIs)

Total caries experience (mean DMFT)

- Reflects a person's lifetime experience of dental caries.
- People 45 years and over all missing teeth included
- People aged less than 45 years only included teeth reason for extraction sought.
- The average number of decayed, missing and filled teeth in Australia is 12.8 teeth.



Average number of teeth with caries experience



Australian data

- In Australian population average number of teeth with caries experience was related to:
 - ▶ Age
 - ▶ Location
 - ▶ Education
 - ▶ Eligibility
 - ▶ Usual reason for visit



Ratio of means between population subgroups in number of teeth with caries experience

<u>Contrast</u>	Prevalence ratio for contrasted groups							
	NSW	Vic	Qld	SA	WA	Tas	ACT	NT
Age	*	*	*	*	*	*	*	*
Male:Female	1.0	0.9	0.9	1.0	0.9	1.0	0.8	0.9
Non-capital:Capital	1.1	1.2	1.1	1.1	1.1	1.1	.	1.0
Low:High SES	1.1	1.0	1.2	1.2	1.0	1.1	0.9	0.9
Eligible:Ineligible	1.4*	1.2	1.3*	1.5*	1.4*	1.2	1.4	1.3
Public: Non-public	[1.5]* (1.4)*	[1.3]*	[1.4]*	[1.6]*	[1.5]* (1.4)*	[1.2]	[1.5]*	[1.5]*
Uninsured:Insured	1.0	0.9	1.0	0.9	0.8*	0.9	0.9	0.8

* statistically significant difference between contrasted groups (non-overlapping 95% CIs)

Summary of subgroup differences in four indicators of caries experience

No. of indicators with a large difference* between subgroups

<u>Contrast</u>	<u>NSW</u>	<u>Vic</u>	<u>Qld</u>	<u>SA</u>	<u>WA</u>	<u>Tas</u>	<u>ACT</u>	<u>NT</u>
Male:Female	—	-	-	—	↑	-	-	↑
Non-capital:Capital	↑	-	-	-	-	.	-	-
Low:High SES	↑↑	-	-	↑	-	—	-	-
Eligible:Ineligible	↑↑↑	↑	-	↑	—	—	—	—
Public:Non-public	↑↑↑	↑↑	↑	↑↑	↑	↑	↑	↑
Uninsured:Insured	↑↑↓	↑	-	-	↓	↓	-	-

* at least two-fold relative difference or difference that is statistically significant ??



Conclusions

- Major differences exist in relation to provider
- Some differences for eligibility, insurance and SES
- Few differences in relation age, sex and location