



# **WALES CARE HOME DENTAL SURVEY 2010-11 FIRST RELEASE**

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<http://www.cardiff.ac.uk/dentl/research/themes/appliedclinicalresearch/epidemiology/oralhealth/index.html>



# Summary

The UK population is at an all time peak and older people make up a larger proportion of the population. Successive Adult Dental Health Surveys have shown each decennial cohort retaining more teeth than their predecessors. In Wales we undertook a survey of care home managers in Wales in 2006-07 to assess knowledge and implementation of oral health policy. This 2010-11 survey of care home residents in Wales followed on from the 2006-07 survey of care home managers with the intention of examining a sample of residents.

Research ethics approval was achieved. Data was collected between October 2010 and June 2011. Two hundred and twenty eight care homes were randomly selected; 5 randomly selected residents from each care home were invited to take part in the survey.

The majority of care home residents were age 75 and over. Care home residents aged 55-64, 65-74 and 75 and over are more likely than free living Welsh counterparts to be without any natural teeth. 54% of care home residents were without any natural teeth.

Less than 25% of dentate care home residents in Wales had 21 or more teeth whereas ADHS 2009 reported that more than 75% of free living dentate Welsh adults had 21 or more teeth. The average number of teeth among dentate care home residents was 13.9; the number of sound untreated teeth was 8.4, leaving 5.5 teeth either restored otherwise sound or decayed/unsound. The number of decayed or unsound teeth for dentate care home residents living in Wales was 2.74. On average there were more decayed or unsound teeth in male (3.59) care home residents when compared with female residents.

The majority (62%) of care home residents had caries on the surfaces of the crowns of their teeth. Prevalence of caries on coronal surfaces seem to increase with increasing deprivation of the care home of residence (using WIMD 2011). For example 59% of residents from care homes in the least deprived quintile had caries on the surfaces of the crowns of their teeth compared with 65% of residents living in homes in the most deprived quintile.

The majority of all care home residents indicated that they would attend the dentist only when having trouble. Dentate care home residents were more likely to seek regular or occasional check-ups compared with edentate residents. Regular dental attendance was less likely to be reported by dentate residents of care homes located in deprived areas.

Dentate care home residents were much less likely to report regular dental check-ups (19%) when compared with their free living ADHS 2009 counterparts (69%). For the Wales care home survey and for Welsh adults taking part in ADHS 2009 there was lower regular dental attendance associated with deprivation. By comparison the inequality in routine access to dental care suffered by dentate care home residents was huge.

## Background

Maintaining the dental health of the older population of the UK will be an increasing challenge. The UK population is at an all time peak and older people now make up a larger proportion of the population. Successive Adult Dental Health Surveys have shown each decennial cohort retaining more teeth than their predecessors (Fuller et al., 2011). We will see a wider diversity of both general and dental health needs among older people including managing heavily restored teeth (National Working Group for Older People, 2005).

The National Diet and Nutrition Survey of older people conducted in 1995 was the first Office for National Statistics survey to examine the dental health of a sub sample of people living in care homes (Steele et al., 1998). The sub-sample was small (275 individuals) which limited detailed comparison of residents with free living older people. The nutritional state of dentate individuals living in care homes was closer to that of edentulous individuals living in the community than to free living dentate peers. It was suggested this might be due to feeding policy assumptions that people had trouble chewing food (Sheiham et al., 1999). Residents of care homes had fewer teeth than their peers living in the community which may partly reflect a historical pattern of extraction of teeth and denture construction in the home (Steele et al., 1998). Residents had more unmet dental need and older and more poorly fitting dentures. Fiske et al. (1990) similarly reported that people living in care homes had more fillings and extractions required than free living peers, even though they had fewer teeth.

It was in this context that we undertook a survey of care home managers in Wales in 2006-07 to assess knowledge and implementation of oral health policy (Monaghan and Morgan, 2010). This survey highlighted a number of issues:

- a considerable proportion of homes in Wales did not have procedures in place to highlight whether individuals had potential oral health care needs and to place them into regular dental care.
- some homes report difficulty in obtaining routine and emergency access to dental care.
- lack of training for care home personnel in oral health care for residents to appropriately support individuals who need assistance in cleaning their mouths and dentures.

The Adult Dental Health Survey which was carried out in 2009 in England, Wales and Northern Ireland excluded care home residents. The 2010-11 survey of care home residents in Wales followed on from the 2006-07 survey of care home managers with the intention of examining a sample of residents to obtain data on prevalence of dental diseases, the types of interventions they could benefit from and the difficulties in delivering the dental care required. It was designed to be a supplementary survey to ADHS 2009 and wherever possible used the same methodological criteria. This report is intended to support local health boards to use information from the survey to plan dental service provision.

## **Method**

NHS research ethics approval was achieved. Data was collected between October 2010 and June 2011.

Two hundred and twenty eight care homes were randomly selected from the list of nursing and residential care homes available through the Care and Social Services Inspectorate Wales (CSSIW) website. These care homes were invited to take part in the survey. When a care home did not consent to take part in the survey, another randomly selected substitute care home from the same Local Authority was invited to participate instead. Two hundred and five care homes took part.

Five randomly selected residents from each participating care home were invited to take part in the survey. All residents who did not have capacity to consent and did not have the Lasting Power of Attorney or Court Appointed Deputy were excluded from the study. Residents who could not communicate in English or Welsh were also excluded.

Dentists and dental nurses from the Community Dental Services (CDSs) were provided training in all aspects of the survey prior to data collection. 15 dentists (examiners) and 17 dental nurses (data recorders) collected clinical and/or questionnaire based data from the residents.

Much of this survey content, both clinical and questionnaire based, consisted of a sub-set of the 2009 Adult Dental Health Survey indices. This allowed comparison of the oral health status of care home residents with their free living peers.

Note that to protect individuals from possible identity small counts in some data cells within tables have been suppressed in line with Public Health Wales' draft guidance on disclosure of small numbers.

Further information on the survey methodology can be obtained from the Welsh Oral Health Information Unit website or from [morganmz@cardiff.ac.uk](mailto:morganmz@cardiff.ac.uk)

## Loss of all natural teeth

The proportion of adults who have retained some of their natural teeth (i.e. are dentate) is an important indicator of the oral health of the population. Tables 1a and 1b presents estimates of the proportion of Wales' care home residents who are dentate and edentate and compares them with free living adults who took part in the ADHS 2009 in Wales.

**Table 1a Dental status by age group and gender Wales Care Homes 2010 compared with Wales ADHS 2009**

Characteristics of all adults (%)	Wales Care Homes 2010			Wales ADHS 2009		
	Dental Status			Dental Status		
	Dentate	Edentate	Total number	Dentate	Edentate	Weighted base (1000s)
All	46.0	54.0	708	90	10	2,437
Age						
35-44	100	0	<5*	98	2	396
45-54	100	0	<5*	98	2	384
55-64	83.3	16.7	18	92	8	371
65-74	56.0	44.0	50	79	21	338
75-84	45.9	54.1	209	58 <sup>#</sup>	42 <sup>#</sup>	293 <sup>#</sup>
85s and over	43.0	57.0	426			
Sex						
Men	51.4	48.6	175	91	9	1,174
Women	44.3	55.7	533	89	11	1,263

<sup>#</sup>75 and over. Shading highlights very small numbers, \*data suppressed due to small number.

54% of care home residents surveyed were edentate (i.e. without any natural teeth), however 46% had at least one tooth.

Care home residents were more likely to be edentate when compared with their free living peers. The percentage edentate for all Welsh adults (aged 16 and over) taking part in the 2009 ADHS was 10%, 44% lower than care home residents in Wales. This is not surprising as the ADHS examined younger age cohorts which were not represented in the care home sample. However among those aged 75 or over the percentage edentate in care homes was 56% compared with 42% for ADHS 2009 participants (Table 1a).

A greater proportion of male care home residents were dentate when compared with female residents (51.4% compared with 44.3%). This



mirrored the findings of the ADHS 2009 survey in Wales; where 91% of all men (aged 16 and over) taking part were dentate compared with 89% of all women (aged 16 and over). It is not possible to compare male and female care home residents with the 75 and over ADHS age cohort as the gender breakdowns for these age groups have not yet been published for the ADHS 2009.

**Table 1b Dental status by socio-economic status/deprivation**

*(i) Wales Care Homes 2010 (based on deprivation quintile of care home postcode)*

WIMD 2011 of Care Home – <i>all participants</i>	Dentate (%)	Edentate (%)	Total Number
Least deprived	52.6	47.4	116
Second least deprived	45.9	54.1	133
Middle deprived	46.0	54.0	161
Second most deprived	39.2	60.8	130
Most deprived	47.0	53.0	168

*(ii) Wales ADHS 2009 (based on household classification)*

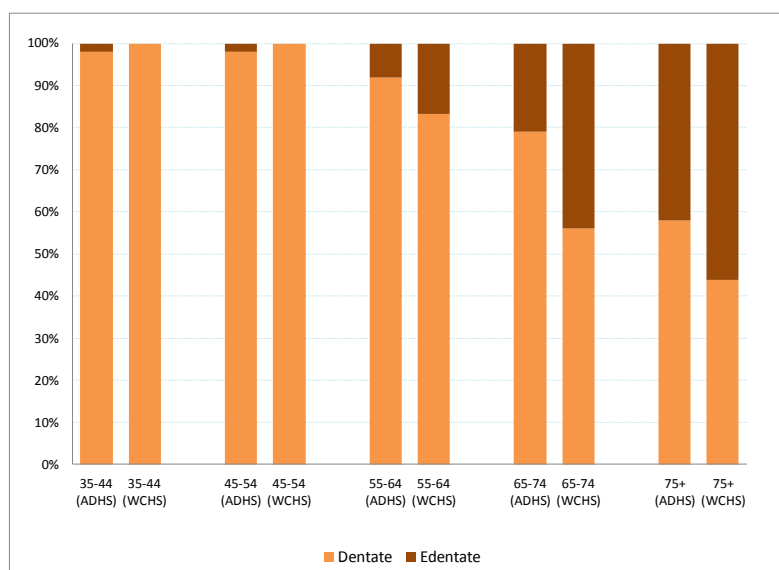
Socio-economic classification of household	Dentate (%)	Edentate (%)	Weighted base (1000s)
Managerial & professional	96	4	785
Intermediate occupations	95	5	381
Routine and manual occupations	84	16	977

Individual socio-economic status was not measured for the survey of care home residents. Instead we used the postcode of the care home to assign the Welsh Index of Multiple Deprivation (2011) as a proxy. It is not possible to determine whether this accurately reflects the level of deprivation experienced by residents before they were admitted to the care home.

There is a tendency for a greater proportion of residents living in care homes in the least deprived areas (according to WIMD 2011) to be dentate when compared with those residing in care homes from the more deprived areas (Table 1bi). This reflects the findings of ADHS 2009 where individuals having routine and manual occupations were less likely to be dentate when compared with those having managerial and intermediate occupations (Table 1bii).

As with the ADHS 2009 the likelihood of being edentate increased with age for care home residents in Wales. When interpreting this trend it is important to note that the majority of care home residents were age 75 and over (n=635); there were only 71 in the younger age groups (Table 1a, Figure 1).

**Figure 1 – Dental Status by age-group for Wales Care Home survey 2010 compared with ADHS Wales 2009**



Care home residents aged 55-64, 65-74 and 75 and over are more likely than free living Welsh counterparts to be without any natural teeth. For example in the 65-74 age-group the percentages were 44% and 21% for care home residents and ADHS participants respectively (Table 1a, Figure 1).

For the first time since the decennial Adult surveys commenced the 2009 ADHS reported that the majority of adults in all age-groups reported upon were dentate. In the oldest age-group, the 75 and over's 58% were dentate (Table 1a, Figure 1). This was not the case for Welsh care home residents where the majority (56.1%) of the 75 and over's were edentate. Nevertheless, 43.9% of this vulnerable group were dentate – having a least one tooth.

## Functional dentition – adults with 21 or more teeth

A complete dentition of between 28 and 32 teeth is rare among older people; however, the more teeth adults keep over their lifetime the better their oral health and function. Attributes such as eating comfortably and socialising without embarrassment can be related directly to the number and distribution of teeth, described as a functional dentition. In the Wales survey of care home residents and the ADHS 2009 a functional dentition was defined as having 21 or more teeth.

**Table 2a The proportion of dentate adults with 21 or more natural teeth by age and sex, Wales Care Homes 2010 compared with Wales ADHS 2009**

	Wales Care Homes 2010			Wales ADHS 2009		
	% of dentate adults with 21 or more teeth	1-20 teeth	Total number in group	% of dentate adults with 21 or more teeth	1-20 teeth	Weighted base (000s)
All	23.0	77.0	326	79	21	2,204
Age						
35-44	0	100	<5*	97	4	395
45-54	0	100	<5*	89	10	365
55-64	20.0	80.0	15	66	33	335
65-74	32.1	67.9	28	52	48	274
75-84	20.8	79.2	96	25 <sup>#</sup>	75 <sup>#</sup>	198 <sup>#</sup>
85s and over	23.0	77.0	183			
Sex						
Men	26.7	73.3	90	78	22	1,090
Women	21.6	78.4	236	82	17	1,113

<sup>#</sup>75 and over. Shading highlights very small numbers, \*data suppressed due to small number.

Less than one quarter of dentate care home residents in Wales had 21 or more teeth whereas ADHS 2009 reported that more than three quarters of free living dentate Welsh adults had 21 or more teeth (Table 2a).

The general trend of older people retaining more teeth seen in successive ADHSs appears to be reflected in the care home population. However for those aged 65-74 the proportion with teeth, and of those with teeth the proportion of residents with 21 or more teeth, is lower than in free living peers. Dentate care home residents under 75 were much less likely to have 21 or more teeth than their free living peers, for example in the 65-74 age-group 32.1% of care home residents and 52% of their free living peers had 21 or more teeth (Table 2a).

In contrast, older dentate care home residents (75 and over) were as likely as their free living dentate peers to have 21 or more teeth; the percentages were 22.2% (62) and 25% respectively (Table 2a). We should not forget that care home residents age 75 or over are less likely to have at least one natural tooth than free living peers, so the comparison of those with 21 or more teeth does not reflect this bigger picture.

It is important to note that the data presented in Table 2a (and 2b(i)) relates to dentate individuals and as a consequence relates to only 326 of the 708 care home residents who took part in the survey.

**Table 2b The proportion of dentate adults with 21 or more natural teeth by socio-economic status/deprivation**

*(i) Wales Care Homes 2010 (based on deprivation quintile of care home postcode)*

WIMD 2011 of Care Home – <i>Dentate participants</i>	% adults with		Total number in group
	21 or more teeth	1-20 teeth	
Least deprived	23.0	77.0	61
Second least deprived	24.6	75.4	61
Middle deprived	20.3	79.7	74
Second most deprived	31.4	68.6	51
Most deprived	19.0	81.0	79

*(ii) Wales ADHS 2009 (based on household classification)*

Socio-economic classification of household	% adults with		Weighted bases (000s)
	21 or more teeth	1-20 teeth	
Managerial & professional	87	13	755
Intermediate occupations	76	24	362
Routine and manual occupations	74	25	884

*\*75 and over*

The ADHS 2009 reported that the majority (87%) of individuals from managerial and professional socio-economic classes in Wales had 21 or more teeth compared with only three quarters of those classified as having intermediate and routine and manual occupations (Table 2bii).

For care homes in Wales there was no clear association of the proportion of dentate residents with 21 or more teeth with deprivation quintile of the care home postcode. Using the WIMD 2011 deprivation fifth of the care home of residence the second most deprived grouping had the highest percentage of residents with 21 or more teeth. This appears to contradict the national trend in the free living population. But it should be noted that the indicators of deprivation used are different and because the focus is on dentate individuals the numbers are small when referring to the Wales Care Home survey (Table 2bi).

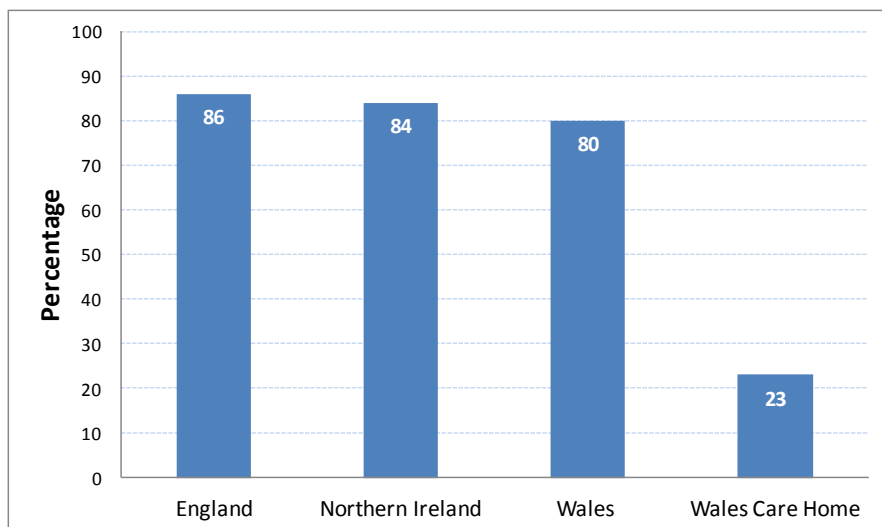
**Table 3 The proportion of dentate adults with 21 or more natural teeth Wales Care Home Residents 2010 compared with ADHS 1978-2009 adults by country**

Country	Has 21 or more natural teeth (%)			
	1978	1988	1998	2009*
England	74	81	83	86
Northern Ireland	68	74	81	84
Wales	71	72	81	80
Wales Care Home	-	-	-	23

In 2009 the ADHS showed that Welsh adults had fewer teeth than adults in both Northern Ireland and England (Table 3 and Figure 2).

The percentage of dentate care home residents in Wales with 21 or more teeth was similar to the proportion in dentate adults in the comparable age cohort of ADHS 2009 (Table 2a). However, it should be noted that more care home residents were edentate and the overall proportion of all care home residents with 21 or more teeth was 10.6%

**Figure 2 The proportion of dentate adults with 21 or more teeth by country taking part in ADHS 2009\* and Wales Care Home survey 2010**



*\*ADHS country level figures include all adults aged 18 and over. Care home study has subjects from age 35 & over.*

**Table 4a Summary of tooth condition (coronal surfaces only) by age and sex– Wales Care Homes 2010 compared with Wales ADHS 2009**

Characteristics of DENTATE adults	Wales Care Homes 2010					Wales ADHS 2009				
	Mean no. of teeth	Mean no. of sound untreated teeth	Mean no. of restored, otherwise sound teeth	Mean no. of decayed or unsound teeth	Total number in group	Mean no. of teeth	Mean no. of sound untreated teeth	Mean no. of restored, otherwise sound teeth	Mean no. of decayed or unsound teeth	Weighted base (000s)
All	13.89	8.37	2.79	2.74	326	24.3	16.3	6.7		2,204
Age										
35-44	7.00	5.50	0.50	1.00	<5*	26.9	18.8	7.2		
45-54	8.00	0.00	1.00	7.00	<5*	25.2	14.9	9.5		
55-64	14.34	8.00	2.27	4.07	15	19.4	10.3	7.8		
65-74	15.93	11.46	1.68	2.79	28			7.9		
75-84	13.76	8.02	3.24	2.50	96					
85s and over	13.67	8.15	2.77	2.75	183					
Sex										
Men	13.97	8.28	2.1	3.59	90					
Women	13.86	8.40	3.05	2.42	236					

Shading highlights very small numbers, \*data suppressed due to small number.

## **Condition of crowns of teeth**

Another important measure of oral health is the retention of natural teeth in a sound and untreated state that is, having no visible dental caries (dental decay) nor any detectable restorations (fillings, crowns or veneers). All data in this section reports only on the crowns and not the roots of teeth. This is in line with the First Release data from the ADHS 2009.

### **Sound untreated crowns of teeth**

The average number of teeth among dentate care home residents was 13.9, and the average number of sound untreated teeth was 8.4, leaving an average of 5.5 teeth either restored otherwise sound or decayed/unsound. The averages for free living adults in Wales for the ADHS 2009 were 24.3 and 16.3 respectively. The lower numbers of teeth amongst care home residents reflects the older average age of this group.

The ADHS 2009 found that the average number of sound untreated teeth varied significantly by age. Adults up to 44 had over 18.8 sound untreated teeth on average, but this declined steeply above 45 years of age to 10.3. Since age is a major contributor to this characteristic it is not surprising that on average Wales care home residents had only 8.4 sound untreated teeth (Table 4a).

### **Restored otherwise sound crowns of teeth**

The average number of restored otherwise sound teeth for dentate care home residents living in Wales was 2.79; the average for free living adults in Wales (as recorded by ADHS 2009) was 6.7 (Table 4a).

On average there were more restored otherwise sound teeth in female (3.05) care home residents when compared with male residents (2.10, Table 4a). Residents of care homes in areas assigned the least deprived deprivation fifth (according to WIMD 2011) had an average of 3.97 teeth restored otherwise sound which was one whole tooth more than the other deprivation groups (Table 4b(i)).



## Decayed or unsound crowns of teeth

The average number of decayed or unsound teeth for dentate care home residents living in Wales was 2.74.

On average there were more decayed or unsound teeth in male (3.59) care home residents when compared with female residents (2.42, Table 4a). Residents of care homes in areas from the most deprived and the second most deprived deprivation fifths had an average of 3.52 and 2.84 decayed or unsound teeth which were higher than the remaining deprivation groups (Table 4b(i)).

**Table 4b Summary of tooth condition (coronal surfaces only) by deprivation**

(i) **Wales Care Homes 2010 (based on deprivation quintile of care home postcode)**

Characteristics of DENTATE adults	Mean no. of sound and unsound teeth	Of which mean number of			Total number of residents in group
		sound and untreated teeth	restored, otherwise sound teeth	decayed or unsound teeth	
WIMD 2011 of Care Home					
Least deprived	13.82	7.30	3.97	2.56	61
Second least deprived	13.75	8.48	2.84	2.44	61
Middle deprived	13.02	8.39	2.58	2.23	74
Second most deprived	16.43	11.24	2.35	2.84	51
Most deprived	13.06	7.23	2.32	3.52	79

Equivalent data from the ADHS 2009 is not yet available.

## Decay on the crowns of the teeth

The majority (62%) of care home residents had active caries on the surfaces of the crowns of their teeth, 63% of male residents compared with 61% of female residents (Table 5a). The average for free living adults in England, Wales and Northern Ireland (as recorded by ADHS 2009) was much lower at 29% (Table 5a).

**Table 5a Any teeth with active caries (coronal surfaces only) by age and sex among dentate adults, Wales Care Home Survey 2010 compared with England, Wales and Northern Ireland ADHS 2009**

Characteristics of DENTATE adults (%)	Wales Care Homes 2010			England, Wales, Northern Ireland 2009		
	% with any teeth with active caries		Total number in group	% with any teeth with active caries		Weighted base (000s)
	Yes	No		Yes	No	
All	61.7	38.3	326	29	71	42,893
Age						
35-44	50	50	<5*	30	70	8491
45-54	100	0	<5*	26	74	6598
55-64	66.7	33.3	15	26	74	7059
65-74	57.1	42.9	28	22	78	4,103
75-84	56.2	43.8	98	35	65	2,341
85s and over	64.5	35.5	183	27	73	492
Sex						
Men	63.3	36.7	90	32	68	21,078
Women	61.0	39.0	236	26	74	21,815

*Shading highlights very small numbers, \*data suppressed due to small number.*

Prevalence of active caries on coronal surfaces seem to increase with increasing deprivation of the care home of residence (using WIMD 2011) this is presented in Table 5b(i) although numbers in each quintile are small. For example 59% of residents from care homes in the least deprived quintile had active caries on the surfaces of the crowns of their teeth compared with 65% of residents living in homes in the most deprived quintile (Table 5b(i)). This mirrors the social class trend reported by ADHS 2009 for all free living adults (Table 5b(ii)).

**Table 5b Any teeth with active caries (coronal surfaces only) by socio-economic status/deprivation**

(i) **Wales Care Homes 2010 (based on deprivation quintile of care home postcode)**

WIMD 2011 of Care Home – Dentate participants	% with any teeth with active caries		Total number in group
	Yes	No	
Least deprived	59.0	41.0	61
Second least deprived	59.0	41.0	61
Middle deprived	60.8	39.2	74
Second most deprived	64.7	35.3	51
Most deprived	64.6	35.4	79

(ii) **Wales ADHS 2009 (based on household classification)**

Characteristics of DENTATE adults	England, Wales, Northern Ireland		
Socio-economic classification of household	% with any teeth with active caries		Weighted base (000s)
	Yes	No	
Managerial & professional	24	76	16,815
Intermediate occupations	28	72	7,791
Routine and manual occupations	35	65	13,697

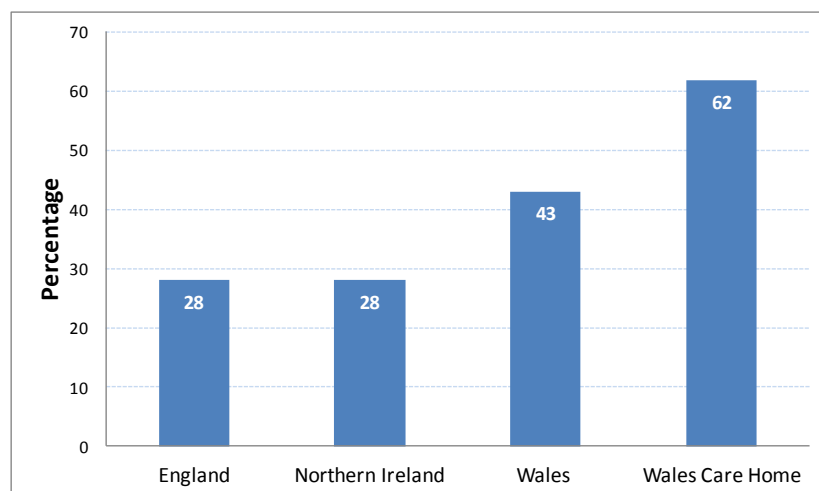
**Table 6 Proportion of adults with at least one tooth with visible caries (DT>0, coronal surfaces only): ADHS 1998-2009 compared with Wales Care Homes 2010**

*Dentate adults*

Country	Any caries (%DT>0)	
	1998	2009*
England	46	28
Northern Ireland	52	28
Wales	41	43
Wales Care Home	-	62

In 2009 the ADHS showed that Welsh adults had higher prevalence of decay when compared with both Northern Ireland and England (Table 6, Figure 3). The proportion of dentate care home residents with at least one decayed tooth was 62%, which is 19% higher than the prevalence amongst free living Welsh Adults (Table 6, Figure 3).

**Figure 3 The proportion of adults with visible caries (%DT>0) by country taking part in ADHS 2009\* and Wales Care Home survey 2010**



\*ADHS country level figures include all adults aged 18 and over. Care home study has subjects from age 35 & over.

## Regular dental attendance

**Table 7a Reported dental attendance by age, sex and socio-economic classification of care home – Wales Care Home Survey 2010 – DENTATE RESIDENTS**

Characteristics of dentate adults	Reported dental attendance					Total number in group
	Regular check-up	Occasional check-up	Only when having trouble	Never been to the dentist	No answer	
%						
All	19.3	7.1	52.1	1.8	19.6	326
Age						
35-44	0	0	100	0	0	<5*
45-54	0	0	100	0	0	<5*
55-64	26.7	13.3	40.0	6.7	13.3	15
65-74	14.3	7.1	64.3	0	14.3	28
75-84	17.7	4.2	56.2	0	21.9	96
85s and over	20.8	8.2	48.6	2.7	19.7	183
Sex						
Men	15.6	5.6	57.8	2.2	18.9	90
Women	20.8	7.6	50.0	1.7	19.9	236
WIMD 2011 of Care Home						
Least deprived	27.9	4.9	57.4	0	9.8	61
Second least deprived	23.0	8.2	41.0	4.9	23.0	61
Middle deprived	18.9	4.1	55.4	0	21.6	74
Second most deprived	13.7	3.9	51.0	2.0	29.4	51
Most deprived	13.9	12.7	54.4	2.5	16.5	79

*Shading highlights very small numbers, \*data suppressed due to small number.*

When providing a reason for attending the dentist the majority of all care home residents (56.5%, 400/708) indicated that they would attend the dentist only when having trouble. This was true irrespective of whether residents were dentate or not (Tables 7a and 7b). A higher percentage of edentate care home residents (60.2%, 230/302 – Table 7b) sought dental treatment only when having trouble when compared with dentate residents (52.1%, 170/326, Table 7a). Conversely, dentate care home residents were more likely to seek regular or occasional check-ups when compared with edentate residents (Table 7a and 7b); even so just over one quarter of dentate residents indicated that they did this. It is important to note that 20.8% (147/708) of all care home residents gave no answer to this question.

Overall women (22.1%, 118) were more likely to have regular or occasional check-ups when compared with men (14.9%, 26); this was true in both dentate and edentate populations (Tables 7a and 7b). There were no obvious patterns relating to general dental attendance and age (Tables 7a and 7b).

Regular dental attendance was less likely to be reported by dentate residents of care homes located in deprived areas (Table 7a). There was no similar trend for edentate residents (Table 7b).

**Table 7b Reported dental attendance by age, sex and socio-economic classification of care home – Wales Care Home Survey 2010 – EDENTATE RESIDENTS**

Characteristics of edentate adults	Reported dental attendance					Total number in group
	Regular check-up	Occasional check-up	Only when having trouble	Never been to the dentist	No answer	
%	%					
All	9.7	5.5	60.2	2.9	21.7	382
Age						
35-44						0
45-54						0
55-64	0	0	66.7	0	33.3	<5*
65-74	4.5	9.1	72.7	4.5	9.1	<25*
75-84	10.6	9.7	54.9	2.7	22.1	113
85s and over	9.9	3.3	61.3	2.9	22.6	243
Sex						
Men	5.9	2.4	74.1	2.4	15.3	85
Women	10.8	6.4	56.2	3.0	23.6	297
WIMD 2011 of Care Home						
Least deprived	10.9	0	65.5	1.8	21.8	55
Second least deprived	8.3	6.9	61.1	2.8	20.8	72
Middle deprived	9.2	4.6	66.7	2.3	17.2	87
Second most deprived	12.7	5.1	55.7	1.3	25.3	79
Most deprived	7.9	9.0	53.9	5.6	23.6	89

*Shading highlights very small numbers, \*data suppressed due to small number.*

Edentate residents were more likely to attend the dentist when having trouble with their teeth and/or dentures if they lived in a care home in a less deprived area, according to the WIMD 2011 index (Table 8b). There was no similar trend for dentate residents where approximately half (52.1%, 170/326) stated that they only attended the dentist when having

trouble; this was the case for all deprivation categories except the second least deprived quintile where 41% (25/61) stated they attended the dentist when only having trouble (Table 8a).

**Table 7c General dental attendance by age, sex and socioeconomic classification – Wales ADHS 2009 – DENTATE ADULTS**

Characteristics of <b>dentate</b> adults	Wales only				Weighted base (000s)
	Regular check-up	Occasional check-up	Only when having trouble	Never been to the dentist	
%					
All	69	7	23	1	2,201
Age					
35-44	65	7	27	1	390
45-54	81	1	17	1	376
55-64	77	6	16	1	342
65-74	78	5	17	-	267
75-84	67	5	26	2	170
85s and over					
Sex					
Men	64	8	27	1	1,073
Women	74	6	19	0	1,128
Socio-economic classification of household					
Managerial & professional	81	6	12	1	754
Intermediate occupations	67	9	24	-	362
Routine and manual occupations	60	8	31	1	825

Dentate care home residents were much less likely to report regular dental check-ups when compared with their free living ADHS 2009 counterparts, the percentages reporting this characteristic were 19.3% and 69% respectively; this was true across all age groups and both genders (Tables 7a and 7c). For Welsh adults taking part in ADHS 2009 there was a relationship between social class and reporting regular dental attendance (Table 7c), this trend was mirrored by the Wales care home survey where there was lower regular dental attendance associated with deprivation (Table 7a). The inequalities suffered by dentate care home residents are huge. 60% of free living adults from the routine and manual occupations group attended for regular check-ups compared with only 28% of care home residents living in the least deprived areas of Wales (according to WIMD 2011). Only 14 % of dentate care home residents in the most deprived areas reported regular dental checks.

**Table 7d General dental attendance by LHB classification of care home – ALL RESIDENTS – Wales  
Care Home Survey 2010**

Health Board	A regular check up	An occasional check up	Never been to a dentist	Only when having trouble with teeth and/or dentures	No answer	Total number in group
Aneurin Bevan	18.9	8.7	0.0	61.4	11.0	127
ABMU	4.8	9.0	2.4	67.7	16.2	167
Betsi Cadwaladr	12.3	4.5	0.0	63.0	20.1	154
Cwm Taf	21.9	2.7	2.7	43.8	28.8	73
Cardiff and Vale	24.7	6.5	2.6	41.6	24.7	77
Hywel Dda	8.8	3.3	8.8	46.2	33.0	91
Powys	31.6	5.3	5.3	31.6	26.3	19
ALL	14.1	6.2	2.4	56.5	20.8	708

Table 7d illustrates wide variation in reporting of dental attendance by local health board area.

**Table 8a Reported frequency of seeing the dentist among DENTATE residents – Wales Care Home Survey 2010**

Characteristics of dentate adults	Frequency of seeing the dentist						Total number in group
	At least 1x every 6 month	At least 1x every year	At least 1x every 2 years	Less frequently than every 2 years	Only when having trouble	No answer	
%							
All	11.0	11.0	3.1	12.3	42.3	20.2	326
Age							
35-44	0	0	0	0	100	0	<5*
45-54	0	0	0	0	100	0	<5*
55-64	13.3	13.3	0	33.3	26.7	13.3	15
65-74	17.9	10.7	3.6	3.6	46.4	17.9	28
75-84	11.5	9.4	3.1	9.4	46.9	19.8	96
85s and over	9.8	12.0	3.3	13.7	39.9	21.3	183
Sex							
Men	11.1	7.8	2.2	8.9	51.1	18.9	90
Women	11.0	12.3	3.4	13.6	39.0	20.8	236
WIMD 2011 of Care Home							
Least deprived	14.8	8.2	3.3	14.8	45.9	13.1	61
Second least deprived	16.4	11.5	1.6	11.5	36.1	23.0	61
Middle deprived	4.1	20.3	4.1	10.8	41.9	18.9	74
Second most deprived	3.9	9.8	0	11.8	45.1	29.4	51
Most deprived	15.2	5.1	5.1	12.7	43.0	19.0	79

*Shading highlights very small numbers, \*data suppressed due to small number.*

In terms of the frequency of attending the dentist the majority of all residents (i.e. both dentate and edentate) indicated that they attend when having trouble (44.2%, 313) which related to the response to the question on reasons for dental attendance (having trouble: 56.5%, 400). 15.8% (112) of all residents stated they attended less frequently than 2 years.

The breakdowns of responses by dentate and edentate residents are presented separately in Tables 8a and 8b. Dentate residents report more regular frequency of attendance when compared with edentate residents. The combined percentages indicating they attended at least once every 2 years were 25.1% (82) for dentate residents and 14.9% (57) for edentate residents (Tables 8a and 8b).



Overall men (54.3%: 95/175) were more likely when compared with women (40.9%: 218/533) to indicate that they only attended the dentist when having trouble – this reflected responses to the question on reasons for attendance presented above. This was true for both dentate and edentate residents (Table 8a and 8b).

**Table 8b Reported frequency of seeing the dentist among EDENTATE residents – Wales Care Home Survey 2010**

Characteristics of edentate adults	Frequency of seeing the dentist %						Total number in group
	At least 1x every 6 month	At least 1x every year	At least 1x every 2 years	Less frequently than every 2 years	Only when having trouble	No answer	
All	4.7	7.3	2.9	18.8	45.8	20.4	382
Age							
35-44							0
45-54							0
55-64	0	0	0	33.3	66.7	0	<5*
65-74	9.1	9.1	4.5	9.1	59.1	9.1	<25*
75-84	8.0	8.0	4.4	14.2	44.2	21.2	113
85s and over	2.9	7.0	2.1	21.8	44.9	21.4	243
Sex							
Men	2.4	5.9	1.2	18.8	57.6	14.1	85
Women	5.4	7.7	3.4	18.9	42.4	22.2	297
WIMD 2011 of Care Home							
Least deprived	1.8	3.6	0	12.7	61.8	20.0	55
Second least deprived	5.6	6.9	2.8	29.2	37.5	18.1	72
Middle deprived	3.4	12.6	1.1	20.7	44.8	17.2	87
Second most deprived	3.8	7.6	5.1	19.0	38.0	26.6	79
Most deprived	7.9	4.5	4.5	12.4	50.6	20.2	89

*Shading highlights very small numbers, \*data suppressed due to small number.*

Table 8b reports on edentate residents reported frequency of dental attendance. There are no clear trends here, other than that the majority attend only when having trouble.

Table 8c demonstrates wide variation across the health board areas regarding reported attendance. There are five-fold differences in six monthly attendance between Aneurin Bevan and Powys health boards,

and in only when having trouble attendance between Hywel Dda and ABMU.

**Table 8c Reported frequency of seeing the dentist– by LHB classification of care home – ALL RESIDENTS Wales Care Home Survey 2010**

	At least once every six months	At least once every year	At least once every two years	Less frequently than every two years	Only when having trouble with teeth and/or dentures	No answer	Total number in group
Aneurin Bevan	4.7	21.3	2.4	14.2	46.5	11.0	127
ABMU	5.4	5.4	4.8	1.2	67.7	15.6	167
Betsi Cadwaladr	6.5	6.5	2.6	14.3	50.0	20.1	154
Cwm Taf	5.5	11.0	1.4	20.5	31.5	30.1	73
Cardiff and Vale	16.9	6.5	2.6	19.5	32.5	22.1	77
Hywel Dda	7.7	4.4	2.2	38.5	13.2	34.1	91
Powys	26.3	5.3	5.3	26.3	21.1	15.8	19
ALL	7.6	9.0	3.0	15.8	44.2	20.3	708

## Recommendations

This first release report demonstrates higher levels of oral disease among care home residents in Wales compared with findings from the 2009 Adult Dental Health Survey. **Further analyses will be required to identify how these disease levels translate into treatment needs.** Initial conclusions which have implication for service provision are outlined below.

Care home residents have higher levels of disease present than their free living peers. In frail older people presence of oral disease does not always equate to need for interventional treatment. Further analysis will help to quantify the disease requiring active treatment. At this stage it is appropriate to suggest that **care home residents are more in need of regular dental checks** to assist in supervision of any disease in their mouths'. Given lower reported levels of regular dental checks this presents a challenge to both care homes and dental services.

The high levels of edentulousness identified in care home residents suggest **high need for denture provision and maintenance** which will need to be addressed by services provided.

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