

INTERIM REPORT 2

Evidence-Based Oral Health Policy for Older People

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Review of the Literature and Report on Focus Groups and Interviews with Older People

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1. Review of the Literature

1.1. Introduction

The aim of this project is to devise evidence-based recommendations for the development of an equitable, person-centred oral health policy for older people in Ireland; specifically, to develop policy recommendations for an available, accessible and acceptable oral health service for older people, which will increase the uptake of services and lead to improved oral health and well-being for this group.

A review of the literature pertaining to dental services for older people was conducted to inform the process of direct consultation with older people. Its purpose was to establish themes for incorporation in the interview process, and to sensitise the researchers to the salient issues. As such, its scope broadened somewhat from the original focus on dental services for older people, to include:

- the demographic characteristics of older Irish people;
- definitions and perceptions of health, oral health, and dental disease;
- the impact of oral health on older people's health and quality of life;
- current oral health policy for older people in Ireland;
- barriers to oral health care experienced by older people; and
- international comparisons of oral health policies for older people.

1.2. Older People in Ireland: Demographic Characteristics

Population ageing is a progressive trend in most developed nations, including Ireland. The NCAOP-commissioned projections of population ageing (Connell & Pringle, 2004) indicate significant growth in the older segment of the Irish population in the next twenty years. The report anticipates the number of males aged 65+ will increase by 70-79%, while the number of older females will increase by 52-58%. While the majority of the projected increase will be in “young” older people, aged 65-74, there will also be a substantial increase in “old” older people, aged 75+.

Allied to the projected increase in the total number of older people is an increase in individual life expectancy. In 2002, life expectancy at birth was 75.1 years for Irish males and 80.3 years for females (CSO, 2004b). Projections by the Central Statistics Office (CSO) for the Pensions Board (2005) indicate that life expectancy at age 65 is expected to increase for both males and females, from 16.0 and 19.4 years, respectively, to 19.2 and 22.4 years by 2026, and 22.0 and 25.3 years by 2056.

The Pensions Board (2005) recently reported previously unpublished population projections by the CSO (2004a). This data shows that the proportion of the population aged 65+ is projected to rise from 11 per cent currently to 17 per cent by 2026. This trend is set to continue through to 2056, by which time it is estimated that older people will comprise 29 per cent of the Irish population.

The projected pattern of Irish population ageing, in terms of the absolute number of persons aged 65+, the increased life expectancy of each of these individuals, and the proportion of the population as a whole aged 65+, will have profound consequences for Irish dentistry. In light of the projected increase in the number of older people requiring oral health care, the extended duration of that care, and the increasing proportion of dental patients who will be aged 65+, the need to develop an evidence based oral healthcare policy for older people is clear. Without the implementation of such a policy, the present system will continue to deliver sub-optimal care to the current population of older people, and will be inadequate to cope with the projected increase in, and changing nature of, demand for services in the future.

1.3. Definitions and Perceptions of Oral Health

To develop an evidence-based oral health policy for older people, a clear understanding of what oral health means, and how oral health impacts on the lives of older people, is first required. This section will review definitions and perceptions of health, oral health and dental disease. The following section will examine research on the impact of oral health on the lives of older people.

1.3.1. Health

The World Health Organisation defines health as:

a complete state of physical, mental and social well-being and not merely the absence of infirmity ... a resource for everyday life, not the objective of living; it is a positive concept emphasising social and physical resources as well as physical and mental capacity.

(WHO, 1948)

This positive definition of health reflects a holistic perspective, with health viewed as a continuum from the absence of disease, disability or death to well-being (Balanda & Wilde, 2003). It is also the definition of health adopted in the current Irish *Health Strategy* (Dept. of Health & Children, 2001).

Lay health beliefs are ordinary people's views on health and illness. Understanding lay health beliefs, particularly those of older people in this context, is important because their perspective has implications for the actions they take to maintain health and remedy disease (McCluskey, 1997). McCluskey conducted the first published study of Irish lay people's health beliefs (1989). He found that five descriptions of a 'healthy person' were common: (i) illness-free / has no illness; (ii) is able to work / engage in one's usual activities; (iii) feels good / has a good attitude to life; (iv) is fit, active, energetic; and (v) is in good physical and/or mental health. McCluskey also found that four descriptions of an 'ill person' were common: (i) has an illness / feels unwell; (ii) is unable to work / engage in one's usual activities; (iii) is confined to bed/house; and (iv) has to attend doctor / in need of hospitalisation. Most respondents used two or more types of descriptions of 'healthy' and 'ill', evidencing the multidimensional nature of these concepts. McCluskey noted that respondents rarely referred to 'disease', and that when they did, it was used interchangeably with 'illness'.

Research conducted on older Irish people's representations of 'health' reveal similarities to and contrasts with both the WHO definition, and the views of the general population. MacFarlane (2000) reported the results of a national survey of older people's health-related concepts. Participants were asked to define 'health' in their own words. Responses fell into three broad conceptual categories. Health as a functional concept was most common, with three quarters of participants defining health in terms of the ability to perform their normal daily activities, and hence remain independent. Health as the absence of illness was mentioned by over half of participants. Some older people defined health as the absence of symptoms, or a low level of contact with the health service, whereas others associated the presence of symptoms with a lack of health; still others thought that one could be healthy despite the presence of some symptoms. One third of participants defined health as a feeling of well-being, such as being in good form, feeling happy, enjoying life, or having a zest for life; being interested in enjoying activities was also emphasised. Multiple definitions of health were cited by around one third of participants, showing that older people's conceptualisations are multidimensional.

1.3.2. Oral Health

The professional and lay definitions of health discussed above have implications for definitions and perceptions of 'oral health'. Published jointly by the Oral Health Services Research Centre (OHSRC), UCC, and the Irish Dental Health Foundation (DHF), *Oral Health in Ireland* (1999) is a scientifically-based document on oral health promotion for use by Irish health professionals. It provides a comprehensive explanation of oral health (p.6), which is clearly consistent with the WHO definition of health above:

Oral health is achieved when the teeth and oral environment are not only healthy but also:

- *comfortable and functional, that is food can be chewed thoroughly and without pain or discomfort and the teeth are not sensitive to different stimuli such as cold*
- *social acceptability is also of importance and the mouth must not give rise to bad breath, the appearance of the teeth and gums should be acceptable and not give rise to embarrassment*
- *there should be an absence of sources of infection which may affect general health*

This state of oral health should persist for life, which given a healthy lifestyle, is achievable for the majority of the population.

The two main oral diseases are dental decay (dental caries) and gum disease (periodontal disease) (OHSRC & DHF, 1999; O'Mullane & Whelton, 1992). A number of other conditions can also affect the oral structures; those common in older people include:

- Root decay (root caries)
- Jaw (temporomandibular) joint conditions
- Tooth wear/erosion
- Dry mouth
- Tooth sensitivity
- Receding gums
- Bad breath (halitosis)
- Cold sores
- Mouth ulcers
- Oral thrush (candidiasis)
- Oral cancer
- Cracking at the corners of the mouth (angular cheilitis)
- Denture-related problems, e.g.
 - traumatic ulceration
 - irritation in denture-bearing areas (denture stomatitis)
 - overgrowth of the lining of the mouth due to dentures (denture-induced hyperplasia)

The prevalence of several of these conditions in the Irish population aged 65+, and their treatment needs, are discussed in the Interim Report of December 2005.

Lay people's perceptions of oral health do not necessarily correspond to those of dental professionals (Atchison, *et al.*, 1993). The Irish National Survey of Adult Oral Health (NSAOH) 1989-90 and 2000-2 contained a questionnaire regarding participants' oral health knowledge, attitudes and behaviours (O'Mullane & Whelton, 1992; Whelton, *et al.*, 2007). This data shed some light on older Irish people's perspective on oral health, in contrast to professional definitions of oral health and disease.

NSAOH participants in 2000-2 were asked a series of questions regarding their knowledge in relation to oral health. Water fluoridation was introduced in Ireland in the 1960s and fluoride toothpastes have been marketed since the late 1970s; fluoride's purpose is to reduce dental decay. Forty-nine percent of older people with some natural teeth, and sixty-four percent of those without natural teeth, did not correctly identify the purpose of water fluoridation.

In the 2000-2 NSAOH, participants were also asked about their attitudes toward a range of oral health issues. Older people were more inclined to have 'a painful back tooth' taken out (33%) and less likely to have it filled (58%) than younger age groups. The same pattern is evident for 'a painful front tooth', though the number opting for filling (77%) rather than extraction (16%) is higher. Older participants with some remaining natural teeth were asked about their attitudes toward dentures; 81% reported that 'the thought of wearing a partial denture' was 'not at all upsetting' or 'only a little upsetting', and 40% stated that losing all of their natural teeth and wearing full dentures either 'wouldn't bother them', or would make them happier.

Participants aged 65+ who possessed some natural teeth at the time of the survey in 2000-2 were asked about their oral healthcare behaviours. Regarding dental attendance patterns in the past few years, 47% of these older people stated that they 'occasionally' or 'never' attend the dentist. However, when asked how often should they visit a dentist, 75% responded 'every 6-12 months'. More recent research confirms the low rate of dental attendance among older Irish people; in 2004, just 13% (19% urban; 5% rural) of community-dwelling older people reported using dental services during the previous 12 months (McGee, *et al.*, 2005). When asked if they would go to the dentist more often if dental treatment were completely free and available, only 50% said 'yes' in the 1989-90 NSAOH. This pattern of dental non-attendance appears to have its origins in childhood dental attendance patterns; only 19% of this group of older people surveyed in 1989-90 had dental check-ups as a child (under 16 years of age); 54% only attended the dentist 'with trouble', and 27% 'never' attended the dentist as a child. Regarding frequency of tooth-brushing, in 2000-2 52% of these older participants claimed to brush their teeth 'twice per day or more often'. However 13% of participants reported brushing less often than 'once per day' in 2000-2; and 5% 'never' brushed their teeth.

Participants aged 65 and over who did not have any remaining natural teeth completed a similar questionnaire, adjusted to take account of their toothlessness. In 2000-2, 91% of these older people stated that they 'occasionally' or 'never' attend the dentist. This is reflected in the age of this group of participants' dentures; 48% of their dentures were 11 or more years old and only 33% of participants had dentures that were five or less years old. When asked how long dentures should last, only 4% of participants in 1989-90 said 'less than 5 years'; 86% stated that dentures should last between 10 years and forever.

Both National Surveys also showed that medical card holders tended to have lower expectations regarding oral health and oral health care than other survey participants, and their awareness of oral health tended to be lower. Frequency of tooth-brushing and of dental attendance were both lower among medical card holders than among those eligible for the Dental Treatment Benefit Scheme or those with no cover (see section 1.5 below for a detailed explanation of these categories).

This data moved the authors of the first NSAOH to comment that:

The attitudinal and behavioural patterns documented in this study suggest that dental health is not a matter given serious consideration by the majority of Irish adults. In many cases the absence of pain seems to be accepted as being synonymous with adequate dental health.

(O'Mullane & Whelton, 1992, p.viii)

Given the similarity of the results from the more recent study, it would appear that this conclusion is still valid.

1.3.3. Oral Health Care and Disease Prevention

Given the wide variation in oral health care and disease prevention behaviours reported by older people in the National Surveys, it was deemed necessary to clarify best practice in this regard. The following recommendations are taken from *Oral Health in Ireland* (OHSRC & DHF, 1999) unless otherwise referenced:

Self-care

- Brush teeth and gums twice a day with a fluoride toothpaste
- Use dental floss, interdental cleaners or antiseptic mouthwash to clean between teeth once a day
- Replace toothbrushes when the bristles begin to show signs of wear
- Consider adapting the toothbrush handle to improve grip, or using an electric toothbrush, if dexterity is limited

Dentures

- Dentures should be cleaned at least once a day with a denture care product (not regular toothpaste) and a soft toothbrush
- Dentures should be rinsed after each meal to remove debris
- Dentures should be removed at night and stored in water (National Institute on Aging, 2002)
- Plastic dentures can be soaked in a specialist denture cleanser, but only for the recommended period of time (Drummond, Newton & Yemm, 1995)
- The gums and roof of the mouth should be brushed in the morning before dentures are placed in the mouth (*ibid.*)
- Dentures should be thoroughly checked for fit and function every five years

Dental Visits

- Visit the dentist for a check-up once a year, even if you have dentures/no natural teeth
- Seek dental advice if denture is loose/ill-fitting or symptoms of dry mouth appear

Other Behaviours

- Reduce consumption of foods and drinks containing sugars and acids, especially between meals; choose healthier alternatives instead
- Do not smoke; if you already smoke, give up
- Consume alcohol in moderation
- Drink at least 8 cups of fluid a day; use water from a fluoridated supply where possible

1.4. Impact of Oral Health on Older People

Oral disorders have a wide range of impacts, potentially affecting virtually every aspect of people's lives. Similar to the broad scope of the WHO definition of health discussed above, oral health and dental disease can impact on people physically, mentally, and socially (Allen, 2003). The National Surveys have shown that the two leading dental diseases (dental decay and gum disease) affect nearly everyone over their life span (O'Mullane & Whelton, 1992; Whelton, *et al.*, 2007). Thus, nearly every older Irish person experiences some impact of oral health and dental disease on their life. The scope of some of these impacts on health and quality of life are examined below.

1.4.1. Impact of Oral Health on Physical Health

It is now widely recognised that "oral health is integral to general health" (US Dept. of Health & Human Services, 2000a). Oral health impacts upon many aspects of physical health and *vice versa*. The NSAOH 2000-2 demonstrated a clear relationship between the general physical health of people aged 65+ and the number of natural teeth those people possess: 35% of healthy older people, but 48% of those with severe systemic disease, had no natural teeth; healthy people on average had 9 natural teeth remaining, whereas people with severe systemic disease had an average of only 6 natural teeth (Whelton, *et al.*, 2007).

The Irish *Health Promotion Strategy for Older People* (Brenner & Shelley, 1998) highlights the link between older people's oral health and nutrition. Oral health problems, whether due to missing teeth, ill-fitting dentures, dental decay, gum disease, or infection, can cause older people to have difficulty eating, and can force them to adjust the quality, balance and consistency of their diet (Vargas, Kramarow & Yellowitz, 2001). Maintaining a natural, functional dentition of more than twenty teeth into old age plays an important role in having a healthy diet rich in fruits and vegetables, a satisfactory nutritional status, and an acceptable body mass index (Marcenes, *et al.*, 2003). Older people's nutrient intake decreases with increasingly impaired dental status; as their ability to chew food deteriorates, intakes of fibre, and most vitamins and minerals decrease (Krall, Hayes & Garcia, 1998; Moynihan, *et al.*, 1994). Older denture wearers' enjoyment of some foods is impaired, and they select, or are given, a modified consistency diet (Drummond, Newton & Yemm, 1996; Wayler, *et al.*, 1984). These dietary restrictions can compromise nutritional status over time and place older people at health risk (Chauncey, *et al.*, 1984).

Without adequate nutrition, older people may become more susceptible to other diseases. A review by the US Committee on Diet & Health (National Research Council, 1989) found that diet influences the risk of several major chronic diseases; these include hardening of the arteries, high blood pressure, chronic liver disease, diabetes and some forms of cancer. A position paper from the American Dietetic Association (Touger-Decker & Mobley, 1995) also suggests that many physical conditions are associated with compromised nutritional and oral health status, for example:

- Heart disease
- Cancer
- Diabetes
- Osteoporosis
- Kidney disease
- Digestive disorders
- High blood pressure
- Infectious diseases
- Malnutrition/wasting
- Disorders of taste and smell

Oral disorders, particularly gum disease, increase the risk of several serious illnesses occurring (Hollister & Weintraub, 1993; US Dept. of Health & Human Services, 2000a). Bacterial endocarditis is a potentially fatal infection of the lining of the heart and heart valves. More than a quarter of all cases occur in people aged 60+, and it affects eight times more older men than women. This infection can occur when bacteria enter the bloodstream via an injury to the lining of the mouth, or via unhealthy gums, as occurs with gum disease. Infection of the heart may subsequently occur in anyone, but people with existing heart valve problems are at increased risk (Beers, 2004; Dajani, *et al.*, 1997).

Research also links dental disease to an increased risk of hardening of the arteries and blood clots (Slavkin & Baum, 2000). In men aged 50 or less, gum disease has been shown to increase the relative risk of death from heart disease almost three-fold compared to similar men without gum disease (DeStefano, *et al.*, 1993). Gum infection and subsequent loss of the (periodontal) bone supporting the teeth has also been shown to increase the total risk of heart disease by 50% and almost double the risk of fatal heart disease (Beck & Offenbacher, 1998; Beck, *et al.*, 1996). Finally, a large scale study with over 41,000 participants showed that tooth loss is associated in a consistent and graded way with the prevalence of heart disease (Okoro, *et al.*, 2005).

Oral infection, particularly gum disease, is also associated with increased risk of stroke. Grau, *et al.* (1997) concluded that poor dental health status increased stroke risk 2.6-fold. Other researchers found even stronger associations; a longitudinal study found that participants with a large loss of the (periodontal) bone supporting the teeth at the beginning of the study had almost three times the odds of having a stroke as those with little or no bone loss (Beck & Offenbacher, 1998; Beck, *et al.*, 1996).

Poor oral health has been linked to an increased risk of pneumonia and other respiratory (breathing) diseases; bacteria in the mouth can gain access to the airway, leading to infection (US Dept. of Health & Human Services, 2000a; Azarpazhooh & Leake, 2006). Gum disease appears to increase the risk of bacterial pneumonia (Scannapieco & Mylotte, 1996; Scannapieco, 1999). The presence of dental decay and poor oral hygiene are also potential risk factors for pneumonia (Azarpazhooh & Leake, 2006). Gum disease (Mojon, 2002) and oral health (Azarpazhooh & Leake, 2006) have been associated with Chronic Obstructive Pulmonary Disease (COPD), the fourth most common cause of death in the United States. Improved oral hygiene and frequent professional oral health care have been shown to reduce the occurrence or progression of respiratory diseases among high-risk older people living in nursing homes and especially those in intensive care units (Azarpazhooh & Leake, 2006).

Diseases of the circulatory system, which include heart disease and stroke, are the leading cause of death in Ireland. Together, diseases of the circulatory and respiratory (breathing) systems caused approximately half of all deaths in Ireland in 2005 (CSO, 2006). It appears likely that poor oral health contributed to some of this disease burden.

1.4.2. Impact of Oral Health on Quality of Life

The WHO oral health program highlights the effect of oral health on psychosocial well-being, noting that “oral health is a determinant factor for quality of life” (Petersen, 2003, p.3). Our teeth, lips, mouth and jaws allow us to speak, smile, kiss, touch, drink, smell, taste, chew and swallow. Thus dental disease may significantly reduce quality of life by impairing the performance of these essential functions. Research has shown that damage to any aspect of the craniofacial complex (teeth, lips, mouth and jaws) has negative implications for self-image, self-esteem, well-being and identity (US Dept. of Health & Human Services, 2000a).

‘Oral health-related quality of life’ (OHRQoL) is a concept which attempts to capture the subjective impact of oral health and dental disease on people’s physical and psychosocial well-being and quality of life (Inglehart & Bagramian, 2002; Allen, 2003). OHRQoL is patient-based, and is usually measured by self-report questionnaire. OHRQoL is a useful concept; it allows us to study dental patients’ perceptions of their own oral health and its impact on their quality of life, as distinct from their dentists’ opinions or their scores on clinical indices of dental disease.

The wide variety of dimensions included in OHRQoL questionnaires illustrates the range of impacts oral health can have on quality of life. These include: (i) functional aspects, such as pain/comfort, cleaning teeth, eating/chewing, speaking/communicating, appearance, and breath odour; (ii) social interaction, such as performing social and employment roles, smiling/laughing, romance/kissing, and personal finance; and (iii) psychological issues, such as self-image/aesthetics, self-consciousness, worry, relaxation/sleep, personality, mood, and self-confidence (Slade, 2002; Allen, 2003; Cushing, Sheiham & Maisels, 1986; Dolan, Gooch & Bourque, 1991; Atchison & Dolan, 1990; Strauss & Hunt, 1993; Slade & Spencer, 1994; Locker & Miller, 1994; Leao & Sheiham, 1996; Adulyanon & Sheiham, 1997; McGrath & Bedi, 2002a). A series of studies conducted in the UK have shown that the impacts of oral health on QoL can be both positive and negative (McGrath & Bedi, 1998; 1999; 2001b; 2002a; 2003; 2004a).

Many studies have employed OHRQoL measures to demonstrate the impact of oral health and dental disease on function and/or psychosocial well-being; a number of their findings are relevant here. Firstly, the majority of older people in the UK consider oral health important to their quality of life, most frequently through physical, rather than social or psychological influences (McGrath & Bedi, 1998; 1999). Older people’s self-ratings of their oral health are an independent predictor of their self-rated general health, self-esteem, and life satisfaction (Benyamini, Leventhal & Leventhal, 2004). Older people with poor OHRQoL report lower morale, more life stress and lower levels of life satisfaction (Locker, *et al.* 2002; Locker, Clarke & Payne, 2000). Conversely, aesthetic restorative dental treatment has been shown to have a positive effect on patient’s self-esteem (Davis, Ashworth & Spriggs, 1998) and OHRQoL (Klages, Bruckner, & Zentner, 2004). Thus general oral health appears to have a pervasive influence on aspects of older people’s quality of life.

In relation to specific dental conditions, the oral health of most patients with gum (periodontal) disease impacts considerably on their life quality, with substantial physical, social and psychological influences (Needleman, *et al.*, 2004). Gum disease and severe dental decay (caries) are the main dental diseases leading to tooth extraction (US Dept. of Health and Human Services, 2000a). Regarding tooth loss, people with less than twenty teeth who do not have recourse to a denture have considerably worse OHRQoL than those with a similar number of teeth who do have a denture, or those with more than twenty teeth. Thus provision of a denture may improve the OHRQoL of individuals who have experienced considerable tooth loss (McGrath & Bedi, 2001a). However, the quality of the denture provided also affects life quality; inadequate denture adaptation and retention reduce OHRQoL (Tsakos, *et al.*, 2006). The complete loss of all natural teeth has a profound psychosocial and functional impact; retaining natural teeth, even in one jaw, can have a marked positive effect on psychological well-being (Allen & McMillan, 1999; 2003). Dental patients with jaw (temporomandibular) joint disorders, gum (periodontal) disorders and denture problems have reported that their condition impacts upon social and physical-oral functioning, well-being, anxiety, including dental anxiety, and causes pain (Reisine, *et al.*, 1989).

Research on Irish older people's OHRQoL is limited. During the Irish National Survey 2000-2 (Whelton, *et al.*, 2007), the United Kingdom Oral Health-related Quality of Life measure (OHQoL-UK®; McGrath and Bedi, 2000) was used to assess the impact of oral health on life quality. Results show that older people have worse OHRQoL than younger age groups, and medical card holders have worse OHRQoL than non-medical card holders. Irish people do not appear to be as aware of the impact of oral health on their quality of life as those elsewhere; less than 60% of the Irish sample perceived their oral health as having *any* impact, either positive or negative, on their quality of life. Most of those who did perceive some impact reported a physical effect of oral health on quality of life (52%); social impacts (38%) and psychological impacts (27%) were recognised less frequently. Older Irish people in particular appear to lack awareness of OHRQoL. In a focus group study of older people in residential care, "older people generally did not express any idea that oral health impacted on any aspect of their daily lives either positively or negatively" (Dept. of Health & Children, 2003, p.63).

Older Irish people's low level of awareness of the impact of oral health on their life quality is particularly interesting in light of research which shows that people who perceive their oral health as having a greater positive impact on their quality of life are more likely to attend the dentist (McGrath & Bedi, 2001b). Utilisation of dental services among older Irish people is very low (see section 1.3.2., above); in 2002, only 9.5% of older medical card holders used the free dental service. This is despite clinical evidence that the majority of older Irish people require some dental treatment (Whelton, *et al.*, 2007). It appears that older people may not be motivated to seek the dental treatment they need because they do not believe it will improve their quality of life.

An alternative explanation for the low reported impact of oral health on quality of life by Irish people, and low service utilisation rates among older people, is that they find a certain level of dental impacts acceptable. Researchers in the UK have shown that if the impacts of oral health on quality of life do not interfere with normal tasks, are not considered serious, and the individual does not define themselves as ill, then they are unlikely to seek care (Sheiham, Cushing & Maizels, 1997). A study conducted with older people aged 65-74 in New Zealand found that they were less inclined to perceive negative effects of oral health on their quality of life than younger age groups. It was suggested that this may be due to older people adjusting to the fact that they are likely to have poor oral health because of their age; it should not be interpreted as meaning that they do not have oral health problems (Chen & Hunter, 1996).

It is also apparent that the impact of oral health on quality of life must be placed in perspective in relation to other impacts and problems people experience. For the majority of people, dental diseases are neither life-threatening nor seriously disabling (Sheiham, Cushing & Maizels, 1997). Thus people construct their own margins of relevance of oral health (Gregory, Gibson and Robinson, 2005). For older people, who may also have to contend with a range of other health and social problems, the impact of oral health on their quality of life may not have sufficient relevance to prompt dental attendance.

Oral health has a profound effect on general health and quality of life. Increasing public awareness of these impacts, particularly among older people, may be useful in encouraging dental attendance and thus improving general health, quality of life and psychosocial well-being.

1.5. Current Oral Health Policy for Older People in Ireland

The Department of Health & Children (DoHC) policy documents which affect dental service provision are:

- *Shaping a Healthier Future: A Strategy for Effective Healthcare in the 1990s* (1994a)
- *The Dental Health Action Plan* (1994b)
- *Quality and Fairness: A Health System for You* (2001)

In 1994, *Shaping a Healthier Future* and the subsequent *Dental Health Action Plan* stated that the aim of the public dental service was to “improve the level of oral health of the whole population” (p.4). The *Action Plan* contained a specific oral health goal for older people for the year 2000 (see Interim Report of December 2005 for further details). However the action plan for older people contained in *Shaping a Healthier Future* did not mention dental services.

The second national health strategy, *Quality and Fairness* (DoHC, 2001), reiterated the overall objectives of Irish oral health policy, including: “to provide adequate treatment services to ... medical card holders and persons over 70” (p.85). The commitment to dental service provision contained in the action plan consisted of an expansion of specialist dental services, and the use of a needs-based approach to further developments of the dental service. The action plan also states that an “integrated approach to meeting the needs of ageing and older people will be taken” (p.165), but does not include any deliverables in relation to older people’s oral health.

Based on these policies, dental services for Irish people aged 65+ are currently provided via four routes:

- The Dental Treatment Benefit Scheme
- The Dental Treatment Services Scheme
- Private Health Insurance Schemes
- Private Dentistry

Tax Relief for Dental Treatment is also available.

1.5.1. The Dental Treatment Benefit Scheme

The Department of Social & Family Affairs (2005) Dental Treatment Benefit Scheme (DTBS) provides assistance towards the provision of dental treatment for employees who make PRSI (social insurance) contributions. A person must have a certain number of PRSI contributions paid to qualify for the DTBS. The dependent spouses/partners of qualified adults are also entitled to Treatment Benefit. Any person who satisfies the requirements, either at age 60 or 66, retains the entitlement for life. Overall, 45% of the Irish adult population are eligible for the DTBS (Whelton, *et al.*, 2007).

The DTBS subsidises dental care, either fully or partially, for a limited range of treatments. An annual examination, diagnosis, and a mild scale and polish are free of charge to all qualified insured persons and their dependent spouse/partner. For other items of routine treatment, such as extractions, fillings and the supply of acrylic dentures, the Department pays a set amount to the dentist in accordance with a fixed scale of charges; the remainder of the cost, if any, is paid by the patient. The DTBS also makes a fixed contribution towards the cost of certain other items of treatment, with the patient paying the balance due to the dentist - pin retained fillings, angle or tip restorations, root canal treatment, and the treatment of serious gum disease.

The DTBS is operated by private dentists who have signed a contract with the Minister to operate the Scheme on behalf of the Department. Payment in respect of dental treatment is only made when the treatment is carried out by a dentist who is a member of the Department's Panel. To claim for dental benefit, a person must apply to the Department for approval by completing the appropriate claim form, available from dentists participating in the Scheme.

1.5.2. The Dental Treatment Services Scheme

Since 1994, the DoHC, via the Health Services Executive (HSE; formerly the Health Boards), has provided free basic dental services for Medical Card holders through the Dental Treatment Services Scheme (DTSS). Older people aged 65-69 must satisfy a means test to establish eligibility for a Medical Card; this card also applies to the person's dependent spouse/partner. Since 2001, everyone aged 70+ qualifies for a Medical Card, regardless of income; however this non-means tested Medical Card does not confer benefits to dependents (Comhairle, 2006b).

Medical Cards are not issued automatically. To apply for a Medical Card, a person must obtain and complete the relevant application form, obtained from their local health centre or the Community Care Office in their area. They must then bring this form to a doctor selected from the list of participating doctors, who will sign the form if they accept the person as a patient. For those aged 70+, the form is then returned to the health centre or Community Care Office and a Medical Card is issued in due course. For the means tested Medical Card only, older people aged 65-69 still participating in the workforce must also get their employer to sign the form and certify their earnings; for those claiming a social welfare payment, including Old Age and Widow's/Widower's Pensions, the form must be stamped at the local Social Welfare Office. Self-employed older people, such as farmers, have to submit their most recent Tax Assessment Form and audited accounts.

The DTSS provides routine dental treatment free of charge to all medical card holders, and their dependent spouses, through HSE clinics and private dentists contracted to the HSE Panel (Comhairle, 2006a). Though there are variations between administrative regions of the HSE, routine dental treatment generally includes:

- examination
- extractions
- fillings
- scaling
- polishing
- removal/amputation of roots
- root treatment (front 6 teeth top and bottom)
- x-rays
- partial dentures
- full dentures

The medical card holder decides whether they wish to be treated by a dentist at a HSE clinic or by a private practitioner; the dentist they select must be a member of the panel of dentists who have agreements with the HSE to provide services. Emergency dental treatment (for the relief of pain) and urgent denture repairs are generally available to anyone covered by a medical card; these services are provided by private dentists and the patient can choose any dentist from the HSE Panel.

A number of more expensive treatments are not provided under the state schemes, such as crowns, veneers, orthodontics and bridgework. Woods' (2005) presentation to the DoHC concluded that this is "contrary to the egalitarian principle of 'equal treatment for equal need' which is the basic principle of the Health Strategy" (p.22).

1.5.3. Private Health Insurance Schemes

The Irish Health Insurance Authority (HIA; 2005) *Market Review* found that 48% of people aged 65+ have some form of voluntary private health insurance (PHI). Three companies offer PHI in Ireland: Vhi Healthcare, Bupa Ireland, and Vivas Health (Comhairle, 2006c). The dental benefits available under the plans offered by these companies vary widely.

Most older people access dental insurance through general health insurance schemes which confer limited dental benefits. Vhi Healthcare plans offer €15-€25 towards an unlimited number of dental visits per year; some plans also offer up to €500 towards emergency dental treatment. Bupa Ireland plans offer up to €25 each year toward dental visits, and up to €510 toward emergency dental treatment. Vivas Health plans usually offer €30 towards the cost of dental visits, up to a maximum of three times per year. Some plans also make a contribution towards a wide range of tooth whitening treatments at selected dental clinics. There are also a number of long-established restricted membership schemes; membership is confined to current and retired employees and their dependents, e.g. the Gardaí, prison officers, and ESB employees (Comhairle, 2005). These schemes cover 6% of the general population (HIA, 2005) and also offer a range of dental benefits.

Overall then, approximately half of all older people may be eligible for some form of dental benefit through PHI. The amount of this benefit is generally small, covering only part of the cost of a dental visit. Despite this, PHI is significantly associated with dental attendance; in a study of community-dwelling older people, 19 percent of those with PHI availed of dental services in the previous year, while just 10 percent of others did so (O'Hanlon, *et al.*, 2005).

1.5.4. Private Dentistry

Most general dental practitioners in Ireland undertake private treatment of dental patients in addition to providing dental treatment through the state operated DTBS and DTSS. There are also a number of private practices which specialise in a specific type of treatment, e.g. prosthodontics, endodontics, restorative dentistry, periodontics, and oral surgery.

For people who are not eligible for either of the state schemes, private dentistry is their only treatment option. In addition, a number of treatments are not provided under the state schemes, such as crowns, veneers, orthodontics and bridgework; patients wishing to have these treatments must pay a dentist privately for them. In 2004, 52% of older people living in the community who used dental services paid for the service (McGee, *et al.*, 2005). Some private dental treatments are eligible for tax relief (see below).

1.5.5. Tax Relief for Dental Treatment

The Irish Revenue Commissioners (2006) allow tax relief for certain dental treatments. These include: crowns, veneers, tip replacement, gold posts and inlays, root canal treatment, periodontal (gum disease) treatment, orthodontic treatment, bridgework, and surgical extraction of impacted wisdom teeth. However tax relief is not available for the cost of scaling (tooth cleaning), extraction and filling of teeth, or the provision of artificial teeth or dentures. Data from the National Survey of Adult Oral Health (Whelton, *et al.*, 2007) showed that older people have far greater need for the treatments not eligible for tax relief.

In addition to investigating the general public's experience of PHI, the HIA (2005) survey also asked people if they were aware that they could claim tax relief on medical expenses. Eighty-four percent of people with PHI were aware that they could claim tax relief on medical expenses; of those who were aware, 60% had actually made such a claim. Only 39% of people who did not have PHI were aware that they could claim tax relief on medical expenses; of those who were aware, only 23% had actually made such a claim.

Thus the majority of dental treatment older people require is not eligible for tax relief. For the minority of treatment that would be eligible for tax relief, nearly 40% of older people are unaware that such relief is available. To compound this issue, those who are not in receipt of any PHI contribution toward the cost of dental treatment are far less likely to be aware of the tax relief system, and are less likely to avail of it even if they do know about it.

1.6. Barriers to Oral Health Care Experienced by Older People

This project aims to develop policy recommendations for an available, accessible and acceptable oral health service for older people. The high level of unmet need for dental treatment among older Irish people documented by the National Surveys is discrepant with their infrequent dental attendance (O'Mullane & Whelton, 1992; Whelton, *et al.*, 2007). Evidently, older people do not find the current oral health service available, accessible and acceptable to them. To explore this further, the following sections will examine research on the barriers to oral health care experienced by older people, and also look at the Irish context more generally by discussing the barriers older people face in accessing general health and social care in Ireland.

1.6.1. Oral Health Care Barriers for Older People

A number of barriers to oral health care for older people have been identified by oral health services research conducted in Ireland and internationally. These include: inability to perform daily oral self-care, lack of awareness of oral health, dental anxiety, cost, lack of information, and lack of social support. These will be examined further below.

Inability to Perform Daily Oral Self-Care

Daily mouth care is essential for maintaining oral health and preventing dental disease. A national study of long-term care residents found that only 18% could conduct daily mouth care independently; 22% were semi-dependent, while 60% depended on care staff for all aspects of daily mouth care (Kelleher, 2005). In a study of older people attending day care or residing at a hospital, care staff frequently reported being asked for help with oral health care (82%), denture cleaning (98%) and tooth brushing (70%) by older people (O'Farrell, Parnell & Quinn, 2005). It might be expected that older people living independently in the community would have a greater capacity for oral self-care. The second NSAOH found that 5% of community-dwelling older participants reported never brushing their teeth (Whelton, *et al.*, 2007). A recent study of community-dwelling older people found that 10% reported major difficulties or severe impairment in their ability to perform activities of daily living independently (McGee, *et al.*, 2005). These findings imply that for a considerable sector of the older population, daily mouth care is not possible without assistance.

Lack of Awareness of Oral Health

Oral Health in Ireland (OHSRC & DHF, 1999) recommends that older people visit the dentist for a check-up once a year, even if they have dentures/no natural teeth. The second NSAOH (Whelton, *et al.*, 2007) contained a series of questions regarding dental attendance. Only 38% of older people with some natural teeth, and 2% with no natural teeth, reported regularly attending the dentist for a check-up. When non-regular attendees were asked why they did not visit the dentist more regularly, 90% cited 'no need'. Similarly, only 14% of older participants in an Irish residential care study identified dental attendance as improving oral health (DoHC, 2003). Thus the majority of older people appear not to be aware of this oral health promotion recommendation.

Dental Anxiety

In the second NSAOH (Whelton, *et al.*, 2007), 16% of older people who were non-regular dental attendees and who had some natural teeth cited 'fear' as one of the main reasons they did not visit the dentist more regularly. British research has shown that the level of dental anxiety experienced by older people (aged 60+) is associated with self-rated oral health, time since last dental visit, and reason for last dental attendance. Compared to non-anxious respondents, dentally anxious respondents were less than half as likely to rate their oral health as good, were three times less likely to report visiting the dentist in the last year, and twice as likely to cite pain as the reason for their last dental visit (Bedi & McGrath, 2000). High levels of dental anxiety are also associated with significantly reduced oral health-related quality of life (McGrath & Bedi, 2004b). Thus fear of the dentist may be a barrier to oral health care for almost one in six older Irish people, with an associated reduction in oral health status and oral health-related quality of life likely.

Cost

In addition to 'no need' and 'fear', 9% of older participants in the second NSAOH (Whelton, *et al.*, 2007) who were non-regular dental attendees cited 'cost' as one of the main reasons they did not visit the dentist more regularly. The non-means tested medical card for persons ages 70 and over was introduced on July 1st 2001, while the fieldwork for the National Survey was underway. Despite this, 8% of people aged 70+ and 12% of people aged 65-69 examined after that date still reported cost as a barrier to dental attendance. When asked if they would go to the dentist more often if dental treatment were completely free and available, only 50% of older people said 'yes' in 1989-90 (O'Mullane & Whelton, 2002).

A survey of GP attendance found that older people aged 65-69 were significantly less likely to attend the GP than those aged 70+ (McGee, *et al.*, 2005); only those aged 70+ *all* possess a medical card, entitling them to free GP care. Thus cost is likely still an issue in relation to dental attendance too. Also, as detailed above (see section 5.2), some types of dental treatment are not covered by the medical card, so patients requiring these treatments still have to pay for them privately, or choose an alternative which is covered by the medical card. Indeed, 52% of older people who used dental services in 2004 paid for the service (McGee, *et al.*, 2005).

Lack of Information

Lack of knowledge and information regarding oral health services among older people is apparent. For example, the NSAOH 2000-2 (Whelton, *et al.*, 2007) found that 40% of older people were not aware that they were eligible for free dental services. A qualitative study of older Irish adults in residential care found that, other than their carers, older people cited family/friends/neighbours, their GP, and the health boards as sources of information about dental services; they did not mention local dental clinics/health centres or dentists, and several older people could not cite any source of information (DoHC, 2003). In the same study, older people were asked to identify the dental services available to them; the majority indicated a place or places in their locality, but did not differentiate between public and private services (*ibid.*).

There is also evidence of a lack of knowledge and information about oral health care among older people. A study of community-dwelling older Irish people linked lack of cleanliness of dentures to a lack of knowledge among older people and their carers on how to clean dentures properly (O'Farrell, Parnell & Quinn, 2005). Over half of older people in residential care reported not receiving or not remembering having received oral health care information or advice from the dentist. Of those that did receive information, most stated that it was in relation to aftercare following treatment, or care of dentures (DoHC, 2003).

Lack of Social Support

Social support can communicate facts, knowledge and information that influence feelings and behaviour in relation to health (McGrath & Bedi, 2002b). Dental appearance is important to social activity, and *vice versa*. In Ireland, 5% of older people report receiving little or no informational or emotional support, and 12% report receiving little or no practical support; the situation for urban dwellers tends to be worse than for rural residents (McGee, *et al.*, 2005). A lack of social support is associated with lower levels of oral health among older people. A study of older men conducted in Sweden showed that insufficient social networks and social support were associated with possessing a low number of functioning teeth and having open front tooth spaces (Hanson, Liedberg & Owall, 1994). A Canadian study including older men and women showed similar results; the presence of unreplaced missing front teeth occurred when social relationships were weaker (Maupomé & MacEntee, 1998).

In Ireland, 26% of older people live alone (CSO, 2004c). A study of older people in Britain examined the effect of living alone on oral health and service use. It found that, compared to older people who lived with another adult, older people who lived alone were more likely to claim that the reason for their last dental visit was because of pain, were more likely to have none of their own natural teeth, and were more likely to wear full dentures (McGrath & Bedi, 2002b). Thus, as the authors of the Canadian study concluded, "some aspects of social network and social support may play a dominant role in promoting the appropriate and timely use of ... clinical services" (Maupomé & MacEntee, 1998, p.603-4).

1.6.2. Health and Social Care Barriers for Older People in Ireland

In addition to the barriers to care that have been identified by oral health services research, a number of studies have been conducted into the barriers older people face in accessing general health and social care in Ireland. Findings in the areas of communication, mobility, transport, and ageism which are potentially relevant to oral health service provision are highlighted below.

Communication

Communication acts as a significant barrier to accessing health and social care services for older people. Older people may regard health care professionals as authority figures, and believe it is inappropriate to ask questions (Sarment & Antonucci, 2002). Older people may have difficulty listening to or reading information provided to them by health and social care services; 30.5% of older people suffer from blindness, deafness, or a severe visual or hearing impairment (CSO, 2004c). Finally, literacy problems may cause communication barriers; over two thirds of persons aged 70 years and over have been educated to primary level only (CSO, 2004c). A study which included questions on barriers to GP care found that 4% of older people considered their education level an access barrier (McGee, *et al.*, 2005).

Mobility

The physical location and layout of the dental practice may act as a barrier to oral health care for older people. Twenty percent of older people have a mobility problem as a result of a chronic physical or mental health problem; this is particularly evident among older women (Layte, Fahey & Whelan, 1999). A recent study of community-dwelling older people found that 19% used a walking stick, 5% used a walking/Zimmer frame or crutches, and 3% used a wheelchair (McGee, *et al.*, 2005). In addition, 11% of older people reported that they would find it very difficult or impossible to attend events outside the home, and 10% would find it very difficult or impossible to visit friends or family in their home. These difficulties were more common among rural dwellers, women, and particularly among people aged 75+.

Transport

A recent review of the health impacts of transport by the Institute of Public Health in Ireland highlighted the impact of transport poverty on health. Transport poverty is “the lack of real travel choice for those who experience exclusion from transport, and as a consequence lack choice in their destinations and activities” (Kavanagh, Doyle & Metcalfe, 2005, p.38). Poor access to transport may affect health by preventing access to resources for health protection and promotion, and family and friends for social support. Evincing this, the Institute of Public Health’s all-Ireland comparison of people who felt their locality had good or poor services, including transport services, showed that those who felt their locality had poor services reported lower levels of general and mental health, less satisfaction with their health, and lower quality of life. The review identified the affordability, availability and accessibility of transport as key issues in producing positive health effects by improving individual access to health protection and promotion resources.

Research based on community-dwelling older people’s health and social service use indicated similar conclusions. One percent of older people regard transport as a barrier to GP access (O’Hanlon, *et al.*, 2001). Driving is associated with better health, fewer physical limitations and higher cognitive function. Forty-seven percent of older people reported driving in the previous six months, with men (69%) significantly more likely to have driven than women (30%). For older people who do not drive, transportation to health and social services may be more difficult. Fifty-eight percent of older people reported walking or cycling, and getting lifts, in the previous six months. Forty-eight percent of older people reported using public transport; however urban dwellers (65%) were far more likely than rural dwellers (25%) to do so (McGee, *et al.*, 2005). Access to transport also mediates access to social support. In particular, older people who were able to drive had significantly fewer difficulties in accessing contact with others when compared to individuals who were unable to drive; 3% of drivers, but 18% of non-drivers, reported that they would have much difficulty or find it impossible to access social support (O’Hanlon, *et al.*, 2005).

Ageism

Ageism diminishes older people's self-esteem, reduces their participation in society, and compromises their autonomy by restricting their access to quality services (O'Hanlon, *et al.*, 2005). A recent NCAOP publication, *Perceptions of Ageism in Health and Social Services in Ireland* (McGlone & Fitzgerald, 2005), outlines prejudicial attitudes, such as the tendency to equate old age with dependency and burden, and discriminatory practices which may act as barriers to care for older people. This study found evidence of age discrimination with regard to: service access for older people; a reluctance to refer older people to specialist services; under-resourced community supports to facilitate independent living; limited health promotion and preventative care for older people; and fragmented service delivery, with a general absence of a multi-disciplinary approach to the care of older people with complex needs.

While ageism in relation to Irish oral health services has not been investigated specifically, dental services form part of the primary care network to which this research pertains. Hence the NCAOP recommend that "future national policy statements, strategic plans and service plans relating to the health and social care of older people should publicly acknowledge the importance of eradicating ageism in health and social services, and advocates that the DoHC and HSE should provide leadership and guidance in this regard" (O'Hanlon, *et al.*, 2005, p.31).

1.7. International Comparison of Oral Health Policies for Older People

The review of Irish oral health policy for older people, and reflection on older people's experiences of the current Irish oral health service, clearly demonstrates the need to improve the availability, accessibility and acceptability of oral health services for older people via the development of an equitable, person-centred oral health policy for them. As a step toward the goal of policy development, oral health policies for older people from a number of other countries are reviewed in this section, with a view to establishing the efficacy of implementing similar policies in Ireland.

1.7.1. England

There is no specific oral health policy for older people in England; instead older people are incorporated in the provisions of a more general document designed to delineate policy for all English citizens. *Choosing Better Oral Health: An Oral Health Plan for England* (Dept. of Health, 2005) is the best practice guideline which aims to provide guidance on preventive care, and support oral health needs assessment and commissioning of services; it superseded *An Oral Health Strategy for England* (Dept. of Health, 1994). This oral health policy advocates evidence-based practice, a targeted population approach toward improving oral health, implementing a complementary range of actions to promote health, an integrated common risk approach involving partnership across and beyond the health service, and the evaluation and monitoring of both process and outcome of oral health strategies. It also sets out the key roles and responsibilities of the various stakeholders involved in implementing the policy. Older people's oral health is explicitly mentioned only in relation to oral health promotion, though they are implicitly included with other adults in several of the plan's other objectives.

Local Primary Care Trusts (similar to the former regional Health Boards in Ireland) are responsible for the day-to-day implementation of the *Oral Health Plan* via the National Health Service (NHS) dental service (Dept. of Health, 2006). However some aspects of patient care are standardised nationally. NHS dental treatment is free to people in receipt of a number of allowances, including 'Guarantee Credit' on 'Pension Credit' (aged 60+; includes recipient's partner); people in a low income may also be eligible for help with payments, but means testing (HC2 certificate) is required. There are three standard charges for all NHS dental treatment:

- £15.50 (€23 approx.) This charge includes an examination, diagnosis and preventive care. If necessary, it includes X-rays, scale and polish, and planning for further treatment. Urgent and out-of-hours care also costs £15.50.
- £42.20 (€63 approx.) This charge includes the above, plus additional treatment such as fillings, root canal treatment or extractions.
- £189.00 (€282 approx.) This charge includes both of the above plus more complex procedures such as crowns, dentures or bridges.

These charges are paid once only, even if the course of treatment requires more than one visit, or referral to another dentist. Additional treatment from the same price-band is free of charge within two months. Repairs to dentures are free. There is no charge for missed appointments, though it may result in the offer of treatment being withdrawn.

Dentists may provide a mixture of NHS and private dental care (Dept. of Health, 2006). Cosmetic treatment is only available via private dentistry. Patients may also choose to have some of the treatment covered by the NHS system provided privately. Patients are required to find a dentist themselves, via the local trust or centralised information source (NHS Direct). However such is the demand for treatment that it has become increasingly difficult to register with a dental practice willing to treat NHS patients in recent years (BBC, 2006).

In addition to the standard NHS dental service, a Community Dental Service provides dental care to those who may not otherwise seek or receive it, including: housebound people; people with a physical or mental illness; adults with special needs; and hospital long-stay patients or in-patients. The dentists provide NHS treatment and advice to those they visit in the community. They aim to promote oral health education and provide treatment during their visits to private homes, care homes, and hospitals (BBC, 2006).

The *Oral Health Plan for England* (Dept. of Health, 2005) recommends the use of guidelines for the care of vulnerable groups. Examples include: The British Dental Association's *Oral Healthcare for Older People: 2020 Vision. A BDA Key Issue Policy Paper* (2003); The British Society for Disability & Oral Health's *The Development of Standards for Domiciliary Care Services: Guidelines and Recommendations* (Fiske & Lewis, 2000), *Guidelines for Oral Health Care for People with a Physical Disability* (Arnold, et al., 2000), and *Guidelines for Oral Health Care for Long-stay Patients and Residents* (Fiske, et al., 2000). The latter includes a simple oral health assessment form for long-stay patients and residents (p.10) highly recommended by the *Oral Health Plan for England*.

1.7.2. Canada

Currently in Canada there is no infrastructure at a federal or provincial level that is responsible for older people's oral health. Oral health services are not part of the public health care system, and are generally delivered via private dentistry (McNally & Lyons, 2004); hence there is no specific Canadian oral health policy for older people. Many Canadians are provided with a dental plan as part of their employee benefit package by their employer (Canadian Dental Association, 2005). A few individual dental insurance plans are also available. However the cost of these plans does not generally compare favourably with that of group plans via employers.

The purpose of a dental plan is to assist in paying for dental treatment; most plans do not cover the entire cost of all treatment required (Canadian Dental Association, 2005). Dental plans usually provide employees with prepaid coverage for a variety of dental procedures, including assistance toward preventive care, and restorative and corrective procedures. Some dental plans also confer benefits to the employee's partner and/or children. Dental plans do not cover all possible treatments, and some dental plans restrict coverage to the least expensive procedure that can be used to treat a particular dental problem, provided it is a professionally acceptable alternative. The cover received depends upon the level of employer and employee payments towards the cost of care, and the specific benefits provided. Employees may also be required to pay an annual deductible or to make co-payments, depending on the type of treatment required and the provisions of the dental plan.

Employers are increasingly using managed care plans to enable them to control the cost of providing dental benefits (*ibid.*). This is achieved by restricting access to dentists to those from a list provided by the employer or plan carrier, and / or by limiting the coverage of care provided. There is also a trend toward the provision of a flexible benefit plan by employers, allowing employees to choose the type of coverage they wish to avail of from a wider selection of options; these may vary considerably, from life assurance to dental coverage. This type of benefit plan may be in place for many years; however, it can be narrower in scope than other types of plan, and therefore not adapt well to changing circumstances over time.

Older people in Canada have access to the same range of oral health services as the other members of the population; i.e. private practice dental services; specialised dental services; dental services in hospitals; and denturist services. Though many older Canadians do not benefit from a dental insurance plan, research shows that this is not a major deterrent from service use; older people are prepared to pay for private dentistry on a fee-for-service basis, provided they feel the cost is reasonable (Marvin, 2001). Oral health services for homebound older people, those living in rural areas and in residential care are limited. In addition, dental professionals are inadequately compensated for costs related to the delivery of complex dental care to older people, and as a result are somewhat reluctant to accept them as patients (McNally & Lyons, 2004).

1.7.3. United States of America

Healthy People 2010 (US Dept of Health & Human Services 2000b; c) is a comprehensive, nationwide health promotion and disease prevention programme for the United States; each state has developed their own *Healthy People* plans modelled after the national plan. *Healthy People* is based on a systematic approach to health improvement, comprising four key elements: goals, objectives, the determinants of health, and health status. *Healthy People* is designed to achieve two overarching goals: increase quality and years of healthy life; and eliminate health disparities. These two goals are supported by 467 specific objectives in 28 areas, focussing on the determinants of health, to be achieved by 2010. Most States have tailored the national objectives to their specific needs. The success of *Healthy People* will be measured in terms of the health status of the target population.

Oral health is one of the 28 areas targeted by *Healthy People*. The goal in relation to oral health is to “prevent and control oral and craniofacial diseases, conditions, and injuries and improve access to related services” (p.21-10). Within this overall goal are 17 specific oral health objectives; while only one of these specifically pertains to older people, many of the goals for adults also impact upon older people:

- Reduce the proportion of older adults who have had all their natural teeth extracted
- Reduce the proportion of adults with untreated dental decay
- Increase the proportion of adults who have never had a permanent tooth extracted because of dental caries or periodontal disease
- Reduce periodontal disease (specific objectives for gingivitis and destructive periodontal disease)
- Increase the proportion of oral and pharyngeal cancers detected at the earliest stage.
- Increase the proportion of adults who, in the past 12 months, report having had an examination to detect oral and pharyngeal cancers.

- Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water.
- Increase the proportion of adults who use the oral health care system each year.
- Increase the proportion of local health departments and community-based health centers that have an oral health component.
- Increase the number of States that have an oral and craniofacial health surveillance system.
- Increase the number of health agencies that serve jurisdictions of 250,000 or more persons that have in place an effective public dental health program directed by a dental professional with public health training.

However, for most older Americans, oral health care is an out of pocket expense; only 15% of older Americans have private dental insurance (Wall & Brown, 2003). Medicare is a health insurance program for older people, operated through the US Dept. of Health & Human Services; its two basic plans (A and B) do not cover the cost of dental care and dentures (2005a). The Medicaid program provides medical benefits to groups of low-income people, some of whom may have no medical insurance or inadequate medical insurance. Medicaid provides limited dental care in most states, but older people are eligible for the program in relatively few states (2005b).

1.7.4. Australia

Australia's oral health plan, *Healthy Mouths: Healthy Lives* (South Australian Dept. of Health, 2004) aims to improve the oral health status of the Australian population and reduce their burden of oral disease. *Healthy Mouths* aims to help all Australians to retain the maximum possible number of teeth throughout their lives, have good oral and general health, and have access to affordable, quality oral health services. Within an overarching population health framework, the plan identifies seven interrelated areas for national action; four of these areas - older people, promoting oral health across the population, low income and social disadvantage, and workforce - will impact directly on older peoples' oral health care. Within each Action Area, the Plan presents national actions to be achieved over one of three timeframes: short term (two years); medium term (five years); and longer term (ten years). It outlines the rationale for these actions, sets out who will be involved, where actions will happen, and lists linked public health initiatives. It also outlines a clear set of process and outcome indicators to evaluate each of the action areas. Several of the actions in relation to older people deal specifically with those in residential care. Community-based recommendations include:

- An enhanced questionnaire-based oral health assessment included in existing assessment systems for older adults in the community to identify people with, or at risk of, oral disease (e.g. Slade, 2005).
- For older people in the community who are identified as being at risk of oral disease, include support for the maintenance of oral hygiene in care programs aimed at assisting them to remain in their own homes.
- Make affordable portable dental equipment available to public and private oral health providers to enable them to treat older people in their homes.
- Ensure that oral health is considered in the development of nutrition plans and programs for older people, including access to fluoridated water.

- Establish affordable and appropriate transport arrangements to enable frail older people to attend oral health clinics.
- Using a community development approach, develop and implement targeted health promotion and preventive programs for specific socio-economically disadvantaged groups, including older people.
- Increase funding to public oral health services to enable concession card holders living in the community to have timely access to preventively-focused dental care that meets the minimum standard benchmarks for oral health service provision.
- Explore more efficient models for the provision of timely dental care for concession card holders using the skills of the full oral health care team.

Currently public dental services in Australia are limited to schoolchildren and disadvantaged adults; responsibility for the delivery of these programs is devolved to regional health authorities. The Dept. of Health & Ageing remains directly involved in oral health services via programs such as Veterans' Affairs, which provides care for 300,000 eligible people, and the provision of dental services to public hospital patients. The regional health authorities limit publicly-funded dental care for adults to holders of concession cards. Most jurisdictions have also introduced patient co-payments for these services. There is significant variation between jurisdictions in the per capita funding of dental care for eligible adults. Waiting lists for publicly funded dental services are lengthy; as a result, emergency dental care comprises an increasing proportion of the care provided by public dental services. The regional health authorities also provide a limited range of specialist dental services for concession card holders; e.g. fixed crowns and bridges, more complex surgery of the teeth and jaws, dental implants and complex gum (periodontal) treatment.

Australian oral health services are largely financed by the private sector; private independent dental services predominate. These services are not systematically coordinated, and operate in isolation from the general health sector. The majority of Australian oral health services are provided and funded privately, with or without assistance from private dental insurance. Treatment costs an average of \$295 (€178 approx.) per hour.

Disadvantaged groups who are not eligible for public dental services and have difficulty accessing regular private oral health services due to cost present a significant access problem. The Australian Government provides a 30% rebate on private health insurance premiums to assist toward the cost of dental care. While this was originally targeted at disadvantaged groups, it now covers the entire population.

1.7.5. New Zealand

The New Zealand Ministry of Health recently launched a new national oral health strategy, *Good Oral Health for All, for Life* (2006). Older people are one of four key priority groups that are the focus of the oral health vision which this strategy encompasses. Highlighting the heterogeneity of the older segment of the population, *Good Oral Health for All* sets out a programme of policy development which will examine the needs of four groups:

- independent older adults
- moderately dependent older adults
- highly dependent older adults
- older adults from groups experiencing particular inequalities (both independently and as part of the other three groups).

Traditionally in New Zealand, as elsewhere, primary health care has been considered the sphere of the general 'medical' professions, and oral health care has sat outside this. As part of the new strategy contained in *Good Oral Health for All*, primary health organisations (PHOs; the local structures for the delivery of primary care) are encouraged to promote oral health to their enrolled populations and wider communities. While the Ministry of Health is still in the process of developing a policy framework to encourage more explicit links between primary health care and oral health services, it is suggested that this could be achieved by:

- directly providing oral health services;
- partnering with dental health boards and/or private dental practitioners; and
- equipping PHO practitioners with the knowledge and resources to support prevention and early intervention for oral health.

The PHO service is community-based, so it is accessible to those in most need; care can be delivered in a range of traditional and non-traditional settings, such as local health services, schools, work places, community organisations, and recreational venues. Community-based oral health services have the potential to extend their services to groups at risk of poor oral health, such as vulnerable older people.

Currently, general dental care for people over 18 years is not funded by the Government in New Zealand. However, emergency dental treatment is available at no charge for people on low incomes. Any person in New Zealand can choose any dentist and receive treatment as a private patient. Private health insurance is available to contribute toward the cost of dental treatment; approximately one third of New Zealanders have health insurance (The Commonwealth Fund, 2005).

1.8. Summary & Implications for Qualitative Research

This review has examined the literature pertaining to dental services for older people, with the aim of informing the subsequent process of direct consultation with older people. Salient themes for incorporation in the interview process are summarised below.

Population ageing is a progressive trend in Ireland. The projected increase in the absolute number of persons aged 65+, individual life expectancy, and the proportion of the population aged 65+, will have profound consequences for oral health service provision. Dental services for older Irish people are currently provided via four routes: (i) the Dental Treatment Benefit Scheme subsidises dental care for PRSI contributors; (ii) the Dental Treatment Services Scheme provides free dental care for medical card holders; (iii) private health insurance provides members with nominal sums toward the cost of dental care; and (iv) private dentistry is available to all who can afford it; some treatments are eligible for tax relief.

Dental professionals believe that oral health is achieved when the teeth and oral environment are healthy and free from infection, functional, comfortable, and socially acceptable. Oral health and dental disease can impact upon physical health, and also have social and psychological consequences for those affected. However, lay perceptions of oral health, and lay people's understanding of the relationship between oral health and other aspects of health, frequently do not correspond to the professional perspective.

'Oral health-related quality of life' (OHRQoL) encompasses the subjective impact of oral health and dental disease on people's physical and psychosocial well-being and quality of life; these impacts can be both positive and negative (Allen, 2003). Data on Irish people's OHRQoL was collected during the Irish National Survey of Adult Oral Health 2000-2. Results show that older people have worse OHRQoL than younger age groups (Whelton, et al., 2007). Older people with poor OHRQoL report lower morale, more life stress and lower levels of life satisfaction (Locker, Clarke & Payne, 2000).

Older Irish people appear to lack appreciation of the impact of their oral health on QoL; in a focus group study, those in residential care, "generally did not express any idea that oral health impacted on any aspect of their daily lives either positively or negatively" (DoHC, 2003, p.63). Utilisation of dental services among Irish people aged 65+ is very low; in 2002, only 9.5% of medical card holders used the free dental service. This is despite clinical evidence that the majority require some dental treatment. It appears that older people may not be motivated to seek the dental treatment they need because they do not believe it will impact on their quality of life.

The high level of unmet need for dental treatment among older Irish people documented by the National Surveys is discrepant with their infrequent dental attendance. A number of barriers to oral health care for older people have been identified in health services research; for example:

- Inability to perform daily oral self-care unassisted;
- Lack of knowledge and information regarding oral health services;
- Lack of awareness of good oral healthcare practices;
- Lack of knowledge regarding health promotion recommendations related to oral health;
- Dental anxiety;
- Cost, particularly for those aged 65-69;
- Lack of social support;
- Communication problems related to visual/hearing impairment and literacy problems;
- Physical location and layout of dental practices;
- Transport poverty; and
- Ageism.

Finally, oral health policies for older people in other countries provide valuable suggestions for increasing the availability, accessibility and acceptability of the oral health service to older Irish people, particularly with reference to financial limits, policy structure and domiciliary care.

With regard to the financing of oral health services, the English system provides subsidised dental treatment to all citizens at fixed rates, allowing people to plan the cost of treatment; free treatment for those on low incomes begins at age 60. Most other systems are far less solicitous regarding citizens' oral health. In Canada, there is no infrastructure at a federal or provincial level responsible for oral health; older people have access to the same range of services as other members of the population, generally delivered via private dentistry. For most older Americans, oral health care is also an out of pocket expense. The Australian system operates limited publicly-funded dental care on a means-tested basis, usually with patient co-payment for services. In New Zealand, general dental care for adults is not funded by the Government, though emergency dental treatment is available at no charge for people on low incomes.

Considering the structure of governmental oral health policy, the United States has a more detailed nationwide health promotion and disease prevention programme than most other countries. An overall goal and 17 specific objectives in relation to oral health are outlined, to be achieved by 2010. The Australian oral health plan takes a similar approach, targeting specific population groups, including older people. Their plan presents national actions to be achieved over one of three timeframes, explains the rationale for these actions, and sets out a clear set of process and outcome indicators to evaluate each of the action areas. The New Zealand strategy highlights the heterogeneity of the older segment of the population, examining the needs of four overlapping groups: independent older adults; moderately dependent older adults; highly dependent older adults; and older adults from groups experiencing particular inequalities. The English strategy recommends the use of guidelines for the care of vulnerable groups.

Domiciliary care is not addressed by the majority of national oral health policies. As part of a new oral health strategy in New Zealand, more explicit links between primary health care and oral health services are being encouraged. The primary care service is community-based, so it is accessible to those in most need; community-based oral health services have the potential to extend their services to groups at risk of poor oral health, such as vulnerable older people. In England, a Community Dental Service provides dental care to those who may not otherwise seek or receive it, including: housebound people; people with a physical or mental illness; adults with special needs; and hospital long-stay patients or in-patients during their visits to private homes, care homes, and hospitals.

1.9. References

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2.0. Report on Focus Groups and Interviews with Older People

2.1. Rationale

In order to delay the onset of age-related health problems and to maintain the ability of older people to improve their quality of life, an understanding of older people's concepts of health and illness is necessary (MacFarlane, 2000). People's beliefs about health and illness are socially constructed. Their definitions of health and illness, perceptions of their causes, and accepted ways of maintaining and restoring health are contingent on their social, cultural and historical contexts. People's actions and behaviours regarding their health are stimulated or inhibited by ideas and values that are held in common with others.

Furthermore, individuals' behaviours concerning health are situated in response to conditions in the wider natural, social, economic and political environment (McCluskey, 1997). For example, if health is understood in a broader context than purely the absence of disease, but rather as a broad spectrum of forms of well-being, various features of the structure of society that are not directly connected to aging, such as transport policy, also impact upon the well-being of older people. Furthermore, "older people" are not simply a homogenous group that includes everyone over 65; rather, the processes of aging affect individuals and groups in considerably different ways (Edmondson, 1997).

The DoHC (2003) acknowledge the complexity of the aims and objectives of studies into attitudes and behaviour concerning oral health, and consequently advocate a synergistic combination of quantitative and qualitative methods of data collection. McGrath & Bedi (2002) describe these as "functionalist" and "hermeneutic" approaches respectively. Such "methodological pluralism" combines the strengths and minimises the disadvantages of utilising one approach to the exclusion of the other (DoHC, 2003).

Moreover, the assertion that people's perception and use of health services are embedded in a wider social context suggests that qualitative research methods are particularly appropriate in investigating these issues (DoHC, 2003). Older people's self-assessment of health and well-being does not always directly depend upon the factors that are employed as objective indices in large-scale quantitative pre-coded questionnaire surveys (MacFarlane, 2000). The interpretation of quantitative material, which is essentially comparative, requires qualitative primary data that is exploratory and descriptive in nature (Woodhouse, 1998). Locker & Gibson (2006) highlight that it is necessary to ask respondents to elaborate on their answers to pre-coded questionnaires in order to understand the meaning of the responses they give.

Exactly what is being measured by these terms is unclear ... qualitative research on respondents' understanding of the questions and the meaning of their answers needs to be undertaken. ... The interpretation of questions by the respondents often differs from that assumed by the investigator, as does the meaning of their responses.

(Locker & Gibson, 2006, p.167)

Edmondson (2000) emphasises the importance of communicating as closely as possible to the readers of research reports what it is that respondents' actually mean by what they say to researchers. She describes this explication of meaning (hermeneutics) as mediating between the worlds of individual respondents, researchers and the readers of the reports.

Decontextualised accounts of meaning, such as those produced in large-scale surveys, can be useful and suggestive, but by themselves cannot make adequate (let alone complete) our understanding of what actors mean by their health-related communication and conduct; hence, they should not be offered by themselves but always require a hermeneutic setting.

(Edmondson, 2000, p.73)

Edmondson (2000) indicates that the function of qualitative research findings is pedagogical as opposed to evidential. Rather than demonstrating a conclusion, they illustrate a set of attitudes that are current in the given setting. The data generated by qualitative techniques are interpreted inductively, to formulate an emerging picture that enables a greater understanding of the complexities of the situation (Leedy, 1997). Whilst the researcher cannot immediately prove a conclusion, the validity of the findings can be judged by the methods followed and the arguments provided to support the case being made by the researcher; "If the account is a valid one, it will have determinable corollaries which can be sought empirically: some perhaps by non-qualitative means" (Edmondson, 2000, p.84).

Specifically in relation to the exploration of attitudes, behaviours and knowledge in relation to oral health, DoHC (2003) and McNally and Lyons (2004) emphasise a qualitative component comprising of focus group discussions and one-to-one individual interviews. This approach was adopted for this study, utilising discussion guides and interview schedules and the subsequent transcription and analysis of findings.

Group discussions are not always a good tool for revealing information that participants regard as sensitive. Nevertheless, an advantage of group discussions is that the dynamic of the group situation provides additional useful information in itself, besides allowing access to the knowledge of several people at once. The interaction of the group can provide a wider range of information than a series of individual interviews with the same participants, and can raise unanticipated issues that can be followed up. Individual interviews are more personal and more likely to reveal sensitive information that may be concealed during group discussions. The semi-structured format of the group discussions and individual interviews allowed the specific concerns of respondents and unanticipated issues to be followed up. Such an approach to the fieldwork enabled the participants to identify the priorities and criteria for assessment that they themselves judged to be significant, in order to enhance the relevance of the research (Edwards and Gosling, 1995; Mikkelsen, 1995).

2.2. Methodology

The following section outlines the methodology used in conducting focus groups and interviews with older people concerning their oral health attitudes, knowledge and behaviours. The methodology comprised a four-stage process: the design of the focus group/interview schedule; participant recruitment; the conduct of the focus groups and interviews; and, data transcription and content analysis.

2.2.1. Schedule Design for Focus Groups & Individual Interviews

A comprehensive review of published research and theoretical literature (see section 1) provided the departure point for designing the semi-structured schedule for the focus group discussions and individual interviews (see Appendix). The literature review raised a variety of issues, including: perceptions of older people by the wider community, lay definitions of health, participants' attitudes, beliefs and practices concerning oral health, oral health-related quality of life concerns, and factors that influence access to oral health care services. The schedule was intended to identify factors which facilitate and challenge oral health service delivery, with a view to increasing the availability, accessibility and acceptability of oral health services for older people, (Edmondson, 1997; McCluskey, 1997; MacFarlane, 2000; DoHC, 2003; McNally & Lyons, 2004). To encourage participants' to speak about their awareness and understanding of oral health issues, an open-ended question format with simple language, making use of lay dental terminology, was used throughout (Rubin & Rubin, 1995; Charmaz, 1995).

The schedule consisted of four sections, each comprising a series of open-ended questions:

1. Older People & Health;
2. Quality of Life;
3. Teeth & Dentures; and
4. Access to Services & Treatment.

The sequence of the four sections, and the questions within each, was devised to focus or "funnel" the direction of the discussions and interviews from broader health and quality-of-life issues toward potential factors acting as barriers and facilitators to oral health service use (see Appendix).

The focus group/interview schedule commenced with questions aimed at obtaining a broad understanding of views of health, as a means of gaining an insight into perceptions of health in general and oral health in particular. By approaching the subject from a more general starting point, it was hoped to gain a more insightful understanding of what the population sample expected and wanted from a dental service. Topics in this first section included: the way older people are viewed, what it means to be healthy, satisfaction with one's own health and oral health, and changes in attitudes towards oral health.

The second section investigated oral health-related quality of life, enquiring about positive and negative impacts, and examining physical, social and psychological effects. The third section addressed participants' histories and experiences related to oral health, whether or not they had their own teeth, partial or full dentures, how they felt about this, and any problems or benefits they had encountered.

The final section explored access to oral health services and participant's experiences of treatment. Topics included:

- Attendance for regular check-ups, or only for emergency treatment, or none;
- Their experience of their last visit to a dentist;
- Sources of payment/cover for treatment, and whether these affected seeking treatment;
- Satisfaction with treatment;
- Awareness of eligibility for the medical card scheme, availability of dental treatment on the scheme, and sources of information about these;
- Issues of finding a dentist; transport difficulties; accessibility of clinics;
- Barriers to accessing services; and
- Factors and practices that would potentially enable access to services.

The order in which the questions appear in the schedule (see Appendix) were not necessarily adhered to as flexibility was required to pursue participants' responses. Some questions were omitted if responses to earlier questions had sufficiently covered the topic. Nonetheless, each section and topic was addressed at an appropriate stage. The broad topics were introduced for discussion, with additional questions from within each topic being introduced as required. General-use questions were employed where necessary as probes to follow-up on responses to the questions. For example: What was that like? Can you tell me more about that? You mentioned ...; Could you expand on that?

The focus group/interview schedule was piloted via a focus group at a day-care centre to enable clarification of the procedures, questions and order of topics, and testing of the recording methods. The material from this discussion was included in the final data set (DoHC, 2003).

2.2.2. Recruitment Strategies & Conduct of the Focus Groups & Individual Interviews

The organisation of the fieldwork advanced through an iterative chain of contacts, whereby groups within communities and individual informants were identified progressively. A convenience sample from the general population was identified through contact with a variety of organisations that recommended groups to be included in the research. These included Health Service Executive Community Works Departments, Directors of Public Health Nursing, Community Development Programmes, Family Resource Centres, Day-Care Centres and Community Associations in Cork City and County.

Twelve focus group discussions and thirty individual interviews were conducted in total. Participants and groups from a broad variety of social backgrounds and geographic locations (urban and rural) were sought for inclusion to maximise the representativeness of the sample. Four of the focus groups comprised of community groups, six of day-care groups, and two of sheltered housing residents. Nine of the focus groups were from city centre and suburban areas of Cork City, and three from County Cork. Individual interviewees were contacted through a variety of channels, including community groups, care centres and networks of retired people.

The second author conducted the focus group discussions and individual interviews over a period of ten weeks between July and September 2006, assisted by the first author. Participation was voluntary and informed consent was obtained from participants prior to the commencement of the discussions and interviews. A standardised consent form was given and read to potential participants, and the purpose of the research was explained. Participants were offered the choice to decline participation without any adverse consequences. Participants were reassured that all information that identified individuals would be held confidentially. Data was recorded and analysed without personal identifiers. No medical procedures or interventions were involved in the research and no medical records were consulted.

The group discussions were conducted on the premises of the organisations and lasted 40-60 minutes. The individual interviews were conducted either face-to-face with the respondent at a location suitable for them, or as a telephone interview between the respondent at home and the researcher at the OHSRC, utilising a telephone with an external speaker to enable recording. Where the interviews were conducted via the telephone, the individual respondents were met face-to-face beforehand and their informed consent obtained.

2.2.3. Data Transcription & Content Analysis

The focus group discussions and individual interviews were recorded with a high sensitivity stereo microphone onto Hi-MD format mini-discs, amounting to over 15 hours of material. Additional parallel back-up recordings were made as audio-only files with a digital video camera. Copies of the recordings were also saved as audio compact discs. All of the participants' responses were transcribed verbatim as MSWord documents by the second author, by playing and replaying the mini-disc recordings sentence by sentence. The transcripts total almost 150 pages (see Appendices A and B).

The framework for interpreting the data was based upon a pre-determined set of procedures provided by the categorisation of questions in the discussion/interview schedule, which in turn had been derived from the relevant published research and theoretical literature (DoHC, 2003). As a basis for content analysis, a coding scheme was developed whereby each question in the schedule was given a code number. The content of the transcripts was then categorised according to these questions, with the relevant responses being systematically allocated one or more code numbers corresponding to one or more of the specific questions in the schedule.

Subsequently, each sentence, or group of sentences, from the transcripts was copied and pasted into the schedule format under one or more of the questions to which it was an appropriate response, and then marked with a label denoting the focus group or individual interview it derived from. Finally, the collected responses to each individual question were analysed. Nonetheless, the presentation of the results is thematic rather than reflecting the sequence of the questions in the schedule.

2.3. Results

The results are presented following the general outline of the focus group/interview schedule (see Appendix). The first section examines participants' views on older people and health, while the second section reports respondents' views on the impact of their oral health on their quality of life. Thirdly, participants' attitudes towards their teeth and/or dentures are outlined. The final section focuses on the participants' points-of-view regarding access to dental services and treatment.

2.3.1. Sample Characteristics

Twelve focus groups and thirty individual interviews were conducted. The focus groups included a total of 134 participants (99 female and 35 male), ranging in age from 58-93 years, with an average age of 75 years. Of the 30 participants in the individual interviews, 17 were female and 13 were male, with an age range of 61-92 years, and an average age of 77 years.

2.3.2. Older People & Health

This first section outlines participants' views concerning broader issues of services for older people in general, and how older people define what it is to be healthy. Subsequently, the section narrows its focus to explore common attitudes towards oral health held by participants' in their youth, and how attitudes and methods of dental treatment have changed over the years.

How Older People are Regarded by Society

Participants generally tended to believe that service provision and the ways in which older people are viewed and treated by society have improved since when they were younger.

I suppose it has changed; older people are living longer now because there's more services there for them. Long ago, people stayed in; when they came to a certain age they didn't go out. Maybe they hadn't the money, the means, but now it's better. People are living longer and there's more there for them.

However, several participants also believed that older people were not receiving sufficient services.

I think the state treats older people like: 'you've served your purpose, now go away and don't deny it' in a lot of cases. ... But I do think that older people in general don't get a fair cut you know, after spending their life paying taxes and things like that.

Five of the twelve focus groups and one fifth of the individual interviewees highlighted long waiting lists for hospital consultations and treatment as being problematic for older people.

The waiting and not knowing, it is hardly fair to older people especially, because the mental anguish is nearly worse sometimes. You'd be imagining things that wouldn't be nearly half as bad as they are.

In addition, three focus groups indicated that the recent reduction in home-help hours has negatively impacted on the quality of life of older people.

The home help has been cut down drastically lately you know, and that's going to affect a lot of old people. What good will, say, half an hour be? A lot of the home helps would only be in the door and say hello and goodbye in half an hour.

Being Healthy

Participants tended to define being healthy in terms of being able to get up in the morning, to carry out their daily activities, to look after oneself, to have an interest in things, and to be able to get out and about. Knowing one's own limitations was highlighted as being important, as was the need for a positive state of mind.

That I can get up and be independent; to do my bit of housework and shopping and go to mass and look after my husband who's not so hectic at the moment.

We all know our capabilities, and what we can do and what we can't do. But it's very important in my case to get out of the house and meet people; that's what I find. You know your own capabilities.

Many participants shared a sense of resignation in having to put up with a degree of ill health due to their age.

Thank God for your blessings, you could have a lot worse wrong with you, do you know what I mean? When a person is going on in years you have to weigh the balance don't you. ... When you come to a certain age anyway, you have to expect something, you can't go through life without nothing. ... Once you can get up in the morning and do what you have to do, do your own bits and pieces, it's a good day.

Attitudes to Oral Health

Participants indicated that when they were younger, awareness of the need for, and means of, maintaining oral health was low. At the time people tended not to visit a dentist unless it was for emergency treatment. The cost of treatment was often reported as a prohibitive factor in visiting a dentist in the past.

People of our age, we never saw a toothbrush in the house did we?

Looking after teeth at that time wasn't a big thing and there wasn't much available you know. ... It wasn't a thing to do and a lot of people weren't going for treatment. But it wasn't available cost wise, and privately it wasn't available to us as a family, you know?

Several respondents commented that in their younger days it was unheard of to visit a dentist regularly for a check-up; dental visits were undertaken only when necessary to treat pain.

I never went for a check up or anything like that, never. Nobody at that time would like going to a dentist, only when they had to, you know. ... You always stayed away from the dentist; he was only necessary when you had pain.

Moreover, participants highlighted that at the time fillings were not widely available and that the extraction of teeth was the common practice.

I mean in the old days there, if you complained at all of a tooth ache or anything else you were extracted right away; there was no such thing as fillings or anything like that. Everything out whatever you had, if you had any problems. But it has gone the other way around now; they save everything.

Many participants reported having all of their teeth extracted at the same time at an early age and wearing dentures since their twenties, which they described as being “the fashion” at the time.

They take the whole lot, that's what happened to me! If you've a mark on your tooth, if you've pyorrhoea (gum/periodontal disease), all of them had to come out. I was nearly crying after. I mean, what they do now, if they could have it done at that time.

For several participants this had happened completely unexpectedly.

I was only nineteen, I went in to get a filling and they took all the top ones.

I went there to get some teeth taken out and they took out all my teeth, top and bottom, they removed the whole lot. I had an anaesthetic and when I woke up, all my teeth were gone.

Changes in Attitudes and Methods of Treatment

Participants were in agreement that younger people today are more conscious of maintaining their oral health. They believed there is a much more positive attitude towards dental treatment among children and their parents.

I'd say people are very aware of their teeth, younger people growing up and everything. I think parents are sending them out younger now and seeing after their teeth.

Children don't mind going to the dentist now, they don't. I mean long ago you'd be screaming at them. They have so much check-ups through the school and everything and it's very good.

Positive changes in methods of dental treatment, especially fillings, were seen as contributing to this change in attitudes towards oral health and visiting the dentist.

They see after teeth a lot better. Before when you'd go to the dentist they'd just take it out, but they don't do that now. Now they fill them and clean them and they do all sorts of things. They didn't do that in our time, early on like. They don't take them out like that now at all.

Positive changes that participants perceived in the dentist-patient relationship were also highlighted as contributing to this change in people's attitudes towards dentists.

The dentist would tell you now everything he's going to do, you're more aware of what's happening.

I find that even the approach of the dentists to the patients is totally different today, like everything is more relaxed. I mean I went to the bloody dentist there when I was a young fellow and sure I'll tell you that much he was a butcher! No, I find them, generally speaking, today they take care.

A member of one focus group suggested that water fluoridation had contributed to preserving the condition of people's teeth.

Years ago when I was going to school, every young fellow's teeth were all toothaches and most young people had their teeth pulled out. ... But when they put the fluoride in I thought it made a fierce difference. ... I got the bad ones pulled out and the ones I have left, since they put the fluoride in, they're solid enough like.

2.3.3. Quality of Life

Participants highlighted both positive and negative ways in which their oral health impacts on their quality of life. Overall, virtually all of the focus groups included at least one person who reported a negative impact. However, more than half of the groups also included someone who reported a positive impact.

Eating and Enjoyment of Food

For some participants, wearing dentures had no negative impact on their ability to eat and enjoy food, but rather a positive one, enhancing their ability to chew their food compared to having sore teeth, gaps in their teeth or no teeth.

I couldn't eat without mine. It's bad for your digestive system too; you need your teeth to chop up the food.

The primary drawback for denture wearers was that food would get in under the denture, for example seeds from jam or bread. In addition, difficulties eating hard foods such as apples, nuts, toffees, bread-crusts and meat were mentioned.

The seeds in jam go under the lower ones. The sesame seeds on bread, they're not very palatable. If the seed gets in under the denture you're in big trouble.

However, sore gums and splits at the corners of the lips were also highlighted as having a negative effect on some people's ability to enjoy eating.

It would be just sore trying to chew on that side especially, with those gums on that side, they'd be very sore.

The splits at the sides of my mouth are very sore, when you open your mouth it hurts. It hurts when I'm trying to eat, and even a hot drink, anything.

Moreover, many participants emphasised that they would take their dentures out during eating because they were loose or causing pain.

I used to get pains in my head and all from it. I used to eat my lunch with them in but I just couldn't leave them in.

Not being able to taste food properly was a drawback with wearing dentures that was mentioned by one participant.

I'll tell you the truth about what I don't like about dentures, you can't enjoy your food, the flavour of it and that.

In addition to the physical impacts on eating, participants also emphasised negative social impacts related to embarrassment when eating in public. This was due either to having to remove their false teeth to eat, or to the limited range of foods they were able to eat.

Well I mean to say if the meat was in any way tough I wouldn't be able to eat it, you know? In fact it would be part of the job that would put me off going out.

Appearance and Smiling

Most participants who wore full dentures were happy with the appearance of their dentures and agreed that wearing their dentures improved their appearance compared with not having them in. Many indicated that their sense of pride demanded that other people should not see them without their dentures.

I'm much happier with them in. But we wouldn't leave anyone see us without the false teeth; that's pride that like!

Nevertheless, a few participants reported that factors such as the colour of the dentures' gums or teeth not looking realistic enough, which caused them embarrassment when smiling or having a photograph taken.

The quality of the gums and the teeth too, with the modern technology now they shouldn't look false, they shouldn't really should they? They should actually look like your own; they should look more real. I'm self-conscious of opening my mouth too much. I have to put my hand over my mouth.

However, some of those participants who still had some of their own teeth felt embarrassed at the condition of their remaining teeth, particularly in contrast to the appearance of the teeth on their dentures.

I have the top, but the bottom, now, are only pieces now actually, I'm ashamed of them.

Speaking

Generally, those with dentures indicated that wearing dentures only affected their speech when the dentures were new, and that it took a little time to get used to them. However, many participants mentioned that their speech was negatively affected when they were not wearing their dentures.

It takes a while to have them settle in you know. If I was on the phone now and I have my false teeth out, when they ring from home they say: 'Mam, you have your teeth out'. You'd be like somebody drunk, with a few drinks in you!

However, one participant reported having difficulties speaking since receiving a replacement set of lower dentures five years previously.

It's embarrassing when I'm speaking or anything, it seems to spit and it's very embarrassing.

Moreover, two respondents cited the fear of their lower dentures falling out when they were speaking as the reason they didn't wear them.

It very hard to use the bottom ones, the top ones are perfect, but the bottom ones you can't, when you're talking they'll fall out.

Comfort

The condition of people's mouth, gums, teeth and dentures were cited as having an adverse effect on their comfort much more frequently than having a positive impact. It may well be that dentures have an implicit positive influence on the quality of life (in terms of comfort) for the many respondents who were satisfied with the fit of their dentures.

One participant who still had many of her own teeth indicated that gum (periodontal) disease had at times affected her ability to sleep at night due to pain. Participants who had a problem in the past which had subsequently been rectified tended to be those that explicitly mentioned comfort as a positive effect. Sore gums, loose dentures, dentures hurting the gum, and dry lips were reported as causes of discomfort, and in a few cases, the reason for not wearing one or both sets of dentures.

It would be constantly painful, but you see now I'm getting into the habit of when I go in the door, the teeth are coming out and that shouldn't be. I only wear them when I go out now, and I mean that's not nice then when anybody comes to the door I've no teeth in, do you know?

Embarrassment

In terms of psychological impacts on their quality of life, respondents with dentures highlighted a variety of situations that could cause embarrassment, including eating out or sharing accommodation on holiday or in hospital. Although people generally felt more confident when wearing their false teeth, embarrassment at being seen without them was regarded as a negative factor.

It can be embarrassing sometimes, if you're sharing with somebody and they don't have dentures and you have to clean your dentures and sometimes you have to leave them to soak.

2.3.4. Teeth & Dentures

This section explores participants' attitudes towards their teeth and/or dentures, particularly with respect to wearing dentures, the age of their dentures, and difficulties in cleaning their teeth and dentures.

Wearing Dentures

The vast majority of participants had at least one partial denture, though half of the focus groups also included someone who did not wear a denture, even if they had some of their teeth missing. Forty percent of the individual interviewees, and at least one person in most of the focus groups, still had some of their own teeth.

I haven't them all, I've one gone there and one at the back there gone and one up here, but other than that they're my own ones, no dentures. I had a check up last week and he said I'm good for another thousand miles!

However, two respondents did not feel as though they would be able to cope with having to wear a denture.

Well I don't think I could manage; that's why I have a couple of teeth now and I'm trying to hang onto them. It is something that I have a dread of. I don't think I'd be able to manage them.

Of those participants who did have dentures, several expressed a sense of resignation at having to wear them.

But like I say, once you have dentures, you're at the end of the line really.

It's like a way of life now; you just accept that that's it.

Several participants also voiced their appreciation that false teeth were available to them.

Sure going back years ago now, with the elderly people when their teeth used to fall out there was nothing; they were all gumsy and everything. ... We'd be in a bad way without them, we'd be like hags! They make an awful difference in all fairness they do.

On the whole I couldn't say anything against false teeth, I say thanks be to God for glasses and Jesus for false teeth!

Some respondents reported that they were relieved when they had all of their teeth finally removed, either because they had been experiencing recurrent toothaches, or simply because they would not have to endure further extractions.

I was delighted when they were all gone, because I was getting toothache and, oh, to go to the dentist, I was terrified and crying and usually getting told off by my mother for being so silly and I hated it.

Three quarters of the groups included at least one participant who had all their teeth removed but never wore their lower denture, even though some of these had been replaced over the years. Similarly, two of the individual interviewees also responded that they had never worn their lower denture.

I could never wear the lower ones. I got three sets of teeth in my life and I never wore the lower ones. I got them over the years like. I suppose it's mainly comfort, that they just didn't settle, do you know?

I have only one set, the top; I had the other ones 40 years ago but I never wore them, I never wore the bottom ones.

Furthermore, several interviewees and members of focus groups would only wear their dentures when they were out and would remove them immediately upon returning home.

When I see the front gate, I think I'll never get in to take them out. And then there's a knock at the door then and you're trying to get them, I'd have my hand up to my mouth if I had visitors.

Age of Dentures

A fifth of the individual interviewees had worn the same set of dentures for over thirty years, as had at least one person in three quarters of the focus groups.

I had them teeth now maybe 40 years, I've never changed my teeth.

I got them away back in the 1940's I suppose. I'm happy with the ones I have, they're perfect.

Many participants who had been wearing the same set of dentures for a long time were not keen to get a replacement set; they either felt that it would be necessary to get used to the new ones all over again, or they did not want to undergo the process of having impressions taken. Moreover, several respondents over the age of 75 believed they were too old to be able to get replacement dentures.

The ones I'm wearing are old. I'm 92 years of age. Does that matter, does age matter? I thought maybe I was too old to get new ones. I must have these 40 years and they're worn down, you know, there's nothing of them hardly at the bottom. I'd love to be able to get a new set if someone could recommend a good dentist.

In contrast, one fifth of the individual interviewees' dentures had been replaced within the previous five years, as had at least one person in two fifths of the focus groups.

I got my first ones 45 years ago like, and then about four years ago. He took me in four or five times to make sure they were right. It was with the medical card.

As was highlighted previously in the section on comfort and quality of life, many participants reported the painful effects of sore gums, mouth or lips. Only very rarely did respondents with some of their own teeth report them causing pain. Particularly in the case of sore gums, the cause of the pain was often reported to be dentures that did not fit properly. On several occasions, respondents believed that this probably resulted from their gums shrinking, and fellow members of the focus group suggested that the person should have their dentures replaced or relined.

I have one denture with two or three teeth in it on the front, and that's loose now. I have a lot of pain on this side where the denture ends. I think they move about more in my mouth than they did, the gums may be shrinking.

An issue raised in many focus group discussions was that some participants were unsure of the most appropriate means of cleaning their false teeth. They tended to be those who had not recently obtained new dentures and they indicated that when they first got their dentures they had not been given advice on how to clean them. In addition, two respondents reported physical difficulties in being able to clean their own remaining teeth with a brush.

2.3.5. Access to Services & Treatment

This section focuses on the participants' points-of-view regarding access to dental services and treatment. In particular, it investigates visiting the dentist, dental treatment schemes, sources of information on these schemes, satisfaction with treatment, barriers to accessing services, and ways of improving access to services.

Visits to the Dentist

Three quarters of the focus groups included people who expressed a fear of visiting a dentist.

While they leaves me alone I lets them alone! They'd frighten you, you'd be terrified because what is he going to do to you.

I'd be afraid of my life to go to the dentist, oh I dread it. I go to the doctor now any day of the week, but I wouldn't go to a dentist, no. If I was going to have to go to a dentist, I'd have to be put out cold, so that I wouldn't know what would be going on. I wouldn't sit there; I'd be gone! I've suffered pain and I wouldn't go, I swear I wouldn't go.

Of the 30 individual interviewees, only 43% had a dentist, 37% reported that they had no dentist, whilst the remaining 20% had obtained their original dentures from a dental hospital and had any replacements made by a dental mechanic. Many of the participants who still had some of their own teeth would never consider visiting a dentist unless it was absolutely necessary.

We wouldn't really go unless we were in pain, that's the truth of it now.

Generally, those participants who wore dentures would not usually think of visiting a dentist unless a problem arose.

I assumed I was free for life and I'd never have to see a dentist again for the rest of my life unless my teeth broke.

In many cases, participants with false teeth had not made a visit to a dentist since they first received their original set of full dentures.

I've never been since I got these, so it must be 60 years anyway.

On the other hand, a majority of participants stated that they would visit a dentist immediately if they required emergency treatment, if they were in pain, or if they had a broken denture.

I'm afraid I don't go so regularly you know, but if I think I need a dentist, I am off like a hare to a dentist. It doesn't upset me that much at all I find. Nobody likes going I suppose but I don't mind it that much.

Nevertheless, more than half of the focus groups included someone who would regularly attend a dentist for a check-up and would receive a reminder from the dentist informing them when their next appointment was due. This was also true for a fifth of the individual interviewees.

Every six months without fail, I've been going to the same dentist for 40 years. Every six months I get a reminder.

However, only two of the focus groups included people who were aware of the importance of regular oral check-ups (even for people with full dentures), in terms of the potential impacts of oral ill-health on their health in general.

My brother-in-law got a sore throat. He actually went to get a tooth out and his dentist spotted something that comes up in about one in a thousand people, and it was actually the start of the growth of cancer. He said the dentist considered himself very lucky that he saw it.

In three focus groups, participants highlighted that they were wary of seeking dental treatment because of the medication they had been prescribed for their heart conditions. The medication thinned their blood, which meant that they knew they would bleed more profusely. Nonetheless, one of these people did point out that she had successfully arranged dental treatment at the hospital through her doctor. A member in each of two other focus groups emphasised that they had difficulties hearing and speaking, which meant that they were afraid to seek dental treatment because of this communication barrier.

Dental Treatment Schemes

Overall, 58% of the focus groups included at least one person who stated that having to pay for dental services would affect their seeking treatment.

It's different when you're working, but when you have a pension you have only so much money and lots to do with so much of it.

One fifth of the individual interviewees mentioned that they had private health insurance through Vhi Healthcare. Several focus group participants indicated that their dental treatment had been subsidised through the Dental Treatment Benefit Scheme for those who make Pay-Related Social Insurance (PRSI) contributions when working. However, one person mentioned that she had not visited the dentist since discovering that the scheme did not cover the full cost of her last treatment.

I had to pay half the cost; my stamps only covered half of it, whereas before now the stamps would cover the whole lot. ... That's what happened to me and I didn't go anymore.

Another respondent highlighted that the PRSI contributions he had paid did not entitle him to subsidised treatment. Consequently, he had put off seeking dental treatment until he was eligible for a medical card at the age of 70.

I'm in the position now that any time I go to the dentist I have to pay. And even the PRSI I was paying, I wasn't paying the full stamp so I didn't qualify there either, so I was caught for everything, medical, doctors and the like. But hopefully that'll change now on the first of January when I'm 70, you know.

Such postponement of seeking treatment was common to other participants below the age of 70 who were not otherwise entitled to a medical card on the basis of a means test.

Now the bottom one's cracked and I'm waiting for my 70th birthday to go away and get them all renewed.

But 65 to 70 is a long time for people without a medical card and benefits, it's a long time.

Most focus groups (83%) included people who were aware that dental treatment is available for those with medical cards from dentists registered for the Dental Treatment Services Scheme. However, half of the focus groups also included people who were unaware or felt badly informed about the services available to them. Furthermore, half the individual interviewees were not aware of the availability of services on the medical card from dentists registered for the scheme.

If I'd known about that I'd have been there a lot sooner.

Three quarters of the focus groups included people who would like replacement dentures and almost half of the individual interviewees said the same.

I actually have a medical card but I didn't think we were entitled to free dental care at all. I think I'll go after that because there's one or two teeth missing off the dentures now at the moment, that's good now then.

Only one participant had changed dentist in order to avail of services with a medical card and had nonetheless remained within the same dental practice.

My dentist doesn't take the medical card. I've been going to him for years I'd say. I'm getting the new ones with the medical card, but from a different dentist. He has another dentist with him you see, and it is he does the medical card.

Sources of Information

Several participants emphasised that finding out information on entitlements to dental treatment and how to access services could be a difficult process for older people.

You find out as you go along. If you don't know, things won't be done. When you don't know anything about it, you don't know where to go.

But you know they're small things to people on higher (income) levels but they're very big things to people who don't know.

Nonetheless, respondents suggested a wide variety of possible sources of information on entitlements to dental treatment, which are listed below (the number afterwards indicates the number of groups/individuals that mentioned each potential source):

- | | |
|--|------------------------------|
| • Citizens' Advice Centres: 6 | • Trade Unions: 2 |
| • Community Resource Centres and Associations: 5 | • Internet: 2 |
| • The Health Services Executive / Abbey Court House: 4 | • Social Welfare Officers: 1 |
| • Doctors: 4 | • Government leaflets: 1 |
| • Nurses: 3 | • Community newsletters: 1 |
| • Day-care Centres: 2 | • Television: 1 |
| | • Newspapers: 1 |
| | • Election campaigns: 1 |

Satisfaction with Treatment

Many participants were very happy with the quality of treatment and aftercare they had received on the medical card.

I couldn't have more comfort from my teeth and they're on the medical card. He kept bringing me back and back until they had everything perfect.

He did all the fittings and everything and it took quite a while to sort it all out. The older teeth were giving me trouble; I was 80 the other day so it was about time. I didn't have to pay. I am very happy, and he's a person that I can go back to if I'm not.

However, 40% of the focus groups included at least one person who was unhappy with the last treatment they had received. In two focus groups there were people who indicated that they would not know where to start if they wished to make a complaint. Another participant reported that she had changed dentists because she was not happy with the treatment that she had received.

He was after filling it three or four times; every time I went back he'd simply fill it. I changed dentists at some stage and I said to the dentist: 'Why's that go black?,' so he x-rayed it and he said, 'That tooth is dead'. And the other dentist had been filling it all the time and probably getting paid for it.

In addition, three respondents with medical cards reported that they had been unexpectedly charged for dental treatment, one of whom never returned to her dentist.

I went to get new teeth and he said I had a cross bite, so instead he built up the teeth and he charged me €60 and I'm still having problems. They're still very loose, but I got such a fright I didn't go back.

I was at a dentist a while ago and I got a filling, right. So actually the filling fell out after a while, but when I went back to him then, he refilled it and he said I had to pay for it, because when he'd send away for his money they would only pay him for doing it the one time.

Two of the focus groups included people who were unhappy with the fit of the new replacement dentures they had obtained through the medical card scheme. Moreover, they felt that there was little that they could do about this situation since they would have to wait before being eligible for another set.

You have to put up with it, that's the only thing I find. I mean I have to wait now, I thought I was eligible, but I'm not. That's being honest about it; that is the reason I'm waiting, for the medical card. You're only allowed them then every so often.

Furthermore, half of the focus groups included people who believed that the quality of treatment and dentures for people with medical cards was inferior to that received by those that paid for dental services.

I think with the private dentists, those writing out a cheque or handing in their card are getting more priority than the person with the medical card, getting top quality. And I don't think what I have in my mouth is top quality, I really don't, no. The quality needs to be upgraded for medical card people.

Alternatively, many other participants believed there was no difference in the standards of services for those paying for treatment and those with a medical card.

They'll treat you the same way; they are not prejudiced where you're getting your allowance from.

By and large I am very happy with the dental treatment that I get anyway. I have the medical card, it is only lately I have it actually, but it doesn't make any difference. I mean the treatment I was getting prior to this is no different to the treatment I'm getting on it, none whatsoever.

A few participants indicated that even though they had medical cards they would opt for private treatment, either because they felt that the quality of service was superior, or because specific services such as caps or bridges were not available on the medical card.

There are differences between the medical card and private. I wouldn't go back to the medical card.

Barriers to Accessing Services

Most participants who did not have a dentist suggested that it would not be difficult to find a dentist to treat them. Generally they indicated that they would be able to ask friends and relatives to recommend a local dentist who would accept the medical card. Those participants who already had a dentist, and had no problems with mobility, usually had no difficulty in making an appointment that would suit them. However, one participant did indicate that people might change their mind if the date was not soon enough.

We should have more urgency. Any delay with teeth is a disaster see, because some people have to gear themselves into going for it. In that event, they should try and grasp it when the person is willing to go.

Quite a few of the participants who were members of day-care groups had severe difficulties in walking or used wheel-chairs. In terms of the accessibility of dental clinics, participants mentioned that many new clinics outside of the town centre tended to be on the ground floor where access was not a significant problem. However, practices in older premises were often situated upstairs, which presented enormous difficulties for older people with reduced mobility.

I find her excellent actually, but of course there's steps up to her surgery from the square and I couldn't make that, I couldn't do that unless with assistance.

The most significant barrier to accessing dental treatment that participants emphasised was mobility and transport, which was mentioned in 75% of the focus group discussions.

I can't go to the dentist because I can't walk. There's one down there but I can't get out, I'm up the hill and I can't get down. I have to get a taxi every time I go out, and then pay again to come back home.

The expense of having to take a taxi and also the need for a companion to assist them presented obstacles for many. People were often forced to rely upon family and friends to transport and accompany them, which could be difficult to arrange due to working hours.

You'd find it hard to get up and down, to get in and out, you know. We'd have to wait for someone to bring us. They're not always available; I mean most of the families are working and everything. It can be troublesome really, so you just kind of sit at home and suffer on with what you have. And when they take you down in the van, they can't get parking spaces.

This situation is particularly significant for those living in rural areas, where people are more isolated and the distance to town might mean that a taxi is prohibitively expensive.

It is hard enough to get in. The majority would be in isolated areas now wouldn't we? The majority of us are on our own, and the family are working here, there and faraway. To get someone to drive you isn't possible. When you're away out the country like, you can't get to a dentist. Our nearest from our place would be I suppose, 10 or 11 miles away.

Ways of Improving Access to Services

Participants identified a variety of initiatives that would potentially increase older people's access to oral health services. For example, half of the focus groups suggested that a mobile dental clinic (like a mobile library) would greatly improve access to oral health services for those with severe mobility issues.

I mean one day in a year for a dentist to visit, it sounds simple and it is simple, and when the facilities are near at hand you get more people to co-operate, you get more of them going. But individuals going along by themselves? They might as well be throwing water into the river outside! Some people are not able to get to these places (dental clinics) in all honesty, even though you could have facilities like taxis and everything else. But if something is there on hand, people will avail of it a lot easier and a lot quicker. And it saves everybody time and it saves everybody money in the long run.

Moreover, almost all of the focus groups suggested that it would be beneficial to have dentists visiting older people at day-care centre, community centres and sheltered accommodation centres.

When people come to the day centre, they have access to physiotherapy as well, and occupational therapy, so dental services is another thing that could be added on to it you know.

They do blood pressure here and cholesterol, they look after all the health issues here as well, they're really fantastic. So maybe if there was a dentist came to visit for people that couldn't go down town, they'd be a lot of people who couldn't.

However, one focus group stressed that, in the absence of a specific government policy, it was very difficult for individual groups to approach health professionals and invite them to regularly visit their centres.

It is not as easy to do as you think, because we can't get the general doctors to come down and visit and we've tried. ... We tried with the Health Executive to get a GP to come down to the centre once a month, for people who may not have ways and means of getting out, and we have quite a few people here suffering with depression and they just won't go out. And we asked a panel of doctors and we couldn't even get one of the panel to come, so it may not be easy to get a dentist.

The focus groups acknowledged that it would be difficult for a dentist to perform surgery in a care centre without the necessary equipment, but nonetheless felt that a dentist visiting the centre would improve people's access to information on services and enable people who thought that they required treatment to arrange an appropriate appointment.

They'd come around and if they've got them (dentures) the dentist could tell you whether they need to be replaced or whatever.

In relation to arranging transport to dental appointments, half of the focus groups highlighted that people with diabetes would have to attend regular three-monthly appointments with a podiatrist at a health centre, and that the Health Service Executive (HSE) would pay for the transport cost. These groups suggested that a similar scheme would enable people with mobility problems to travel from home or the care centre to a dentist for treatment. Some of the diabetic people were taken by the centre's mini-bus if the centre had one, or if they had to take a taxi then the fares were paid for.

For the free service out of here with the day-care, I have the list and I organise the taxi and the appointment, and three or four clients are collected and taken down to Grattan Street (Clinic) and brought back to their homes again. And that's all funded by HSE, so it is all free.

2.3.6. Summary

The focus group sessions confirmed and clarified a number of issues previously revealed by the oral health questionnaire in the National Survey of Adult Oral Health in 2000-2 (see Table 1 below; Whelton, *et al.*, 2007).

Firstly, older people have low expectations in relation to their oral health and oral health-related quality of life. Frequently, they do not appreciate that using the oral health service could enhance their oral comfort, function and appearance. The origin of this attitude may be shared with the culture of oral neglect apparent in many of the focus groups; a lack of oral health awareness, poor access to services as a child, and a childhood association of dental treatment with a response to pain were reported.

The association of dental treatment with a response to pain is particularly revealing as it allows us to contextualise the attitudes of this age cohort. Today's older people have no childhood experience of preventive dentistry. Sixty five or more years ago, the causes and prevention of oral disease were less well understood, and there was little focus on dental care for prevention of disease, either in the clinic or at home. Hence members of this age group have developed different attitudes to preventive dental care, and different oral health expectations, than those which are prevalent among younger age cohorts (Whelton, *et al.*, 2007). Unfortunately this older-style culture also includes a lack of awareness of the capacity of the dental service to improve quality of life with regard to oral function, comfort and appearance.

The findings also indicate that any oral health promotion programmes designed to address the attitudes of this cohort of older people should include information on the availability, scope and quality of dental services. Given the scale of the negative childhood and young adulthood experiences by many focus group participants, oral health promotion efforts should address the changed nature of contemporary dental services. Such efforts should be directed at increasing confidence in visiting the dentist. Oral health promotion must also address the lack of awareness of the rationale for, and considerable benefits of, regular dental check ups for those with and without their own natural teeth.

Many of the focus group participants were unaware of their eligibility for dental services. A publicity campaign could address this information deficit and may help to increase the uptake of the DTSS. Older people also reported a number of barriers to accessing oral health care. The difficulty of finding a companion to help them negotiate their journey to the dentist during working hours was highlighted. Transport was also a problem, with the cost of taxis prohibitive for many older people.

The difficulties reported during the focus groups indicate a high level of dissatisfaction with dentures. This may indicate a need for the training and employment of specialists to deal with those who have persistent difficulty with denture wearing.

Table 1: Summary of Results

Section	Topic	Issues	Groups n=12 (%)	Individuals n=30 (%)
Older People & Health	How older people are regarded by society	Improvement in services	10 (83%)	11 (37%)
		Waiting lists for hospitals	5 (42%)	6 (20%)
		Reduced hours for home helps	3 (25%)	0 (0%)
	Being healthy	Ability to do daily tasks	9 (75%)	4 (13%)
	Attitudes to oral health	Positive change in treatment methods	8 (67%)	12 (40%)
Quality of Life	Negative impacts	Total	11 (92%)	17 (57%)
		Eating	8 (67%)	8 (27%)
		Appearance & smiling	4 (33%)	2 (7%)
		Speech (new dentures only)	3 (25%)	0 (0%)
		Comfort	7 (58%)	12 (40%)
		Eating in front of others	5 (42%)	0 (0%)
		Embarrassment	5 (42%)	0 (0%)
	Positive impacts	Total	7 (58%)	3 (10%)
		Eating	5 (42%)	3 (10%)
		Appearance & smiling	4 (33%)	0 (0%)
		Speech	3 (25%)	0 (0%)
		Comfort	2 (17%)	0 (0%)
Teeth & Dentures	Wearing dentures	Still have some of own teeth	9 (75%)	12 (40%)
		Never wear lower set	9 (75%)	2 (7%)
		Take them out at home	3 (25%)	1 (3%)
	Age of dentures	Dentures more than 30 years old	9 (75%)	6 (20%)
		New dentures in last 5 years	5 (42%)	6 (20%)
	Problems	Sore gums / mouth / lips	8 (67%)	12 (40%)
		Badly fitting dentures	7 (58%)	9 (30%)
Access to Services & Treatment	Visits to dentist	Fear of dentists	9 (75%)	1 (3%)
		No Dentist	12 (100%)	17 (58%)
		In emergencies	12 (100%)	19 (63%)
		Regular check-ups	7 (58%)	6 (20%)
		Awareness of problems related to oral ill-health	2 (17%)	0 (0%)
	Dental treatment schemes	Having to pay affecting seeking treatment	7 (58%)	4 (13%)
		Aware of medical card dental scheme for over 70s	10 (83%)	15 (50%)
		Feel badly informed	6 (50%)	15 (50%)
		Not satisfied with last treatment	5 (42%)	1 (3%)
		Medical card treatment inferior	6 (50%)	1 (3%)
	Barriers and ways of improving access to services	Difficulty travelling to dentist	9 (75%)	4 (13%)
		Mobile dental units	6 (50%)	2 (7%)
		Dentists visiting community centre, etc.	10 (83%)	3 (10%)
		Transport to dentist	6 (50%)	4 (13%)

The focus group participants were quite inventive when it came to suggesting solutions to the barriers to dental care. These included the use of mobile dental clinics and an arrangement whereby dentists could visit older people at day-care, community, and sheltered accommodation centres.

In conclusion, the focus groups identified:

1. The need for effective oral health promotion programmes targeting older people which would promote the benefits of regular dental visits and increase awareness of available and accessible high quality dental services.
2. A high level of dissatisfaction with dentures.
3. The need for new approaches to make dental services more accessible to older people.

The way in which these needs might be met will be the subject of further research with those engaged in the management and delivery of services.

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Appendix: Semi-Structured Schedule for Focus Group Discussions & Individual Interviews

This schedule is intended to cover the broad issues under investigation. The order in which the questions appear in this schedule may not necessarily be adhered to, as flexibility will be required to follow-up on participants' responses. Some questions may be omitted if responses to earlier questions have sufficiently covered the topic. Nevertheless, each topic should be addressed at an appropriate stage. For the focus groups, the broad topics will be introduced for discussion, with additional questions from within each topic being introduced as required.

General-use questions will be employed where necessary as probes to follow-up on responses to the questions. For example:

- What was that like?
- Can you tell me more about that?
- You mentioned... Could you expand on that?

1. Views on Older People and Health

"This first set of questions is about your views on the way in which older people are viewed, and your views on health in general and about the health of your mouth, gums, teeth and/or false teeth. Remember there are no right or wrong answers"

- How do you think older people are viewed in Ireland?
- What does it mean to be healthy? For example:
 - Being free from illness
 - Having the strength to resist illness
 - Having the ability to perform one's daily activities
 - A feeling of well-being
- How would you regard your own health?
- Are you satisfied with your own health in general?
- How would you regard your oral health, that is; the condition of your mouth, gums, teeth and/or false teeth?
- Are you satisfied with the condition of your mouth, gums, teeth and/or false teeth?
- What were the attitudes towards oral health when you were growing up?
- Do you find that attitudes have changed? In what ways?

2. Quality of Life

"The next set of questions is about how your oral health (that is, your mouth, gums, teeth and/or false teeth) may affect your quality of life. Remember there are no right or wrong answers."

- Can you tell me about the positive effects and/or negative effects of the condition of your mouth, gums, teeth and/or false teeth?
- Overall, how would you say this affects your life?
- (If answers negative, ask:) Are there any positive aspects?
- (If answers positive, ask:) Are there any negative aspects?
- Are there any special occasions where it's an issue for you?
- In what ways does your oral health affect you physically? For example:
- Your eating or enjoyment of food?
 - Your appearance?
 - Your speech?
 - Your comfort?
 - Your breath odour?
 - Your general health?
- What about effects on your social life?
 - Your smiling or laughing?
 - Your social life?
 - Your personal relationships?
 - Your work or ability to do your usual jobs?
 - Your ability to eat in public?
 - Your finances?
- What about effects on the way you feel? For example:
 - Your ability to relax or sleep?
 - Your confidence?
 - Your carefree manner (lack of worry)?
 - Your mood?
 - Your personality?
- When does this kind of thing come up in conversation with other people?
- Do you talk about these issues with people of your own age / people of different ages?

3. Teeth and Dentures

“This next set of questions is about your teeth and/or false teeth and how you look after them. Remember there are no right or wrong answers”

- I'd like to get a picture of the way that the condition of your mouth, gums, teeth and/or false teeth fits into everyday life. Could you describe an ordinary day, briefly from the time you wake up to the time you fall asleep at night?
- What difficulties come up for you in terms of looking after your mouth, gums, teeth and/or false teeth?
- Can you tell me a bit more about... (...any problematic area highlighted, for example, putting your dentures in, in the morning)?
- What kind of information would be or would have been useful to you on how to look after your teeth or dentures?
- Do you have either a partial or full denture?
- If “No”: Do you think you will always have some of your own natural teeth?
- How does the thought of wearing a partial denture make you feel?
- How would you feel if you lost all of your natural teeth and had to wear full dentures upper and lower?
- If “Yes”: When I say ‘dentures’, what comes to mind (words, images, feelings)?
- How does wearing dentures make you feel?
- When do you wear your dentures?
- If you don't wear your dentures most of the time, can you tell me a bit more about this?
- Are there any difficulties you have with your dentures?
- How do you feel about the appearance of your dentures?
- How do you feel about the comfort and fit of your dentures?
- How old are your dentures?
- Tell me about first getting your dentures? What was it like?
- Any stories you tell about dentures?
- What advice would you give to someone who was having a denture for the first time?
- What would you tell them about difficulties, challenges, etc?
- What kind of information was/would have been useful to you at the beginning?

4. Access to Services and Treatment

“The next section relates to your views on dental health and your experience and use of dental services in the past and present. Remember there are no right or wrong answers”

- When I say the word ‘dentist’, what comes to mind?
- Would you ever go to the dentist for emergency treatment if you were in pain or had a broken denture?
- Would you ever go to the dentist to have a check-up for your mouth or denture?
- Where would you go to the dentist, - family dentist, private clinic or public dental service?
- Do you usually see the same dentist each time? If so have you had to change dentist for any reason?
- If you were to go to the dentist for treatment, would you have to pay for the treatment? For example, would it be covered in part or in full by: Private dental insurance / PRSI dental scheme / Medical card / or paying per visit (no other cover)
- How would having to pay, or not having to pay, affect whether or not you visit the dentist?
- If you paid for your treatment were you satisfied with the treatment provided and its cost?
- If you have a medical card or you get subsidised dental treatment through the PRSI dental scheme or private dental insurance:
 - How informed do you feel about the range of treatments covered under the scheme?
 - How satisfied do you feel about the range of treatment available?
 - If you are not satisfied with the range of treatments, could you specify which treatments were not available?
- How would you feel about paying for treatment not covered by the scheme?
- Were there times when you weren’t happy with your treatment?
- Were there times when you felt like complaining?
- What would have stood in your way?
- Are you aged 70 years or over, and if so, are you aware that you can get a medical card that includes dental treatment?
- How do you feel about the availability of information on the medical card dental scheme? For example:
 - Where to find information on the system other than from the dentist?
 - Which dentists operate the system?
 - How to join the system?
 - How your rights are protected within the system?
 - Where to complain if you are not satisfied?
- Have you consulted a person other than a dentist for advice on or treatment of your mouth, gums, teeth and/or false teeth? If so, who and for what?
- If you could cast your mind back now to the last visit you made to a dentist, what was it like? How did you feel?
- Can you tell me about a typical visit to the dentist? (If they start in waiting room, you need to ask:) What prompts you to go? How do you go about making an appointment? (If they end leaving surgery, you need to ask about afterwards)

- What is it like finding a dentist who would treat you? (Are there any difficulties?)
- What is it like making an appointment that suits you? (Are there difficulties / delays?)
- What is it like travelling to the dentist? (Are there any difficulties?)
- What is it like if you have to make multiple visits to the dentist for your treatment?
- How do you find the dental surgery you attend in terms of accessibility and comfort?
- Do you think your dentist does all she/he can to make a visit pleasant and painless?
- In what ways do you feel that your dentist would treat you differently if you were younger? ... or older?
- Are there any barriers or challenges that come to mind that older people may experience in accessing dental services?
- Are there any enabling factors that come to mind that help older people in accessing dental services?
- How could things be better for older people? For example:
 - Mobile Dental Units?
 - Visiting dentist to community care centres?
 - Dentists in the same offices as doctors (and appointments for both together)?
 - Clear information at doctors' offices?
- Is there anything else that comes to mind / has occurred to you while we were talking?

Thank you very much for participating in our research.

Please feel free to contact us if you have any queries.