



# Oral Health of Adults with an Intellectual Disability in Residential Care in Ireland 2003

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V. Kelleher, M. Cronin, E. Flannery, J. Nunn

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A collaborative project involving:

Department of Health and Children  
East Coast Area Health Board  
Midland Health Board  
Mid Western Health Board  
Northern Area Health Board  
North Western Health Board  
South Eastern Health Board  
Southern Health Board  
South Western Area Health Board  
Western Health Board

WHO Collaborating Centre for  
Oral Health Services Research University College Cork

Final Report – April 2005



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## Executive Summary

This report presents the results of a national oral health survey of adults with an intellectual disability in residential care in Ireland. It is the first such national survey. The report describes the oral health care needs for adults with an intellectual disability in residential care in Ireland in 2003. The results are of interest to the public, to policymakers and to service providers and will be of assistance in the evaluation of current oral health services and the planning of services for this group.

The specific objectives of the study were:

1. To conduct an assessment of oral health and treatment needs of adults with an intellectual disability in residential care
2. To measure current oral health care practices
  - Personal ability
  - Residential care policy (e.g. diet, smoking)
  - Level of involvement of carers
  - Training of carers
3. To measure the current level of service provision
  - Routine screening
  - Identification of pain (behaviour change)
  - Referral for treatment
  - Awareness of services e.g. Dental Treatment Services Scheme (DTSS)
4. To assess barriers to care
  - Residential care perspective
  - Proximity of clinics and DTSS surgeries
  - Domiciliary kits

For this survey 10 teams of trained and calibrated dentists and dental nurses examined 281 adults with an intellectual disability residing in 27 units spread all over Ireland. Carers of the examined residents completed an interview style questionnaire to assess individual oral health care practices. In addition as part of this study, the directors of all residential care units for adults with an intellectual disability in the Republic of Ireland were asked to complete a postal questionnaire to give an overview on dental service usage and barriers to care for this group.

It was found that the majority of residents have been in residential care for more than ten years. In addition to residents having an intellectual disability they also have a number of other disabilities including physical limitations, sensory disabilities, challenging behaviours, diabetes and epilepsy which may impact on their dental health and/or access to dental services.

Treatment of decayed teeth by extraction is more common among adults with an intellectual disability than in adults from the general population. This trend starts early in life and continues into adulthood. Although both dentate groups, adults with an intellectual disability and adults in the general population, had similar levels of oral health in terms of overall vDMFT (Decayed, Missing and Filled teeth), older adults (35+ years) with an intellectual disability were found to have more untreated decay and substantially more missing teeth than their adult counterparts in the general population.

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Loss of all natural teeth is much more common in adults with an intellectual disability than adults in the general population. Sixty one percent of adults with an intellectual disability in full time residential care aged 55+ years have no natural teeth compared to 41% of adults aged 65+ years in the general population. The majority of the adults with an intellectual disability who are missing all their own natural teeth do not wear dentures and have been assessed by the dentists as not being suitable for dentures. The impact of this on their quality of life is unknown but must be profound. A possible strategy to avoid this outcome would be early and regular screening of groups with special needs. This would allow for the early detection of disease so that other treatment options other than extraction could be considered. In addition, assumptions regarding the suitability for denture wearing and ability to benefit from dental treatment need to be explored and tested.

The vast majority of adults examined as part of this study had gingivitis (early gum disease). The severity of the gingivitis increased with age. Fifty two percent of the 55+ year old age group were found to have moderate to severe periodontal disease. A high prevalence (11% in the 35 – 54 year old age group) of a painful gum condition (acute necrotizing ulcerative gingivitis) was found. The majority of adults examined required professional cleaning of their teeth.

Regular oral screening of this group is again warranted in light of the high prevalence of oral mucosal lesions found in the study group. Twenty percent of the 35 – 54 year old age group were found to have these lesions. Three percent of this age group who were examined were found to have suspect oral cancerous lesions that required urgent referral for further review.

The majority of adults with an intellectual disability living in residential care do receive regular dental treatment or check ups. The majority receive their dental care from the health board dental service. The range of dental services available to this group in the health board varies widely around the country. Some health boards report having relatively good services, others reporting minimal care. Although the majority of units did not perceive access to dental services as a problem, this client group has a large amount of unmet dental treatment need. Overall at least 50% of the adults examined required some kind of dental treatment. It was found that the majority of this care could be delivered in the primary care setting. However a distinct subgroup of the population approximately twenty percent of the residents examined were assessed as requiring sedation and/or general anaesthesia for invasive dental treatments (secondary care). Presently the secondary care services are not comprehensive enough to cover this need. All of the health boards reported that they have limited access to secondary care facilities. To reduce the need for massive secondary care services prevention of dental disease must be adopted.

The data compiled from the two questionnaire surveys gives us an insight into the current oral health practices and access to dental treatment for this group of clients. The majority of residents need help to maintain adequate oral and denture hygiene. Yet only 12% of units had written guidelines on how to provide oral health care for clients and 66% of units reported that their staff had never received any kind of training in oral care. Many of the difficulties encountered by units in providing oral care for their clients relate to the clients disability and dependence on the care staff for oral care. Some of these concerns would be addressed by training and support of carers in oral hygiene methods for their client group.

Eighty percent of units reported a need for training of their staff in the provision of oral care. This provides a real opportunity for the introduction of an oral health education and

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promotion programme into residential units for adults with an intellectual disability.

In summary, this study highlights the need for the expansion of both primary and secondary dental services for adults with an intellectual disability in residential care in Ireland. In addition, training of care staff in oral health care for adults with an intellectual disability and oral health promotion programmes for units is urgently required.



# Oral Health of Adults with an Intellectual Disability in Residential Care in Ireland 2003

## Introduction

This report presents the results of a national oral health survey of adults with an intellectual disability in residential care in Ireland. It is the first such national survey. The report describes the oral health care needs for adults with an intellectual disability in residential care in Ireland in 2003. This description will include both the current oral health status of the population, treatment need requirements, current level of service provision and current oral health practices. In addition, barriers to the provision of dental care and the maintenance of oral health will be accessed. The results of this survey will aid in the future development of dental services for this vulnerable group.

## Importance of Oral Health

The importance of oral health, and the impact it has on overall health and quality of life is internationally recognised<sup>1</sup>. Oral health is "a standard of health of the oral and related tissues which enables an individual to eat, speak and socialise without active disease, discomfort and embarrassment and which contributes to general well-being"<sup>2</sup>. This should be a target for all individuals in our community.

## Who are and where are Adults with an Intellectual Disability?

There are approximately 25,416 people in Ireland with an Intellectual Disability<sup>3</sup>. Table 1 reports the degree and prevalence of intellectual disability in Ireland (all ages groups, 2004).

Table 1. Degree and prevalence of intellectual disability in Ireland (2004 data)<sup>3</sup>

	n	%
Mild	9011	35.5
Moderate	9587	37.7
Severe	3968	15.6
Profound	1050	4.1
Not verified	1800	7.1
<b>All levels</b>	<b>25416</b>	<b>100</b>

The majority of these individuals (62%) are living in a home setting with parents, relatives or foster parents. Thirty two percent are living in full-time residential care, mainly in community group homes, residential centres, psychiatric hospitals and intensive placements. This 32% (excluding under 16 year olds), approximately 7,730<sup>3</sup> adults with an intellectual disability in residential care was the target group for this survey.

## Adults with an intellectual disability in residential care

Clients in full-time residential care tend to be of an older age group and have a more severe

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disability than the group of residents living at home. Only 14.5 % of people with a mild intellectual disability live in full-time residential care but this increases to 45.5% in the case of those with a moderate, severe or profound disability. The total number of people with moderate, severe and profound intellectual disability has increased by 30% since 1974. This reflects both an increase in the growth of the general population over this period and an increase in the lifespan (as with the general population) of people with intellectual disability.

The age profile of this group is changing. For example, the proportion of people with moderate, severe and profound intellectual disability aged 35 years and over has increased from 29% in 1974 to 46% in 2004. As the age profile changes and many people with intellectual disability outlive their parents (carers at home) an increase in the demand for full time placements is being reported<sup>3</sup>.

### **What are the current dental services for this group?**

Appendix I contains a summary written by health board dental staff of the current dental services available for adults with an intellectual disability. Appendix I also contains a summary of services (mainly secondary care) available for this group at the two dental hospitals in the Republic of Ireland. In the vast majority of areas the main provider of primary care dental treatment for this particular group is the Health Board Dental Service. The range of dental services available varies widely around the country. Some areas report having relatively good services, others reporting minimal care. However, all health boards report difficulties in providing comprehensive care for this group. The main challenges reported were lack of manpower, resources and no or limited access to secondary care facilities i.e. general anaesthesia.

### **Who carried out this study and why was this study done?**

In 1998 the Department of Health and Children and the Health Boards funded a series of surveys of dental health as part of a contract for epidemiological services. The Oral Health Services Research Centre (OHSRC) in University College Cork won the contract to advise and assist the Health Boards in the design and conduct of these surveys involving both the general population and groups with special needs through a competitive tender process. The special needs groups to be surveyed was to be decided in consultation with the Health Boards and other interested parties. A consultation process began in 2000 between the project team – OHSRC (Appendix 2) and the Health Boards – User Group (Appendix 2) to decide on priorities for surveys of groups with special needs. During this consultation process it was decided to conduct a national survey to assess the oral health needs of adults with an intellectual disability in residential care in Ireland.

### **Background**

Information on the oral health of adults with special needs in Ireland is limited. More extensive data are available on children with intellectual disability. In the recent ‘National Survey of the Oral Health of Children attending Special Needs Schools 2002’<sup>4</sup> it was found that children with special needs had similar levels of oral health but less fissure sealants placed and more missing teeth than the general population. Treatment needs for this group of children was high but consisted mainly of simple routine treatment that could be carried out in the primary care setting.

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Information both internationally and nationally is particularly deficient for adult groups with special needs including adults with an intellectual disability. Surveys in other countries have shown this group to receive less oral health care, often of a lower quality than the general population and tend to have more extractions, poorer oral hygiene and less fillings<sup>5,6</sup>. In an Irish context in 1985 and in 1990, the dental treatment needs for adults with an intellectual disability in Cork were described<sup>7,8</sup>. The authors reported a need for more organised dental services in Ireland for the purpose of providing comprehensive dental care for persons with disability. They concluded that the majority of people with disabilities could be treated successfully in the dental surgery under local anaesthesia and /or conscious sedation<sup>8</sup>. However, they found that there is a small but distinct group of people with disabilities who in addition, often have handicapping medical conditions and /or who are extremely apprehensive that dental treatment under general anaesthesia is the only option. In 1987, Costello looked at the dental health status of children and adults with intellectual disability in Galway. Costello found that a high number of missing teeth, high level of periodontal disease and a high unmet need for dentures amongst the adult population surveyed. He reported that the bulk of treatment needs could be treated under primary care conditions<sup>9</sup>.

During the consultation process, it was reported by the health board dental staff to the User Group (Appendix 2) that a service was being provided although limited in most areas to adults with an intellectual disability. However, little was known about their oral health needs and it was felt that in order to improve and expand the service for this group a survey of their oral health needs should be conducted. In order to make the survey manageable and not to impact hugely on direct service provision, it was decided to target adults in full-time residential care only. Adults in full-time residential care were known to have a more severe disability and might therefore experience more barriers to care than clients who reside in the community. A recent survey of the attitudes, knowledge and behaviour of groups with special needs towards oral health in Ireland found that the degree of disability was identified as the determining factor in the ease of use of the dental services<sup>10</sup>.

### What will this survey tell us?

The aim of this study was to assess the oral health care needs among adults with an intellectual disability in residential care in Ireland.

The specific objectives of the study were

1. To conduct an assessment of oral health needs of adults with an intellectual disability in residential care
2. To measure current oral health care practices
  - Personal ability
  - Residential care policy (e.g. diet, smoking)
  - Level of involvement of carers
  - Training of carers
3. To measure the current level of service provision
  - Routine screening
  - Identification of pain (behaviour change)
  - Referral for treatment
  - Awareness of services e.g. Dental Treatment Services Scheme (DTSS)

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4. To assess barriers to care

- Residential care perspective
- Proximity of clinics and DTSS surgeries
- Domiciliary kits (*This information has been gathered in a previous survey*)

5. To communicate the findings of the study to decision makers at departmental and service level.

In order to achieve the above aims the study was designed in two parts. The first part involved a clinical oral examination (Appendix 3) on a random sample of adults with an intellectual disability in residential care in Ireland in units with ten or more clients.

To assess individual oral health care practices the 'regular carer/ team leader' of each adult completed a questionnaire (Appendix 4), prior to the clinical examination of that adult. The second part of the survey was designed to capture information on dental service usage at residential unit level. The directors of all residential care units for adults with intellectual disability in the Republic of Ireland were asked to complete a postal questionnaire (Appendix 5).

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## Methods

### Protocol Design

In July 2002, following a series of meetings with the Health Board User group, the OHSRC project team circulated a draft protocol amongst the group for comments. Comments were fed back and the protocol modified accordingly. The questionnaires were piloted with the help of a number of Directors of Residential Centres (Appendix 2 for User Group and contributors). The final protocol was submitted to the ethics committee of the Cork Teaching Hospitals, it being a properly constituted ethics group. Ethical approval was received on 3rd September 2002 to conduct both the survey and the training course for the examiners and dental recorders.

### Consent and Emergency Cover

Although a sizeable proportion of adults with an intellectual disability would be capable of giving informed consent to participate in this survey, it was acknowledged from the planning stage that a certain percentage would not be capable of doing so. Presently in Ireland, there is no legislation on the topic of what to do when you cannot obtain an adult patient's consent to treatment. In conducting this survey a pragmatic humanist approach was adopted. That is, it was accepted that as the aim of this survey was to carry out a needs assessment for planning a dental service for this group it would be wrong not to conduct the study or to exclude individuals from participating if they were unable to give their own consent. In the long term, all adults in this group should be expected to benefit from the development of the dental services for this group. However, it was felt that every individual who participated in the survey should receive some kind of individual benefit. Therefore, written assurances were received from all participating Health Boards that any individual examined in the survey who was found to have pain, sepsis or a suspect oral mucosal lesion would be referred for care. In addition, as this group are considered vulnerable and in light of past abuse cases it was considered essential that families or next of kin of the individual should be informed that the survey was taking place and asked for their agreement or assent to the individual participating. In summary given the motivation for the study and the potential gain to participants the service and research teams and the ethic committee were satisfied with the consent/assent approach adopted.

### Data Protection

The data protection licences of the health boards and of University College Cork were extended to include survey data. The survey complied with the requirements of Data Protection Act 1988, Data Protection (Access Modification)(Health) Regulations, 1989, (S.I. No.82 of 1989), Data Protection Act 1988, Data protection (Access Modification)(Social Work) Regulations, 1989, (S.I. No.83 of 1989) and the Council Directive on the Protection of Individuals with Regard to Processing of Personal Data (Directive 95/46/EC)(W).

### Database Collection

In 1995 the Department of Health and Children established a National Intellectual Disability Database<sup>3</sup> to provide accurate information for planning services for people with intellectual disability. The database is organised by the Health Research Board<sup>3</sup>. The primary purpose of the database is for planning service developments, prioritising service

needs and assisting in resource allocation decisions at a national, regional and local level. Unfortunately, information on future and current dental service needs by the registered individuals is not collected separately from medical services for this database. Statistical information regarding numbers and profile of individuals is available on approval for research use but this information is anonymous information from the database. Hence, the required information for example names, addresses or telephone numbers of individuals which were required in order to conduct this survey were not available through this route. Therefore, as part of this research work a database of adults aged 16 years and over in full time residential care in 2002 was compiled. Adults in any type of residential care were included – larger residential units, small community housing units and some hospitals including psychiatric hospitals.

### Compilation of database

It was decided in conjunction with the health boards that this survey would be limited to adults (16 years of age plus) in full-time residential care. Therefore the results of this study are applicable only to a subset of the whole population of adults with an intellectual disability. The initial data required to draw up the sampling frame for the survey was collected by each community care/dental area on a paper database collection sheet (Appendix 6 for database collection form). The information requested for each residential unit were; the unit's contact details (name, address, contact person) and the number of residents of each gender by ten year age bands (16-24, 25-34, 35-44, 45-54, 55-64, 65+). However the gender breakdown in each of the age bands proved difficult to obtain and therefore only the gender breakdown for the unit overall was obtained. The health board dental staff in each community care/dental area agreed to collect their local data. In order to assist the health boards in the collection of the data a sample frame was drawn up initially using information on units from the 'Directory of Services – The National Association for the Mentally Handicapped of Ireland'<sup>12</sup>. Each Health Board was asked to contact each residential unit in their area, verify that it was actually a full time placement unit, verify numbers in each unit and to add any units not on the initial database. Once all the information was received back in the OHSRC, information was compiled and circulated again to the Health Boards for final validation. Some of the problems encountered were that workshops were included and units were found to have moved or closed. The information required was not easily accessible in some areas and although each community care area was looking after a relatively small number of units, to compile the full database including validation checks took four months (from July – October 2002).

### The Sample

All Health Boards with the exception of the North Eastern Health Board participated in the study. The North Eastern Health Board were unable to participate in this survey because they were unable to give the commitment for emergency cover due to inadequate resources and facilities particularly access to secondary care i.e. general anaesthesia backup. Each health board provided information on the size (number of clients), age and gender profiles of each residential care unit in their area. The sample frame (excluding the North Eastern Health Board) consisted of 96 units with 10 + residents with a total reported population of 4,919 of which 31.4% were 16-34 years of age, 45% were 35-54 years of age and 23.5% were 55+ years of age. 49.3% of residents were male and 50.7% female. There were 323 units where the number of residents was less than 10 people with total reported population of 957 individuals. Following study of the sample frame, a pragmatic approach was taken to sampling. It was decided in conjunction with the Health

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Boards to confine clinical examinations to those residents in units of 10 residents or greater. This was decided to keep the survey to manageable proportions. Clinical examinations were conducted in the units. The more residents examined in the same unit on the same day, the more cost effective the survey. In addition, because of the difficulty in accessing adequate numbers in narrow age bands in this population, it was decided to include all adults age 16 years and over in the sampling frame in the following age bands 16-34 (younger adults), 35-54 (middle aged adults) and 55+ (older adults) years. This is different from the contemporaneous 2002 adult survey of the general population<sup>13</sup> in which only adults in the following age groups were eligible to participate 16-24, 35-44 and 65+ years. The expected response rate was unknown and it was not possible to estimate what proportion of this group would accept a full clinical examination. Therefore the sample size was based on the worst expected case scenario i.e. a response rate of 50%. To achieve a sample of 60 adults in each of the three age groups the total target sample size was 360. The numbers sampled in each health board were chosen to ensure proportional representation across health boards in each age group, and to ensure that the proportion of males to females in the total sample reflected that of the sampling frame (i.e. was balanced). 27 centres (with 10+ residents) were randomly selected (by computer programme) for clinical examinations. If the centre had more residents than were required to be examined, residents were randomly selected by computer programme (or alternatively if not available names were drawn out of a hat) for issue of consent forms.

Each residential care unit selected to participate in the survey was asked (director of the unit) prior to the conduct of examinations for permission to conduct the survey and to distribute consent/assent forms and to complete the questionnaires (Appendix 4).

Once the residents had been randomly selected to participate (if applicable) the director of the unit was asked to determine which individuals were capable of giving their own consent. For these residents the consent form was read out to the individual prior to them being invited to sign it. Although these individual were capable of giving their own consent, assent was also obtained from their next of kin prior to the examination taking place.

### **Training of examining teams**

It was decided by the Health Board User Group that Senior Dental Clinical Surgeons (Special Needs) were the most suitable personnel for carrying out the fieldwork for this survey. Each health board nominated one examiner and dental recorder (dental nurse) to conduct the fieldwork in their health board area (Appendix 2).

Training of examiners and dental recorders took place over a two-day period in the Oral Health Services Research Centre in November 2002. The group of examiners were already highly experienced in providing dental treatment for this group. Therefore it was considered unnecessary and inappropriate to involve actual adults with an intellectual disability in the training course. Training in clinical criteria took the form of lectures using clinical slides and examination of conditions on screened adults from the general population. During the training course intra and inter examiner agreement was recorded and examiners adjusted accordingly.

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## Conduct of fieldwork

### Clinical examinations

All examinations took place at the residential care units during January – March 2003. The clinical record form and codes for conditions are contained in Appendix 3. The following conditions were examined denture status, denture hygiene, dental trauma, periodontal health, lesions of the oral mucosa, dental caries (decay), the individuals manageability (co-operation) for treatment and treatment need for the various conditions and overall treatment need. Lighting was provided by a portable dental light source ('Daray' lamp). Sterile pre packed standard mouth mirrors and CPITN probes were used for each examination. A CPITN probe was used only to remove food debris from teeth. Disposable headrests were used and the examination area was wiped down with disinfection wipes between examinations. If possible protective eyeglasses were placed on each subject before the oral examination commenced (alternatively, the subject could retain his or her own spectacles if desired). A strict cross infection control protocol was enforced.

The regular carer (or director of unit) of a selected client was asked to be present during the examination and to complete a pre assessment interview type questionnaire (Appendix 4) prior to the conduct of the clinical examination. The purpose of this questionnaire was to assess the physical, sensory and challenging behaviour of a client and to collect other information the examiner should be aware of prior to conducting the clinical examination. Information regarding the current oral health care practices of the individual client was also collected.

If necessary, to ensure the safety of the resident, the examiner used an appropriate level of physical intervention in order to examine the individual. The level of physical intervention used was no more than that required by the normal carer to perform daily activities (e.g. shaving or brushing hair). The level of physical intervention used was under the direction of the normal carer. Administration of sedation and other medication to restrain the individual was not used in this survey. In view of the difficulties experienced both by the examiner and the patient when examining this group of adults no intra/inter examiner agreement was measured in the field.

### Data Collection

Data were collected on paper clinical record sheets. All clinical data and completed questionnaires were sent to the Oral Health Services Research Centre. Coding of open ended questions was carried out. Both the clinical data and the questionnaire data was double-data entered on an Excel spreadsheet and crosschecked by a data entry company. It was exported to SAS ® (Version 8.01) statistical package for analysis.

### Presentation of Results

The results are presented by age group. As not all residents had complete clinical and questionnaire data, the number of respondents for tables and figures vary. The number of respondents available is clearly indicated for each table and figure. In a number of tables the number of respondents in a particular age group can be less than 30, in these cases percentages should be read with caution. Rounding errors may occur in the calculation of percentage totals and indices.

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In this report comparisons have been made where appropriate between the results found for this survey of adults with an intellectual disability living in residential care in Ireland and the results found in a survey of the General Population of Irish Adults<sup>13</sup>. A number of differences between the surveys should be noted. Firstly as mentioned previously the age-bands used for the two surveys differ slightly. The first two age groups used in this survey (16-34, 35-54) represent a slightly older group of subjects than those used for the survey of the general population (16-24, 35-44), while the third age group (55+ compared to 65+) represents a slightly younger group. Secondly, the North Eastern Health Board area was not represented in this survey. Thirdly the results presented in the survey of the general population were weighted for a number of factors, the results in this survey are not weighted. As the two populations are not strictly comparable no formal statistical comparisons have been made between the two populations. However, the descriptive comparisons provide a general overview of the major differences between the two populations with respect to levels of oral health.

281 adults from 27 residential units took part in the clinical survey

## Results

### Response rates and number examined

A total of 362 adults with an intellectual disability in residential care were sampled from 27 residential units around Ireland. From these, 281 consents were obtained, giving a response rate of 78%(281/362). This was a higher response rate than anticipated and may demonstrate an interest in oral health care services among this group and/or their carers.

The distribution of the sample by age group and gender is shown in Table 2.

The number of residents examined was slightly lower in the older age group (55+years), with 81 subjects compared to 104 subjects in the middle age group (35-54 years) and 96 in the younger age group (16-34 years). In the overall sample there were 58% male and 42% female, this differs slightly from the gender proportion in the sampling frame which was 49% male and 51% female. In the first two age groups there were just over 50% males, but in the older age group 70% of residents were male. The reason for the imbalance in the older age group is not clear. During compilation of our database, it was only possible to collect the overall gender distribution of the unit. The gender distribution by age band was not available for many units. Possible reasons for a gender imbalance in the older age groups is that in the past some of the services particularly those run by religious orders provided residential services exclusively for males or females. While this no longer happens, many of these services still have a predominantly male or female population in the older age groups and our sample may have an over-representation from some of the previously male-dominated services. As accurate weighting factors were not available for age specific bands no weights have been applied to the results of this survey. However, as females generally have poorer oral health than males<sup>13</sup>, the overall results presented here may be an underestimate of the levels of dental caries and oral health conditions present in the 55+ age group of this population.

Table 2. Distribution of sample by age group and gender

Age group	Male n(%)	Female n(%)	Total n
16-34 years	52(54)	44(46)	96(100)
35-54 years	55(53)	49(47)	104(100)
55+ years	57(70)	24(30)	81(100)
<b>Total</b>	<b>164(58)</b>	<b>117(42)</b>	<b>281(100)</b>

Of the 281 residents participating in the survey, 251(89%) had complete examinations, 24(9%) had incomplete examinations and 6(2%) could not be examined, due to an inability to co-operate under the field conditions (Table 3).

*In addition to residents having an intellectual disability they also have a number of other disabilities which may impact on their dental health and/or access to dental services*

*The majority of residents have been in residential care for more than ten years*

**Table 3. Distribution of sample by examination status**

Age group	Complete n(%)	Incomplete n(%)	No exam n(%)	Total n
16-34 years	88(92)	6(6)	2(2)	96
35-54 years	89(86)	12(12)	3(3)	104
55+ years	74(91)	6(7)	1(1)	81
<b>Total</b>	<b>251(89)</b>	<b>24(9)</b>	<b>6(2)</b>	<b>281</b>

### Description of Population

Information on the prevalence of physical and sensory disabilities, challenging behaviours, diabetes and epilepsy was collected to provide the examining dentist with relevant information prior to examining the resident. This information was collected from the regular carer or supervisor on behalf of the resident examined. These data provide us with a general description of the kind of disabilities and conditions affecting this adult population in addition to their intellectual disability (Table 4). Thirty-three percent of the younger adults had physical limitations, as did 25% of adults in the middle age group and 32% of older adults. Sensory disabilities affected 24%, 18% and 25% of adults in the age groups respectively. The prevalence of challenging behaviour and epilepsy was highest among the younger adults (at 49% and 42% respectively), and decreased with age (44% and 31% respectively in the middle age group, 32% and 15% respectively in the older age group). Four percent of adults in the middle age group and 12% in the older age group had diabetes mellitus. Only 5% of adults in the 16-34 age group smoked, this rose to 17% for the 35-54 age group and to 33% in the 55+ age group. This information illustrates that in addition to residents having an intellectual disability, they have also a number of other disabilities or conditions. These may impact on their dental health and/or access to dental services.

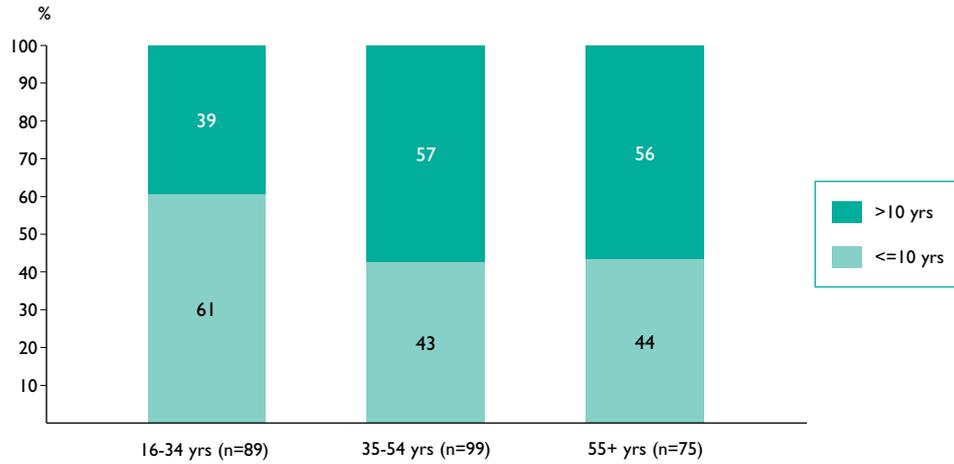
**Table 4. Disabilities and conditions affecting adults with an intellectual disability in residential care**

Condition	16-34 years		35-54 years		55+ years	
	n	% Yes	n	% Yes	n	% Yes
Physical limitations	96	33	102	25	81	32
Sensory disabilities	96	24	104	18	81	25
Challenging behaviours	95	49	102	44	79	32
Diabetes	96	0	104	4	81	12
Epilepsy	96	42	103	31	80	15
Smoker	94	5	100	17	78	33

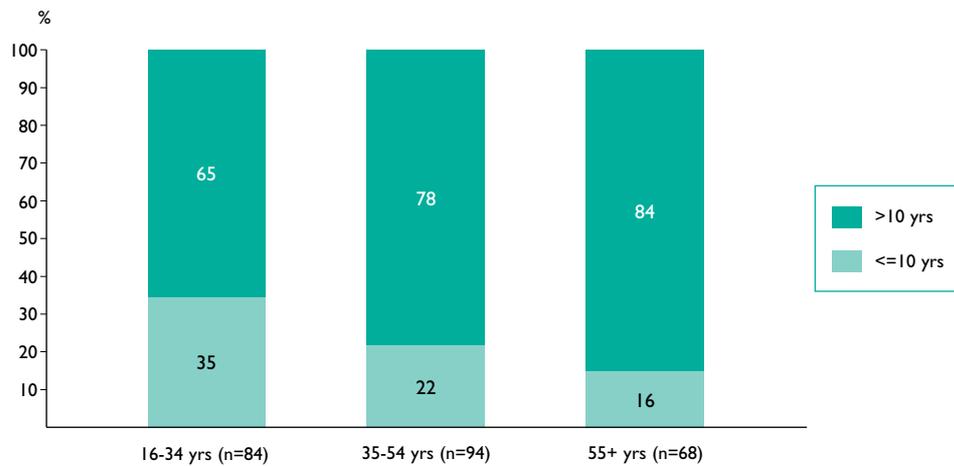
Figure 1 presents the number of years clients have been resident in their current unit while Figure 2 presents the total number of years in residential care. In the 16-34 age group 39% of adults have been resident in their current unit for more than 10 years, while just over

50% of residents in the other two age groups have been in their current unit for this length of time (Figure 1). Figure 2 shows that the majority of residents in all age groups have been in residential care for a total of more than 10 years.

**Figure 1. Number of years resident in current unit**



**Figure 2. Number of years in residential care**



The number of medications that residents were receiving is presented in Table 5. In the younger age group only 18% of adults were not receiving any medication, this reduced to 12% of adults in the middle age group and to 6% for the older adults. In all age groups the majority of residents were receiving no more than 5 different medications.

**Table 5. The percentage of all residents by number of medications receiving**

<b>Age group</b>	<b>n</b>	<b>0 %</b>	<b>1 %</b>	<b>2 %</b>	<b>3 %</b>	<b>4 %</b>	<b>5 %</b>	<b>6-10 %</b>	<b>10+ %</b>
16-34 years	90	18	19	11	12	11	3	23	2
35-54 years	102	12	17	19	18	11	10	12	3
55+ years	78	6	17	14	12	9	9	28	5

Often medications can cause dry mouth and some may have sugar added. Polypharmacy or taking a number of different drugs has a greater impact on salivary flow than single drug use. Generally the greater the number of drugs taken the greater the reduction in salivary flow. Once salivary flow rate is reduced below 50% of an individuals normal physiological flow rate, the effects on the dentition can be catastrophic as the protective properties of saliva are lost. Such reductions in salivary flow rate are associated with increase incidence of dental caries (decay), gingivitis, oral candida and difficulties in eating and speaking. Preventive and supportive oral health care is particularly important for such patients <sup>14,15</sup> . In addition, the number of clients taking medications reflects the complicated medical history of this client group.

## Levels of Oral Health in Adults with an Intellectually Disability in Residential Care

As this was the first national survey of its kind in Ireland, it was important to assess the current oral health status of the population. This baseline information on the oral health status of this group will allow us to monitor changes in their oral health in the future and to evaluate the effectiveness of any future oral health initiatives. In addition, assessment of their oral health status allows us to compare their oral health with the general population and other groups with special needs.

### Tooth loss, denture wearing and need for denture treatment

The retention of natural teeth is very important because of their role in the basic functions of daily living such as eating, speaking, smiling and laughing. When all teeth are lost there may be a significant effect on diet, nutrition, general well-being and quality of life<sup>13</sup>. In this section we will look at total loss of natural teeth (edentulousness), the number of natural teeth present, the wearing of dentures and the treatment need for dentures as assessed by the examining dentist.

### Total Loss of Natural Teeth - Edentulousness

The percentage of residents who were edentulous (that is with no natural teeth present) increased with age. Only 2% of 16-34 year olds were edentulous, this rose to 14% amongst the 35-54 year olds, and then increased dramatically to 61% for the 55+ year olds (Table 6). From Figure 3 we can see that edentulousness (total tooth loss) is more common in the adults with an intellectual disability than in the general adult population<sup>13</sup>. The difference of 2% between the two populations in the youngest age groups may be due to the group with an intellectually disability containing slightly older adults, up to 34 years of age compared to 24 years for the general population. A bigger difference is seen in the middle age groups with 14% of adults with an intellectual disability having no teeth at all (edentulous), compared to 1% of 35-44 represents an older selection of adults. Any age difference between the two groups is unlikely to produce such a marked difference between the two populations. Therefore it appears that the level of edentulousness (total tooth loss) is higher among adults with an intellectual disability. This is also supported by the fact that 61% of residents with an intellectual disability aged 55 + years had no teeth (edentulous) compared to only 41% of adults in an older group of 65+ years in the general population.

61% of residents aged 55 + years had no natural teeth

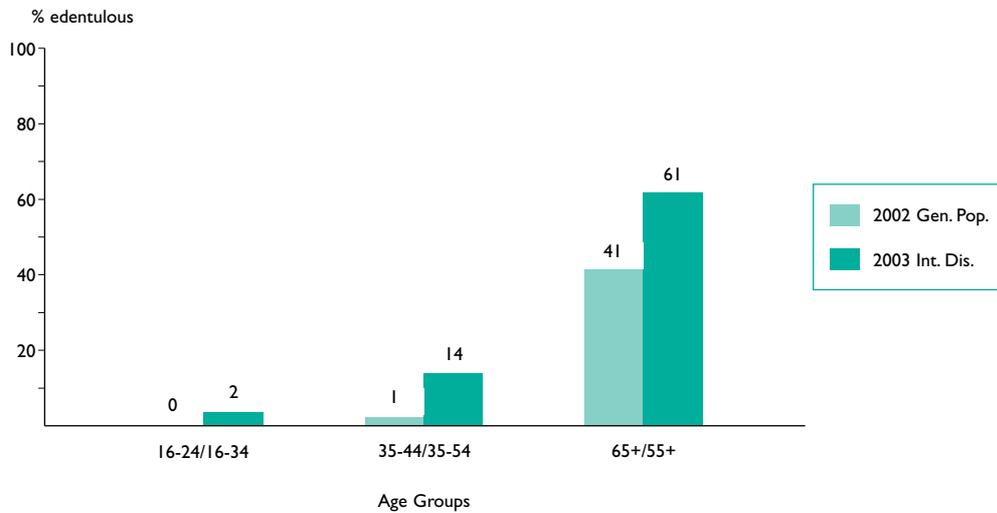
Loss of all natural teeth is much more common in adults with an intellectual disability than adults in the general population

Table 6. The percentage of adults with an intellectual disability who were edentulous (no natural teeth present)

Base : Dentate and Edentulous

Age group	n	% edentulous (no natural teeth)
16-34 years	94	2
35-54 years	101	14
55+ years	80	61

**Figure 3. The percentage of adults who were edentulous in the General Population 2002 and the Population with an Intellectual Disability 2003**



### Mean Number of Natural Teeth Present

The full complement of natural teeth in the mouth is taken to be 32, if the four wisdom teeth are included. However many adults do not possess wisdom teeth, for these adults a full complement of teeth is therefore 28. Table 7 presents the mean number of natural teeth present for all residents with an intellectual disability and for dentate residents (that is with at least one natural tooth present). As expected from the results presented for edentulousness (total tooth loss), the mean number of natural teeth for all residents decreased with age, from 27 for the younger adults, to 18 for the middle age group and then dramatically to only 4 for the older group. The mean number of teeth present among dentate adults also decreased with age from 27, to 21 and then to 10 in the age groups respectively.

**Table 7. The mean number of natural teeth present for all residents and for dentate residents**

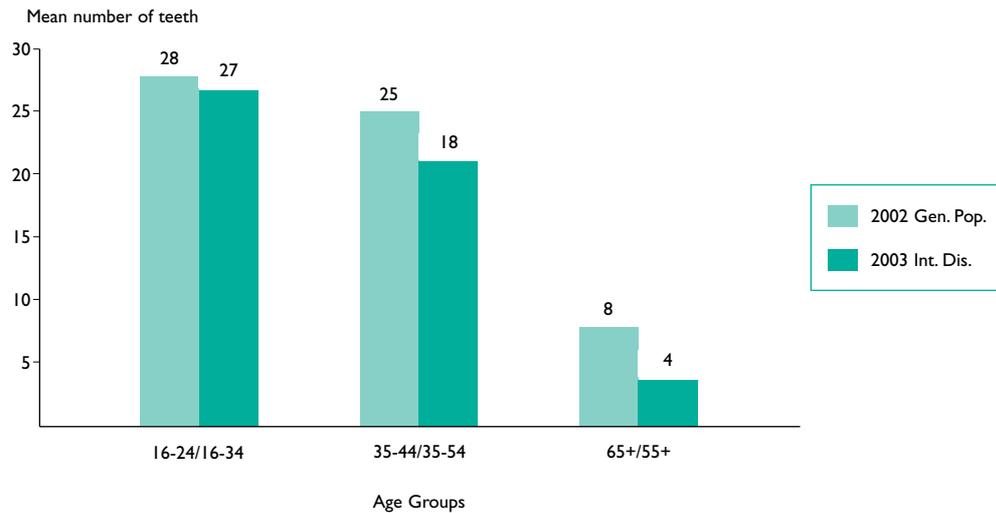
Age group	All (Dentate and Edentate)		Dentate	
	n	Mean(SD)	n	Mean(SD)
16-34 years	86	27(4.5)	85	27(3.5)
35-54 years	86	18(9.8)	76	21(7.6)
55+ years	73	4(7.1)	30	10(7.7)

*Adults with an Intellectual Disability have more missing teeth than adults in the general population*

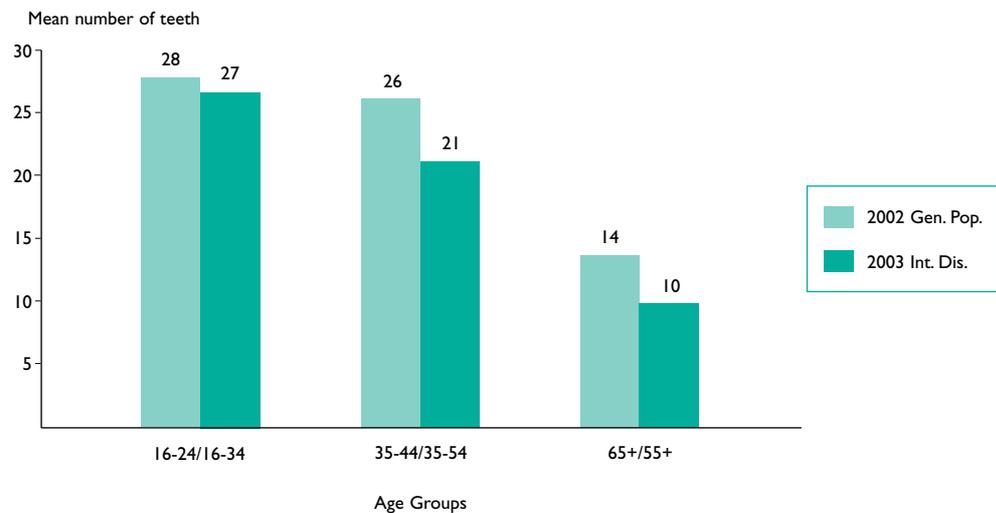
The fact that edentulousness (total tooth loss) is more common among the population with an intellectual disability than the general population is reflected again in Figure 4, which shows that the mean number of natural teeth present for all adults is lower in all age groups of the population with an intellectual disability, compared to the general population. However, as can be seen from Figure 5 the mean number of natural teeth present among dentate adults is also lower in the population with an intellectual disability compared to the

general population. Hence the lower mean number of teeth present for the group with an intellectual disability is not due only to higher levels of edentulousness (total tooth loss). The differences between the two populations are more marked in those aged 35 years or older.

**Figure 4. The mean number of natural teeth present for all subjects in the General Population 2002 and the Pop. with an Intellectual Disability 2003**



**Figure 5. The mean number of natural teeth present for Dentate subjects in the General Population 2002 and the Pop. with an Intellectual Disability 2003**



## Denture Wearing and the Need for Denture Treatment

Dentures are commonly worn when a person has a number of missing teeth. If all the teeth are missing in an arch then a full denture is usually worn. If only some teeth are missing then a partial denture can be worn. Table 8 presents the current levels of denture wearing among adults with an intellectual disability in residential care. The following notation has been used to denote the different combinations of full and partial dentures worn. F/F represents

subjects wearing full upper and lower dentures, F/- full upper denture only, -/F full lower denture only, P/P partial upper and lower dentures, P/- or -/P partial upper or lower denture only, P/F or F/P partial upper and full lower dentures or full upper and partial lower dentures.

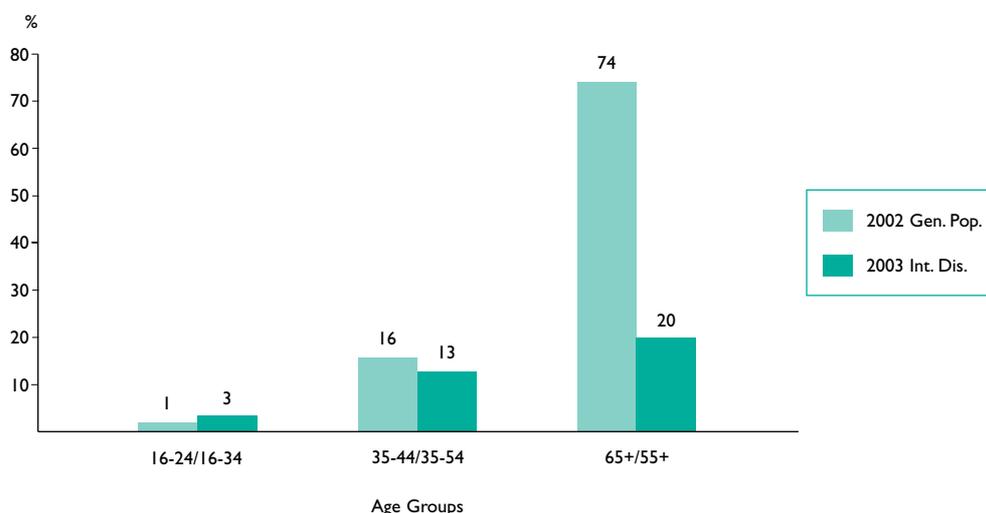
**Table 8. The percentage of residents wearing dentures**

Age group	n	Possessing but not wearing %	F/F	F/-	-/F	P/P	P/- or -/P	P/F or F/P	Total wearing dentures %
			%	%	%	%	%	%	
16-34 years	94	0	1	0	0	0	2	0	3
35-54 years	101	2	3	3	1	0	5	1	13
55+ years	80	4	10	6	0	1	1	1	19

**Base : Dentate and edentulous**

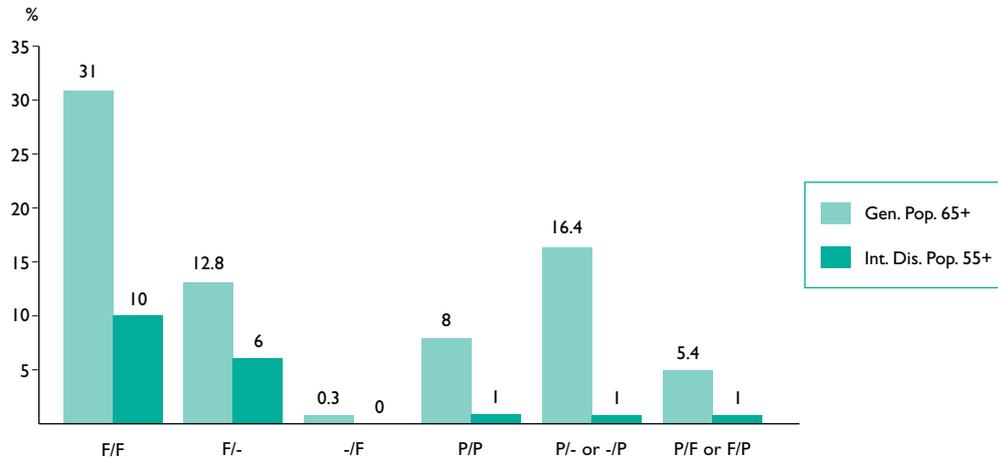
There were a small number of residents (2% of the 35-54 year olds and 4% of the 55+ year olds) who possessed a denture but who were not wearing them. Denture wearing was uncommon in the younger age group with only 3% wearing any denture. In the middle age group 13% of subjects were wearing dentures, of these 3% were wearing full upper and lower dentures, 4% had either a full upper or lower denture, 5% had a partial upper or lower denture and 1% had a combination of full and partial dentures. In the older age group 19% of subjects were wearing dentures, here mainly full dentures were worn. As can be seen from Figure 6 the percentages of adults wearing dentures are similar between the general population and adults with an intellectual disability in the younger and middle age groups<sup>13</sup>. However, there is a massive difference among the older adults with 74% of 65+ year olds in the general population wearing dentures compared to only 19% of 55+ year old adults with an intellectual disability. Full upper and lower dentures were worn by 31% of adults aged 65+ in the general population compared to only 10% of 55+ year olds in the population with an intellectual disability, 12.8% of 65+ year olds in the general population were wearing full upper dentures compared to 6% of the adults with an intellectual disability (55+ year olds), 8% compared to 1% were wearing partial upper and lower dentures, and 16.4% versus 1% were wearing either a partial upper or lower denture, in the populations respectively (Figure 7).

**Figure 6. The percentage of all subjects wearing dentures in the General Population 2002 and the Pop. with an Intellectual Disability 2003**



The majority of adults with an intellectual disability who have no natural teeth present do not wear any dentures

**Figure 7. Percentage of 65+ year olds in the General Population 2002 and 55+ year olds in the Pop. with an Intellectual Disability 2003 wearing dentures**



It may be expected that the majority of edentulous adults (adults with no natural teeth present) would be wearing full upper and lower dentures. This would indeed seem to be the case in the general population in 2002 but not for the adults with an intellectual disability in 2003 (Table 9). Only 21%(3/14) of edentulous residents aged 35-54 and 16%(8/49) aged 55+ were wearing full upper and lower dentures compared to 63% and 75% respectively in the general population. Full upper dentures only were being worn by 14%(2/14) of 35-54 year olds and 8%(4/49) of 55+ year olds in the edentulous population with an intellectual disability, compared to 37% and 10% respectively in the edentulous group of the general population. In summary, it was found that for the majority of adults with an intellectual disability who were edentulous (had no natural teeth present) they did not wear any dentures.

**Table 9. The percentage of residents wearing dentures**

Base : Edentulous

Age group	n	No Denture %	Possess but not wearing %	F/F %	F/- %	-/F %	P/P, P/- or -/P %	P/F or F/P %
<b>Int. Dis. 2003</b>								
16-34 years	2	50*	0	50*	0	0	0	0
35-54 years	14	57*	0	21*	14*	0	0	7*
55+ years	49	69	6	16	8	0	0	0
<b>Gen Pop 2002</b>								
35-44 years	9	0		63*	37*	0	0	0
65+ years	292	6		75	10	0	9	0

\* Percentages to be read with caution as n<30

The adults with an intellectual disability were assessed for denture need taking into account the individual's condition and ability to benefit from treatment. It is interesting to look at the level of denture need recorded for the edentulous adults who did not possess a

denture, this is shown in Table 10. Of the 43 edentulous residents not possessing any denture, 14(33%) were assessed as requiring a full set of upper and lower dentures, with the majority of these in the 55+ age group.

**Table 10. The assessment of denture need**

**Base : Edentulous residents not possessing dentures**

Age group	n	None (no denture) n(%)	Full (Full denture) n(%)
16-34 years	1	1 (100*)	0
35-54 years	8	5 (63*)	3 (38*)
55+ years	34	23 (68)	11 (32)

\* Percentages to be read with caution as n<30

The pattern of denture wearing among dentate adults in the population with an intellectual disability is summarised in Table 11. Again denture wearing is uncommon in the younger age group. In the 35-54 age group 2% of dentate adults possessed dentures but were not wearing them, and 8% in total were wearing some form of denture, this compares to 11% of 35-44 year olds in the general adult population<sup>13</sup>. In the older age group 12% of dentate adults were wearing dentures, which is also lower than the corresponding group in the general population where 35% of dentate 65+ year olds were wearing dentures<sup>13</sup>.

**Table 11. The percentage of residents wearing dentures**

**Base : Dentate**

Age group	n	Possessing but not wearing %	F/- %	-/F %	P/P %	P/- or -/P %	P/F or F/P %
16-34 years	92	0	0	0	0	2	0
35-54 years	87	2	1	1	0	6	0
55+ years	31	0	3	0	3	3	3

The assessment of denture need for all dentate residents is presented in Table 12. Only 5% of 16-34 year olds and 18% of 35-54 year olds were assessed as requiring dentures compared to 45% of 55+ year olds. In the older group 23% of adults were assessed as needing either partial dentures or a full upper or full lower denture only and a further 23% of adults required a clearance of the remaining teeth and placement of a full set of upper and lower dentures.

**Table 12. The assessment of denture need**

**Base : Dentate**

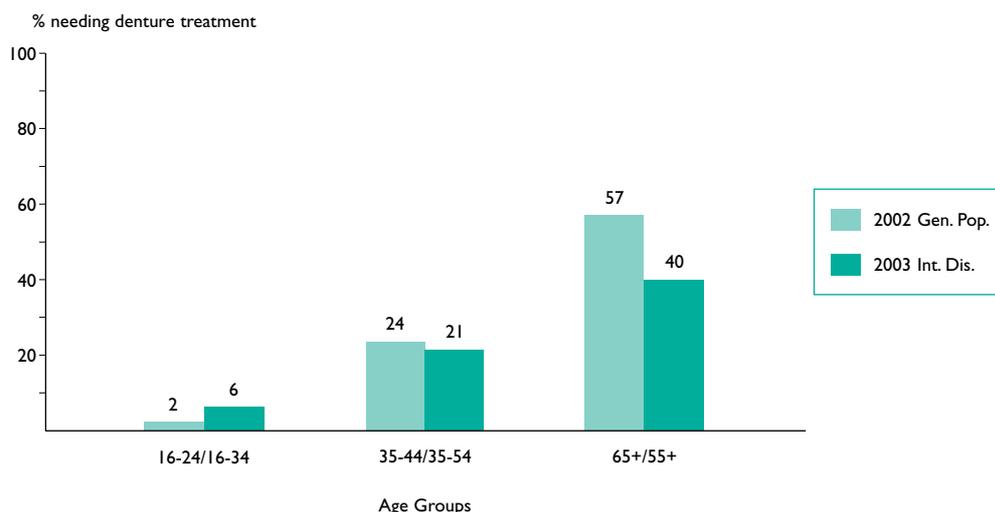
Age group	n	None %	Partial %	Full %
16-34 years	92	95	4	1
35-54 years	87	82	18	
55+ years	31	55	23	23

Table 13 summarises the overall assessment of denture need for all residents (dentate and edentulous) in the population with an intellectual disability and Figures 6 and 7 give a comparison with the results found for the general population<sup>13</sup>. Above we reported that the level of denture wearing is substantially higher among older adults in the general population (aged 65+) than in the population with an intellectual disability (aged 55+), however, the assessment of need for dentures is also greater for the general population. Fifty-seven percent (57%) of adults (age 65+) in the general population were assessed as requiring dentures compared to 40% in the 55+ age group of the group with an intellectual disability (Figure 8). The higher percentage recorded in the general population could be in part due to the fact that this is a slightly older group of subjects, but it may also suggest that adults with an intellectual disability, due to the nature of their disability, are less likely to tolerate this kind of treatment. The major difference in the assessment of the type of denture treatment needed is in the need for partial dentures (this includes the need for a partial upper and or partial lower denture, and a full upper only or full lower only denture), with a higher percentage of older adults in the general population assessed as requiring partial dentures at 24% compared to 10% of adults with an intellectual disability (Figure 9).

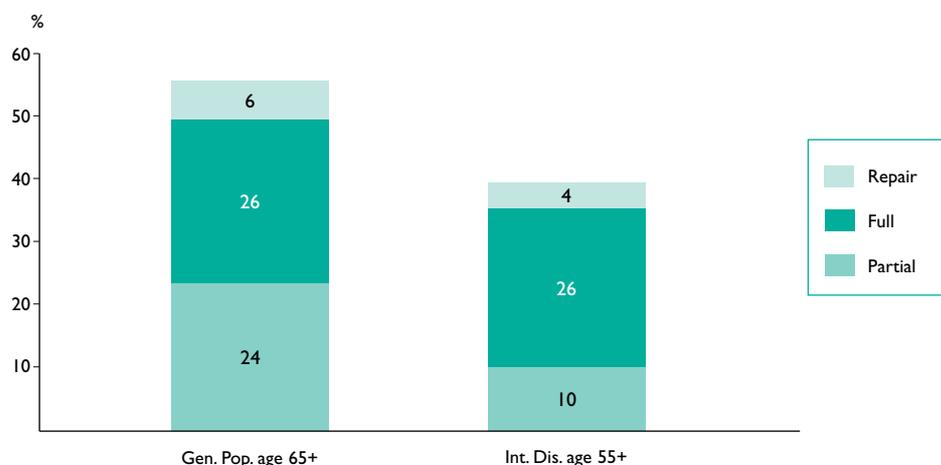
**Table 13. The percentage of residents assessed as in need of denture treatment**  
Base : Dentate and edentulous

Age group	n	No need	Partial denture	Full denture	Repair of existing denture
		%	%	%	%
16-34 years	94	94	4	2	0
35-54 years	101	79	17	4	0
55+ years	80	60	10	26	4

**Figure 8. The percentage of adults assessed as in need of denture treatment in the General Population 2002 and the Pop. with an Intellectual Disability 2003**



**Figure 9. The type of denture treatment needed for General Population (Age 65+, 2002) and Pop. with an Intellectual Disability (Age 55+, 2003)**



Denture bearing areas were assessed as to whether the denture was having a destructive effect on the tissues. The conditions assessed included gum stripping, tilting of teeth, caries on adjacent teeth, denture stomatitis and a flabby ridge. The results are summarised in Table 14. Of the 32 subjects wearing dentures, 12(38%) had dentures affecting the oral mucosa. The majority of these subjects (9 out of 12) were edentulous subjects wearing full dentures. The other two subjects (one edentulous and one dentate) were wearing partial dentures.

**Table 14. The number and percentage of residents wearing dentures that were affecting the oral mucosa. Base : Dentate and edentulous residents wearing dentures**

Age group	n	Affecting n(%)
16-34 years	3	1(33*)
35-54 years	13	5(39*)
55+ years	16	6(38*)

\*Percentages to be read with caution as n<30

The denture hygiene for residents wearing dentures was assessed as poor, satisfactory or in urgent need of cleaning. No resident had dentures in urgent need of cleaning. However, 12 out of 30 denture wearing adults (40%) had poor denture hygiene. (Table 15).

**Table 15. The hygiene status for residents wearing dentures. Base : Dentate and edentulous residents wearing dentures**

Age group	n	Poor n(%)	Satisfactory n(%)
16-34 years	3	1(33*)	2(67*)
35-54 years	11	4(36*)	7(64*)
55+ years	16	7(44*)	9(56*)
Total	30	12(40*)	18(60*)

\*Percentages to be read with caution as n<30

40% of residents wearing dentures had poor denture hygiene

*Treatment of decayed teeth by extraction is more common among groups with special needs. This trend starts early in life and continues into adulthood*

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## Summary and Comment

We have reported that levels of edentulousness (no natural teeth present) are higher among adults with an intellectual disability in full time residential care and that the number of natural teeth present among dentate adults of this group is lower, when compared with adults in the general population. Clearly adults with an intellectual disability have extractions more frequently than in the general population. In a recent survey of children attending schools designated as special needs by the Department of Education and Science, the children were found to have similar levels of decay experience to the general population, however these decayed teeth were more commonly extracted than filled among the children with special needs<sup>4</sup>.

The data from the two surveys indicate that treatment of decay by extraction is more common among groups with special needs. This trend starts early in life and continues into adulthood.

A possible strategy to avoid this outcome would be early and regular screening of groups with special needs. Early detection of disease risk allows application of simple preventive techniques. Early detection of disease permits use of simple restorative techniques. Both types of treatments take less time and are more easily tolerated than treatment of advanced disease. Treatment of advanced disease among this group often requires secondary care services. Currently these secondary care services are not widely available and in many cases are limited to treatment by extraction. Further development should be supported by training in the care of groups with special needs for the general dental practitioner.

Early prevention of disease among this group may avoid the need for general anaesthesia to facilitate treatment of more advanced disease later on. All general anaesthetics carry a risk of morbidity or mortality. However as many people with an intellectual disability have in addition complicated medical conditions the risk is increased.

The impact of tooth loss on adults with an intellectual disability must be profound. A large percentage of this group are edentulous, do not wear dentures and have been assessed by the dentist as not being suitable for dentures. There is currently no remedy for this situation, it is too late to help this group. Lessons need to be learned to avoid perpetuating such an undesirable outcome for future generations of people with an intellectual disability. Further work is needed to determine the impact of edentulousness without dentures on the quality of life of adults with an intellectual disability. In addition, assumptions regarding the suitability for denture wearing need to be explored and tested.

## Caries Levels and Treatment Need

In this section the level of dental caries (decay) among adults with an intellectual disability living in residential care in Ireland will be described. The mean number of decayed (including both cavitated and visual decay), missing (all reasons) and filled teeth (vDMFT) will be presented.

Reported caries (decay) will include both ‘cavitated decay’, where it is possible to confirm cavitation to dentine by placing a probe in the cavity and ‘visual decay’, non cavitated dentine caries, where the caries (decay) is visible as a shadow under the enamel. Visual decay is included in the reported decay levels of this population in addition to cavitated decay to give a more accurate estimate of the treatment needs of the population under study. If an adult or child with visual caries had a course of dental treatment the visual caries would be assessed as requiring the treatment of a filling.

Table 16 shows caries at visual plus cavitation level (mean vDMFT) and the contribution to overall mean vDMFT of the vDT, MT and FT components. As caries is a cumulative condition, caries levels increase dramatically with age. In the 16-34 year old age group the mean vDMFT was 6.7, the 35-54 year olds recorded a mean more than double this of 16.2, and for the 55+ year olds the mean vDMFT rises to 28.1.

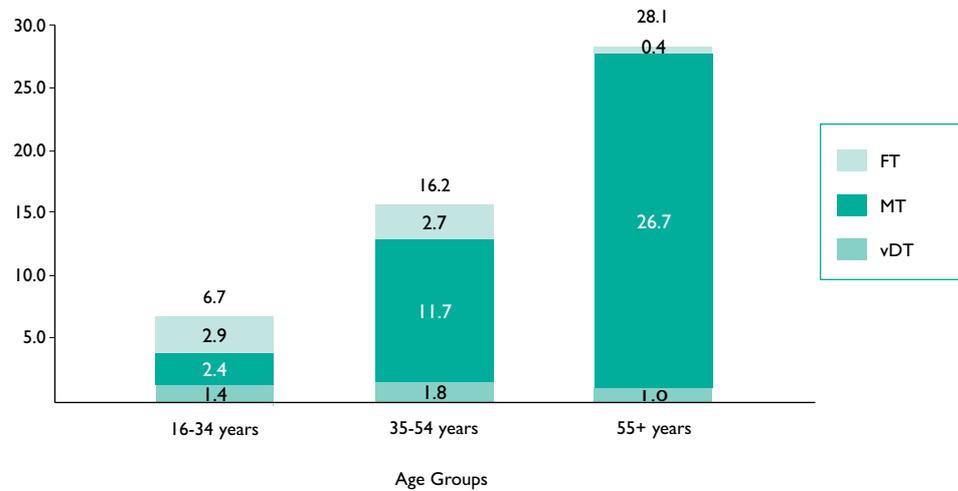
**Table 16. The mean vDMFT, and the mean and percentage of the total vDMFT that is attributable to the decayed (vDT), missing (MT) and filled (FT) components**

Base : Dentate and Edentulous

Age group	n	Mean vDMFT(SD)	Mean vDT	Mean MT	Mean FT	% vDT	% MT	% FT
16-34 years	86	6.7(6.8)	1.4	2.4	2.9	21	36	43
35-54 years	86	16.2(9.3)	1.8	11.7	2.7	11	72	17
55+ years	73	28.1(5.8)	1.0	26.7	0.4	4	95	1

The youngest age group has the highest percentage attributable to decayed teeth (vDT) at 21% compared to 11% for the middle age group and 4% for the older group, and also the highest percentage attributable to filled teeth (FT) at 43% compared to 17% and only 1 % in the other groups respectively. Correspondingly, the percentage attributable to missing teeth increased with age from 36% for the younger group, to 72% for the middle age group and to 95% in the older group (Table 16, Figure 10).

**Figure 10. The components of mean vDMFT for all residents**



*Although both dentate groups had similar levels of oral health (overall vDMFT), older adults (35+ years) with an intellectual disability were found to have more untreated decay and substantially more missing teeth than their adult counterparts in the general population*

As reported above, the level of edentulousness (no natural teeth present) was found to be higher in the population of adults with an intellectual disability than in the general population. Therefore, with respect to the level of caries present between the two populations comparisons will be made between the dentate subjects only. These data are presented in Table 17. For the youngest adults in both surveys, the mean vDMFT is slightly higher in the group with an intellectual disability (6.4 vs 5.8). However, a slightly older group of subjects 16-34 year olds were examined in the survey involving adults with an intellectual disability compared to 16-24 year olds examined in the survey of adults from the general population. In the middle age group, we see a slightly lower mean vDMFT in the population of adults with an intellectual disability compared to the equivalent group in the general population (14.2 vs 15.3), despite this group being slightly older than the group in the general population (35-54 year olds compared to 35-44 year olds). The mean vDMFT for the 55+ year olds in the population with an intellectual disability was 23.7 compared to a mean vDMFT of 21.9 for the 65+ year olds in the general population. In each of the age groups the percentage of vDMFT that is attributable to missing teeth is higher in the adults with an intellectual disability, while the percentage attributable to filled teeth is lower. The differences are more marked when comparing adults who are 35 years or older and confirm our earlier results that extraction of teeth is used more frequently among groups with special needs. In addition, it was found that adults with an intellectual disability aged 35+ years have a higher percentage of decayed teeth than those in the general population. Therefore, in summary, it was found that although both dentate groups had similar levels of oral health in terms of overall vDMFT count, older adults (35+ years) with an intellectual disability were found to have more untreated decay and substantially more missing teeth than their adult counterparts in the general population.

**Table 17. The mean vDMFT, and the mean and percentage of the total vDMFT that is attributable to the decayed (vDT), missing (MT) and filled (FT) components: Population with Intellectual Disability 2003 and the General Population 2002.**

Base : Dentate

Age group	n	Mean vDMFT	Mean vDT	Mean MT	Mean FT	% vDT	% MT	% FT
Int. Dis. 2003 16-34 years	85	6.4	1.5	2.1	2.9	23	33	45
Gen. Pop. 2002 16-24 years	1194	5.8	1.6	1.5	2.7	28	26	47
Int. Dis. 2003 35-54 years	76	14.2	2.0	9.1	3.1	14	64	22
Gen. Pop. 2002 35-44 years	967	15.3	1.4	5.5	8.4	9	36	55
Int. Dis. 2003 55+ years	30	23.7	2.4	20.3	1.0	10	86	4
Gen. Pop. 2002 65+ years	422	21.9	1.1	16.4	4.4	5	75	20

Following the assessment of caries the treatment need for each tooth was recorded. The clinical record form and the coding sheet can be found in Appendix 3. The examiners were instructed to assess the treatment need for each tooth recorded taking into consideration the patients overall condition and ability to benefit from the treatment. Although this might seem a vague instruction all the examiners were experienced dentists working for many years providing treatment to patients with special needs and make this kind of assessment every day in practice. In the younger age group 55% of examined residents were judged as requiring some kind of treatment for caries with an average of 4.1 teeth requiring treatment, slightly less adults in the middle age group were judged to require treatment (50%) and the average number of teeth involved was also lower at 3.6. The older age group had the lowest percentage of residents assessed as requiring treatment at 45%, however the average number of teeth involved was higher at 7.1. Fillings were judged to be the most commonly required treatment for those under 55 years of age, while extractions and advanced restorations were more commonly recommended for the older group. In summary, at least half of this client group required some form of basic dental treatment (Table 18).

**Table 18. The percentage of residents assessed as requiring treatment for caries and the mean number of teeth requiring treatment**

Base : Dentate and Edentulous

Type of treatment	16-34 yrs (n=86)	35-54 yrs (n=86)	55+ yrs (n=73)
% Any treatment	55	50	45
% Filling	33	36	15
% Fissure sealant	26	7	0
% Extraction	12	20	22
% Advanced restoration	6	7	23
% Other	0	0	1
Mean (SD) number of teeth requiring treatment	4.1(6.4)	3.6(6.7)	7.1(11.4)

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## Comparison of Treatment Need with the General Population

In the treatment of dental disease, there may often be a number of different treatment options for a patient. When the examiners were assessing treatment need in this survey and in the general population survey they took into consideration not only disease present but also the patients overall condition, ability to benefit from and under go the treatment procedures. Treatment options may vary from providing no treatment to simple procedures to more complex treatment. For example, if a patient has a missing tooth, treatment options may vary from carrying out no treatment, to filling the space with a denture (removable prosthesis), to providing a bridge (fixed prosthesis) or providing an implant. Obviously, more complex treatments may require a higher level of medical fitness and co-operation from the patient. Although no instructions were given to the examiners to choose simpler treatment options for this client group, it was expected because of the challenges in terms of co-operation for treatment and the risks for the clients in receiving some treatment (especially complex laborious procedures) that simpler treatment options might be chosen by the examiners than if they were examining adults from the general population. Therefore, it would not be reasonable to compare treatment needs between this population and the general population. Therefore comparisons between the two populations in terms of treatment needs will not be reported.

However, although both dentate groups, adults with an intellectual disability and adults in the general population, had similar levels of oral health in terms of overall vDMFT (Decayed, Missing and Filled teeth), older adults (35+ years) with an intellectual disability were found to have more untreated decay and substantially more missing teeth than their adult counterparts in the general population. Therefore, if purely normative need (based on disease levels only) was only considered, adults with an intellectual disability in residential care would have higher treatment needs than adults from the general population.

## Traumatized Incisors

The prevalence of dental trauma in Ireland is high compared to other countries. Approximately 24% of adults with an intellectual disability have experienced dental trauma. This is similar to the general population

Dental trauma can cause aesthetic, psychological, social and therapeutic problems. The majority of injuries involve the anterior (front) teeth and may lead to difficulty in eating and speaking and feeling embarrassed to smile or show the teeth<sup>16</sup>. No data is available on the prevalence of dental trauma in adults with an intellectual disability in Ireland. Data from studies conducted on children with special needs has showed that the prevalence amongst children to be in the range from 14% to 29%<sup>9,17,18</sup>. The prevalence of dental trauma in the general population of children and adults (16 –24 years olds) is particularly high in Ireland compared to other European countries<sup>19</sup>. The reason for this is unknown.

Upper and lower permanent incisors were examined for traumatic injury. The percentage of dentate adults with one or more permanent incisor affected by trauma was lowest in the 35-54 age group at 11% compared to 24% among the younger group and 26% in the older group. In the younger group the majority of traumatic injuries affected the upper permanent incisors, while upper and lower incisors were equally affected in the other two groups. (Table 19). In the adult survey of the general population<sup>13</sup> trauma was measured for the youngest age group (16-24 years) only, as measurement of these conditions is problematical for older age groups. The results would suggest that the prevalence of trauma is similar among young adults with an intellectual disability (16-34 years having 24% affected by trauma) and young adults in the general population (16-24 years, also having 24% affected by trauma).

**Table 19. The percentage of residents with at least one permanent incisor affected by trauma**  
Base : Dentate

Age group	n	Lower %	Upper %	Any %
16-34 years	90	4	20	24
35-54 years	79	5	6	11
55+ years	23	13*	13*	26*

\*Percentages to be read with caution as n<30

The distribution of residents according to the number of traumatised incisors is presented in Table 20. In the younger age group the majority of cases involve a single incisor, this is again similar to results found in the general population 13. Among the middle age and older adults approximately half of cases involve a single incisor.

**Table 20. The percentage of residents according to the number of traumatised incisors**  
Base : Dentate

Age group	n	0 %	1 %	2 %	3 %	4 %
16-34 years	90	76	17	4	1	2
35-54 years	79	89	6	3	1	1
55+ years	23	74*	13*	9*	0	4*

\*Percentages to be read with caution as n<30

A breakdown of trauma of the permanent incisors by category of trauma revealed that fractures involving the enamel and dentine were the most common type of injury in all age groups (Table 21). The usual treatment of choice for this kind of trauma when the fractured portion of the tooth is not available is the placement of a composite restoration. Only 12% of adults with an intellectual disability with trauma had an acid-etch composite compared to 30% of adults (16–24 year olds) in the general population with trauma.

**Table 21. The percentage of traumatised incisors according to the category of trauma**

Type of trauma	16-34 yrs	35-54 yrs	55+ yrs
Total number of traumatised incisors	34	16	11
% Discolouration	24	0	18*
% Fracture involving enamel/dentine	35	63*	45*
% Fracture involving enamel/dentine/pulp	0	0	27*
% Missing	21	13*	9*
% Acid-etch composite	12	13*	0
% Semi/Permanent restorations	0	0	0
% Denture	0	0	0
% Bridge	9	13*	0
% Implant	0	0	0

\*Percentages to be read with caution as  $n < 30$

Approximately half of the residents in each age group with traumatised incisors required treatment for their trauma (Table 22).

**Table 22. The number and percentage of adults with an intellectual disability with trauma of the permanent incisors by treatment need.**

Base : Dentate residents with trauma of the permanent incisors

Age group	n	No n(%)	Yes n(%)	Unknown n(%)
16-34 years	22	9 (41*)	12 (55*)	1 (5*)
35-54 years	9	5 (56*)	4 (44*)	0 (0*)
55+ years	6	2 (33*)	3 (50*)	1 (17*)

\*Percentages to be read with caution as  $n < 30$

Half of the residents with dental trauma required treatment for that trauma

## Periodontal Condition

There were three aspects to the examination for periodontal health i.e. gingival health, periodontal health and calculus. No probing of gingival tissues was carried out. The examination and criteria were similar to that used in the Special Olympics oral health periodontal assessment<sup>20</sup>. The clinical record form and coding sheet are contained in Appendix 3. A summary of the results is given below.

### Gingival health

The gingival health of the residents have been summarised as healthy (all gingival have normal stippled ‘orange peel appearance’), not healthy (not completely healthy but not affected by moderate/severe gingivitis) or having moderate/severe gingivitis (3 or more index teeth with moderate/severe gingivitis). The results are presented in Table 23.

Table 23. The percentage of residents according to Gingival Health

Base : Dentate

Age group	n	Healthy %	Not healthy %	Moderate /severe %
16-34 years	91	0	66	34
35-54 years	83	6	42	52
55+ years	29	0*	41*	59*

\*Percentages to be read with caution as n<30

With the exception of 6% of the adults in the 34-55 year group, all adults had gingivitis present to some extent, with the severity of gingivitis increasing with age. In the 16-34 year olds 66% of residents had unhealthy gingival and 34% had moderate to severe gingivitis. Just over 40% of adults in the other age groups had unhealthy gingival, with 52% of 35-54 year olds and 59% of 55+ year olds having moderate to severe gingivitis.

### Periodontal Health

Each adults periodontal tissue health was summarised as healthy, not healthy or having moderate/severe periodontal disease on one or more index teeth. As for gingivitis, the extent of periodontal disease increased with age (Table 24). In the youngest group 20% of adults had no periodontal disease, compared to 13% in the 35-54 year olds and 3% in the 55+ years old age group. Moderate to severe periodontal disease was reported for 16% in the younger group compared to 45% of the 35-54 year olds and 52% of the 55+ year olds.

Table 24. The percentage of residents according to Periodontal Health

Base : Dentate

Age group	n	Healthy %	Not healthy %	Moderate /severe %
16-34 years	91	20	64	16
35-54 years	83	13	42	45
55+ years	29	3*	45*	52*

\*Percentages to be read with caution as n<30

All adults had gingivitis present. The severity of the gingivitis increased with age

52% of the 55+ year old age group were found to have moderate to severe periodontal disease

## Calculus

Calculus (or tartar) is calcified plaque (bacteria) and is often present when tissues are diseased. Part of the treatment for gingivitis and periodontal disease is the removal of plaque and calculus. Removal of calculus can be time consuming and laborious. Calculus was present for 71% of adults in both the 16-34 and the 55+ year old age groups, with the severity of condition higher among the older adults, 25% of 55+ year olds having calculus covering more than a third of the surface of the worst tooth affected compared to 10% of the 16-34 year olds (Table 25). The presence and severity of calculus was highest in the 35-54 year old age group with 89% of all adults in this group presenting with calculus, 26% having calculus covering more than a third of the surface of the worst tooth affected.

**Table 25. The percentage of residents according to Calculus Level**

Base : Dentate

Age group	n	No visible calculus %	Calculus <1/3 %	Calculus 1/3-2/3 %	Calculus >2/3 %
16-34 years	90	29	61	9	1
35-54 years	79	11	62	11	15
55+ years	28	29*	46*	11*	14*

\*Percentages to be read with caution as n<30

The assessment of treatment required for periodontal tissues was made taking into account the adult's condition and ability to benefit from any treatment. This may be the reason that 21% of adults in the 55+ age group were classified as not requiring treatment compared to 6% in the 16-34 and 1% in the 35-54 age groups. Simple cleaning or simple scaling was the treatment required for the majority of adults in all age groups. Deep scaling was required for 5% in the 16-34 age group, 21% in the 35-54 age group and 14% in the 55+ group (Table 26).

**Table 26. The percentage of residents according to Treatment Need for Periodontal Tissues.**

Base : Dentate

Age group	n	None %	Needed but not appropriate now %	Need Undetermined %	Simple OH %	Simple scaling %	Deep scaling/ Root planning %
16-34 years	87	6	1	2	30	56	5
35-54 years	75	1	3	3	17	55	21
55+ years	29	21*	7*	10*	7*	41*	14*

\*Percentages to be read with caution as n<30

The majority of adults required professional cleaning of their teeth

*Regular oral screening of this population is warranted in light of the high prevalence of oral mucosal lesions found*

## Lesions of the Oral Mucosa

The examination of the oral mucosa was made using an adaptation of the criteria used in the Oral Health Surveys, 1987<sup>21</sup>. Table 27 shows the percentage of residents with each type of lesion. Adults had up to two lesions recorded, an adult with two lesions recorded will be represented twice in the table, once under each lesion type (hence percentages in the table do not add up to 100%). The prevalence of conditions or diseases of the oral mucosa was high in this population. Only 89% of 16-34 year olds, 80% of 35-54 year olds and 88% of 55+ year olds were found to have no such lesions. The most common lesion recorded was acute necrotizing ulcerative gingivitis experienced by 6% of 16-34 year olds, 11% of 35-54 year olds and 12% of 55+ year olds. The prevalence for this condition in the general population in 2002 was 2% (16-24 year olds), 2% (35-44 years) and 1% in the 65+-year-old age group<sup>13</sup>. In the 35-54 year old age group 8% of residents examined had a sinus associated with an infected tooth compared to 1% of the general population. The assessment of treatment need for lesions of the oral mucosa is shown in Table 28. Only one subject in the 16-34 year old age group required treatment, compared to 11 in the 35-54 year old age group and 7 in the 55+ year old age group.

The high prevalence of acute necrotizing ulcerative gingivitis and other mucosal lesions in this population is a cause for concern. These conditions may be long standing and cause chronic pain and discomfort. Many adults with an intellectual disability may be unable to communicate that they are in chronic pain and these conditions may go untreated. Acute necrotizing ulcerative gingivitis (ANUG) is a painful and rapidly progressive disease of the gingival tissues characterized by necrosis of the gingival papilla accompanied by halitosis (bad breath). Without treatment, ANUG may occasionally progress to involve destruction of the periodontal tissues. There is a positive association between ANUG and smoking (however, the prevalence of smoking in this population is low and much lower than in the general population), poor oral hygiene, low socio-economic status, malnourishment, viral infections and stress/fatigue/personality<sup>22</sup>. ANUG is both painful for the individual but in addition can be socially debilitating because of the often severe halitosis (bad breath) associated with the condition. The treatment for ANUG is antibiotics and scaling (cleaning) of the teeth and a reduction of the risk factors i.e. better oral hygiene and nutrition. Left untreated oral hygiene can be very painful. If the person with the condition has someone assisting them with their oral hygiene they may be uncooperative as they may experience pain and in addition, it may be a very unpleasant experience for the carer.

Measures such as better oral hygiene practices often with carer assistance with the use of adjunctive agents for example chlorohexidine rinses or sprays<sup>23</sup>, better diet and improvement in general health should be aimed for to improve the quality of life for this population.

The fact that the examiners assessed most of the adults with this condition, as not requiring treatment for the condition (in that they would not benefit/co-operate) is a cause for concern as this is a very painful condition if left untreated (Table 28). Beliefs around the area of 'ability to benefit from treatment' and 'treatment need' should be explored as part of the training of dentists who are involved in treating this group of clients.

Four residents who were examined in this survey were reported to have suspect oral cancerous lesions. This high prevalence of suspect lesions warrants the call for regular routine oral screening for this group.

**Table 27. The percentage of residents by type of lesions of the oral mucosa.**

**Base : Dentate and Edentulous**

Type of lesion	16-34 yrs	35-54 yrs	55+ yrs
Total number of subjects examined	87	91	76
% None	89	80	88
% Acute necrotizing ulcerative gingivitis	6	11	12
% Suspect oral neoplasm	1	3	0
% Oral Lichen planus	1	2	1
% Leukoplakia	1	3	1
% Candidiasis	2	3	1
% Sinus associated with infected tooth	0	8	1
% Aphthous ulceration	2	0	3
% Denture stomatitis	1	0	0
% Geographic tongue	1	1	0
% Other	1	0	1

**Table 28. The treatment need for residents with lesions of the oral mucosa**

Age group	n	None	Treatment appropriate at this time	Treatment needed but not appropriate now	Treatment need undetermined
		%	%	%	%
16-34 years	10	9(90*)	1(10*)	0	0
35-54 years	18	7(39*)	8(44*)	0	3(17*)
55+ years	9	2(22*)	5(56*)	1(11*)	1(11*)

\*Percentages to be read with caution as n<30

Over 50% of residents were judged to need some kind of dental treatment

## Overall assessment of treatment need

For each adult an overall assessment of treatment need was made. These results are summarised in Table 29. Over 50% of residents in each age group were judged to need some kind of treatment. The majority of these adults needed this treatment at the time of the examination.

Table 29. Overall assessment of treatment need

Base : Dentate and Edentulous

Age group	n	None	Treatment appropriate at this time	Treatment needed but not appropriate now	Treatment need undetermined
		%	%	%	%
16-34 years	90	41	51	6	2
35-54 years	96	42	47	4	7
55+ years	77	49	39	8	4

20% of the residents examined were assessed as requiring sedation and/or general anaesthesia for invasive dental treatment

## Manageability Index

The Manageability Index (MI) provides information on the level of difficulty involved in treating patients with an intellectual disability and hence plays an important role in the planning and allocation of resources for the dental management of this population. The examiners classified each resident according to their ability to accept treatment under local anaesthesia or whether sedation or a general anaesthetic (GA) would be required. Full details of the criteria used can be found in the coding sheet (Appendix 3).

Fifty-seven percent of all adults who took part in the survey were assessed as likely to accept routine dental care while conscious and without the need for any sedation or general anaesthetic (GA) (Code 1, Figure 11). Adults who would accept minimal intervention and routine treatment but who may require sedation or GA for more extensive treatment accounted for 23% (Code 2, Figure 11). Therefore the majority of dental care for this group could be delivered in a primary care setting. The group who are most difficult to treat in terms of co-operation, risk to patient and demand on resources are the 19% of adults who would not allow a comprehensive exam and who would require invasive dental treatment to be carried out under GA (Code 3), and the 1% of adults who would not allow any examination and who would require GA facilities for both examination and any treatment (Code 4). The highest proportion of these adults were found in the middle and younger age groups. Obviously as a high percentage of the 55+ year old age group were found to be missing all their natural teeth, they would have less need for complex dental treatment that might require a general anaesthetic.

Figure 11. Percent of Adults with an Intellectual Disability by Manageability Index



In order to plan resources (staff and facilities) to treat this client group, it is helpful to look at the type of treatment judged to be required by each of the categories of the Manageability Index. Of particular interest is the type of treatment judged to be required for those residents (20% of the group) who may be the most difficult to treat (Codes 3 and 4), as the treatment of these residents may require hospitalisation and the involvement of secondary care services i.e. general anaesthetic facilities. However, for adults in the

categories Code 3 and 4, treatment need should be taken as an estimate only because of the difficulty in examining these clients in the examination conditions of the survey.

### Treatment Need for Caries (tooth decay) by Manageability Index

Thirty percent of residents examined classified as code 3 or 4 by the Manageability Index required some treatment for caries (tooth decay), this compares to 48% of residents in the category code 1 and 52% of residents in code 2 (Table 30). Given that a higher percentage of the residents coded 3 or 4 are from the middle to younger age groups who from previous data often have higher treatment need levels for caries, this may suggest that the survey examination (with no sedation given) underestimates the level of treatment required by this group. In addition, clients who have more profound disabilities with challenging behaviours may be less mobile and have less access to sugary snacks and thereby experience less dental decay. The most common types of treatment needed for caries were fillings and extraction, with 26% and 13% of difficult to treat adults judged as requiring these treatments respectively.

**Table 30. Manageability Index by need for Treatment of Caries**

Base : Dentate and Edentulous

Treatment for caries	MI Code 1 (n=154)	MI Code 2 (n=62)	MI Codes 3 and 4 (n=54)
% Any caries treatment	48	52	30
% Filling	23	31	26
% Fissure sealant	13	10	4
% Extraction	14	23	13
% Advanced restoration	14	10	0
% Other	1	0	0

### Treatment Need for Dental Trauma by Manageability Index

A total of 18% of residents coded 3 or 4 were judged to require treatment for trauma (Table 31).

**Table 31. Manageability Index by need for Treatment of Trauma**

Base : Dentate and Edentulous

Treatment for trauma	MI Code 1 (n=154)	MI Code 2 (n=62)	MI Codes 3 and 4 (n=54)
% Treatment appropriate at this time	4	3	9
% Treatment required but not appropriate at this time	0	2	9
% Treatment need undetermined	0	2	2

## Treatment Need for Periodontal Health by Manageability Index

The most common type of treatment required for periodontal tissues among adults with a Manageability Index of code 3 or 4 was simple cleaning (31%) and simple scaling (31%), (Table 32). Improvements in the oral hygiene of these clients with carer support and training has the potential to reduce the number of general anaesthetics required and free up general anaesthetic sessions for other less easily prevented conditions.

**Table 32. Manageability Index by need for Treatment of Periodontal Tissues**

Base : Dentate and Edentulous

Treatment for periodontal tissues	MI Code 1 (n=154)	MI Code 2 (n=62)	MI Codes 3 and 4 (n=54)
% Simple OH	6	23	31
% Simple scaling	46	23	31
% Deep scaling/root planning	8	13	6
% Treatment required but not appropriate at this time	1	3	2
% Treatment need undetermined	1	2	7

## Treatment Need for Oral Mucosal Lesions by Manageability Index

Very few (2%) of the more difficult to treat residents required treatment for lesions of the oral mucosa (Table 33).

**Table 33. Manageability Index by need for Treatment of Lesions of the Oral Mucosa**

Base : Dentate and Edentulous

Treatment for lesions of the oral mucosa	MI Code 1 (n=154)	MI Code 2 (n=62)	MI Codes 3 and 4 (n=54)
% Treatment appropriate at this time	9	0	0
% Treatment required but not appropriate at this time	0	0	2
% Treatment need undetermined	1	5	2

## Overall Treatment Need by Manageability Index

Table 34 gives the overall assessment of treatment need for each of the codes within the Manageability Index. Just under half of all adults examined categorized as Code 3 or 4 (44%) required some form of treatment. The treatment need for 15% of this group was undetermined because of the difficulty in examining the individual under the survey examination conditions.

**Table 34. Manageability Index by Overall Assessment of Treatment Need**

Base : Dentate and Edentulous

Overall treatment need	MI Code 1 (n=154)	MI Code 2 (n=62)	MI Codes 3 and 4 (n=54)
% Treatment appropriate at this time	49	42	35
% Treatment required but not appropriate at this time	3	10	9
% Treatment need undetermined	1	3	15

---

## Resources Implications for Secondary Care i.e. Sedation and/or General Anaesthetics

*Secondary care services must be expanded to meet the needs of this population*

*Prevention must be adopted to reduce the burden of disease*

The majority of adults with an intellectual disability could be treated in the primary care setting. However, a distinct subgroup of the population approximately 20% (manageability Code 3 and 4) would require some degree of secondary care i.e. sedation and/or general anaesthesia in order to receive dental treatment. 35% of this group (of the Codes 3 and 4) were assessed as requiring treatment at the time of the examination and for another 15% of this group the treatment need was unable to be determined because they could not be examined under the survey conditions. If these numbers are extrapolated to the general population of adults with an intellectual disability in full time residential care (estimate of total population 5,876 – excluding NEHB) it can be estimated that currently 1,175 adults (20% of the population) with an intellectual disability in full time residential care would require sedation or general anaesthesia in order to receive dental treatment. An estimated 411 clients (35% of this group) would currently require some kind of dental treatment under sedation or general anaesthesia and in addition, an estimated 176 clients (15% of this group) would require sedation or general anaesthesia in order to determine their treatment need. The current secondary care services are inadequate to deal with this number of patients on a ongoing basis. Other client groups also have requirements for such secondary care services. To achieve an adequate level of oral health care and reduction of pain and discomfort for this group of adults, secondary care services must be expanded.

Dental disease is preventable. To reduce the need for secondary care services, prevention must be adopted. Regular oral screening of these clients will also reduce the number of clients requiring sedation or general anaesthesia as disease can be treated earlier and simpler type treatments are often more acceptable to the patient and avoid the necessity to refer the client for secondary care.

## Oral Health Care Practices For Adults with an Intellectual Disability in Residential Care Units

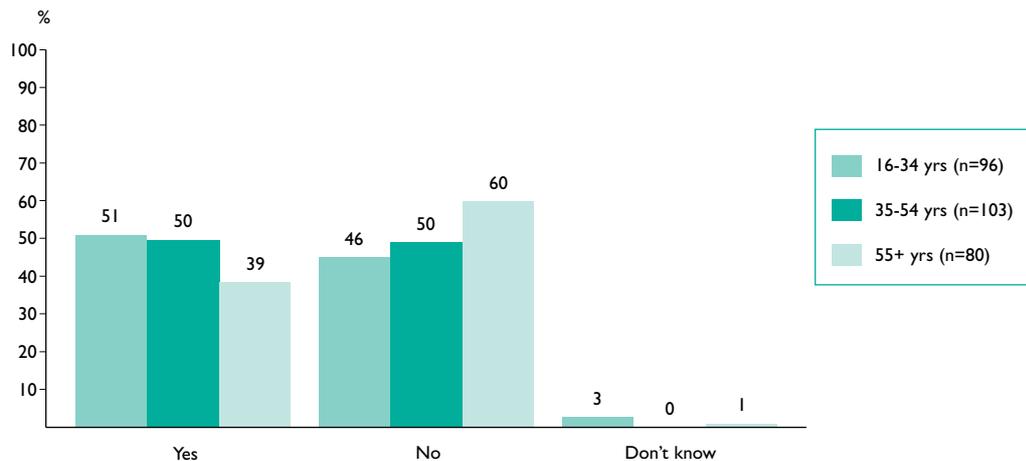
This section will report on the current oral health care practices of the individuals examined in the residential units. It will assess the mouth care needs of adults with an intellectual disability in residential care and measure their current level of service provision and barriers to care. The regular carer or supervisor completed a questionnaire on behalf of the resident to be examined prior to the examination taking place.

### Oral health care practices for adults with an intellectual disability in residential care units

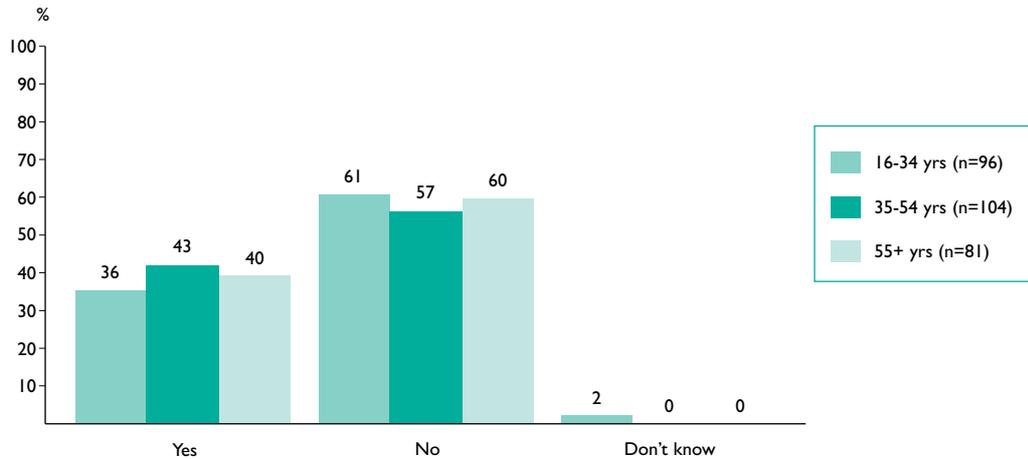
The regular carer/supervisor was asked to provide information on the care of teeth/dentures for the individual adult with an intellectual disability being examined. These data are summarised in Figures 12 to 14. Approximately half of adults under the age of 55 brushed their own teeth or cared for their own dentures compared to 39% of those over 55 years of age (Figure 12). However, in the opinion of the regular carer/supervisor the majority of residents in all age groups were not capable of performing this task (Figure 13). This clearly implies that these adults require basic oral hygiene support. From Figure 14 we can see that the vast majority of those who were not capable of caring for their own teeth or dentures had someone performing this task for them. If the carers have the responsibility of caring for teeth and dentures it is vital that they be properly trained and supported in this area.

*The majority of residents need help to maintain adequate oral and denture hygiene*

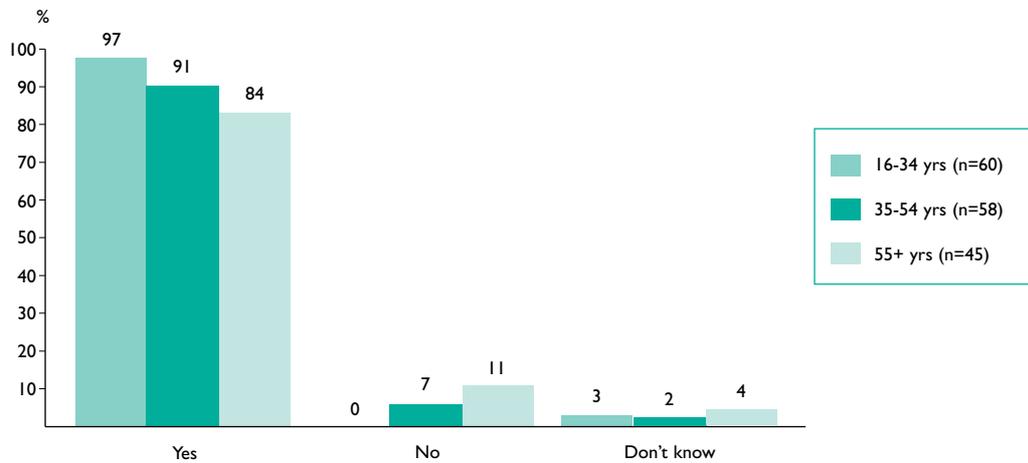
Figure 12. Does this client brush his/her own teeth or care for their own dentures?



**Figure 13. Is this client able to take care of their own teeth/dentures?**



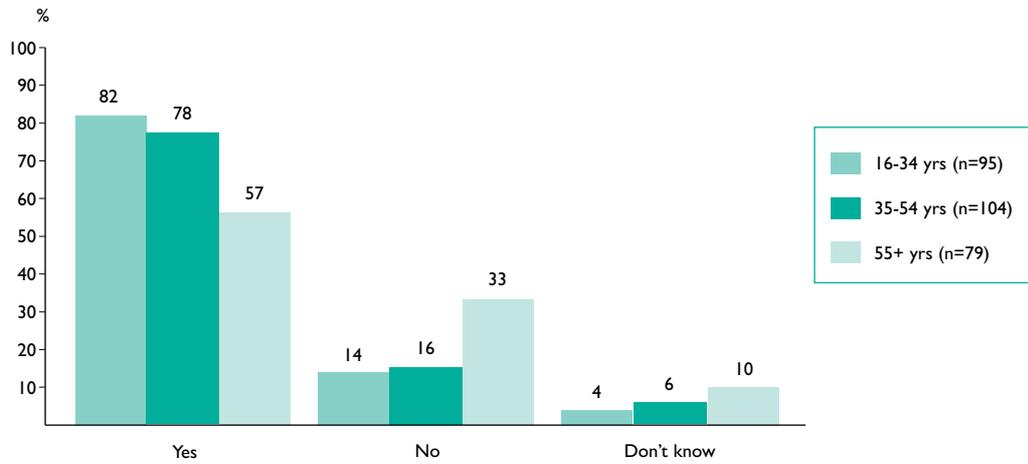
**Figure 14. For clients who are unable to take care of their own teeth - Is there someone responsible for the care of this client's teeth/dentures?**



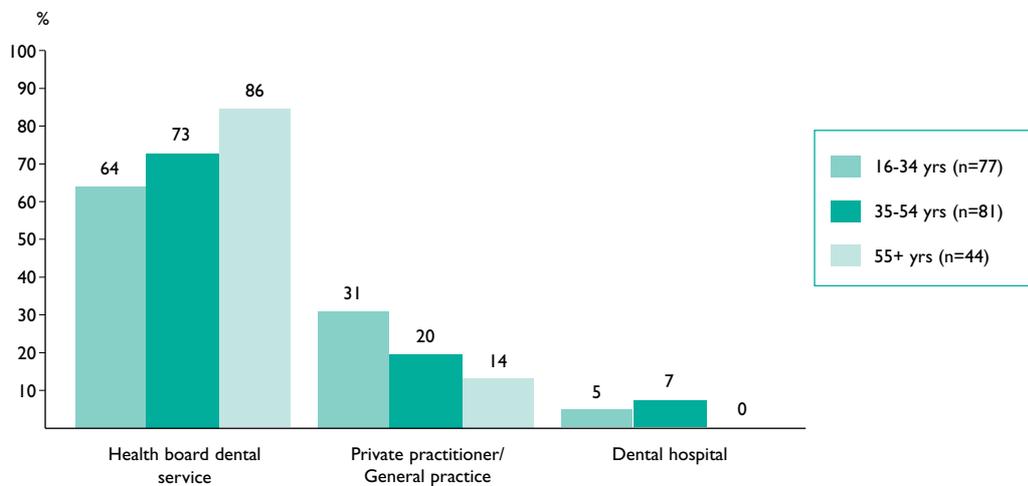
*The majority of the residents receive their dental care from the health board dental service*

Information was collected on the level of dental service usage for the residents examined while residing in the care unit. The vast majority of adults under 55 years of age and just over half of the adults over 55 years of age had received some dental treatment while residing in their current unit (Figure 15). A substantial proportion of this treatment was received from health board dentists (Figure 16).

**Figure 15. Has the client received any dental treatment while residing in this unit?**

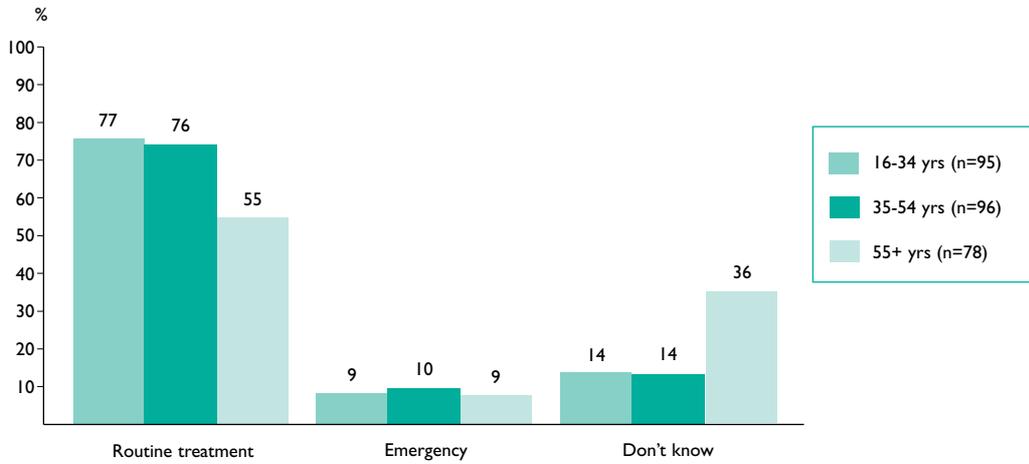


**Figure 16. If client has received treatment, where did they access it?**



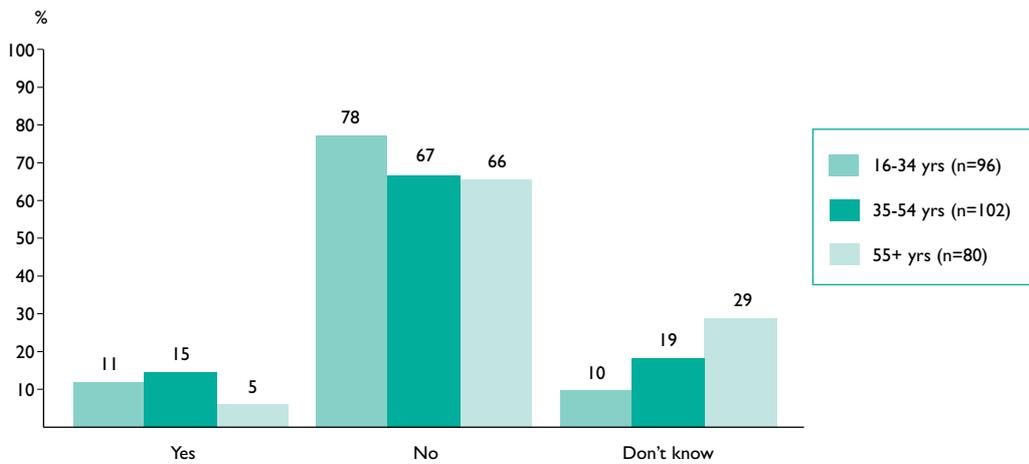
Check ups, routine treatment or new dentures was the nature of treatment for over three quarters of the residents under the age of 55 and for just over half of those over 55 years of age. Nine to ten percent of residents had pain requiring emergency treatment. The nature of treatment for 36% of the older adults was not known (Figure 17).

**Figure 17. What was the nature of the last dental treatment received?**



The proportion of residents known to have refused dental treatment was low at 11% for the 16-34 year olds, 15% for the 35-54 year olds and 5% of adults over 55 years of age (Figure 18).

**Figure 18. Has the client ever refused dental treatment?**



## Oral Health Care Practices and Service Usage at Unit Level for Adults with an Intellectual Disability in Residential Care Units

### Results from the Postal Questionnaire.

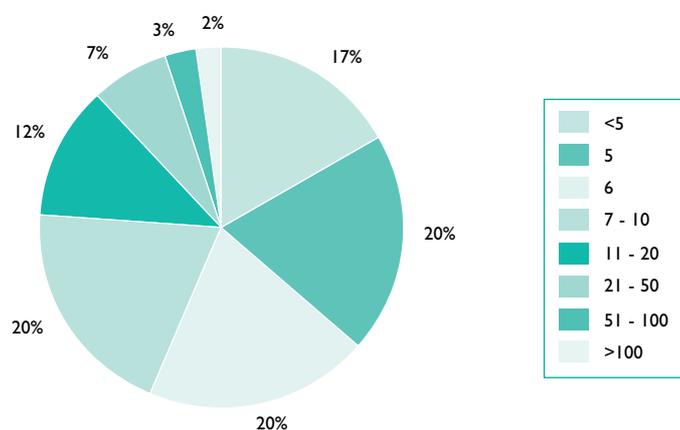
The results from the postal questionnaire will be presented in this section. It will report on the current oral health care practices and the level of service usage at the residential unit level. It will also detail the difficulties reported by the residential units in providing good oral health care and access to dental services for their clients.

The directors of all residential units in Ireland (excluding the North Eastern Health Board) were asked to complete a postal questionnaire. A total of 441 questionnaires were distributed. Of these 336 units had responded within one year of the initial questionnaires being posted, giving a response rate of 76% (336/441). Again this high response rate may demonstrate an interest in oral health care services among carers for this group. A number of units returned more than one questionnaire. These were units that consisted of a number of small house/community groups within the one centre. The units believed that a separate questionnaire for each group within the centre reflected their situation more accurately. In total 396 questionnaires were returned from the 336 units. For the purpose of analysis each questionnaire returned has been taken to represent a different unit.

### General profile of residential care units

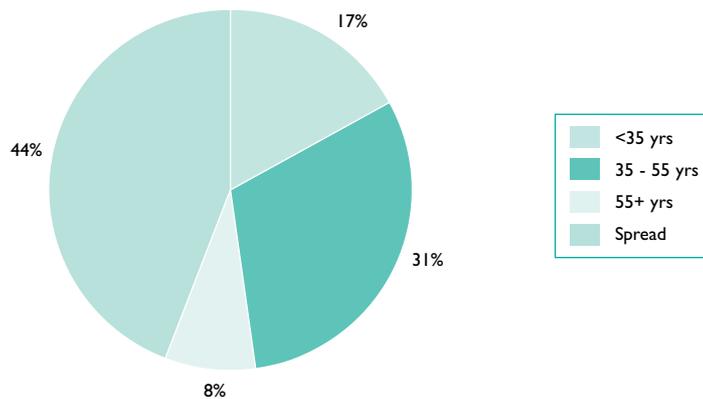
The vast majority of units (77%) were small in size, with no more than 10 residents (Figure 19). Seventeen percent of units had less than 5 residents. The most common size for a unit was either 5 residents, 6 residents or between 7 and 10 residents, each of these accounting for 20% of units. Twelve percent of units had between 11 and 20 residents and 7% had between 21-50 residents. There were very few large units, only 3% of units had between 51 and 100 residents and only 2% had more than 100 residents. The biggest unit reported had 234 residents.

Figure 19. The size of the client base in residential care units (n=393)



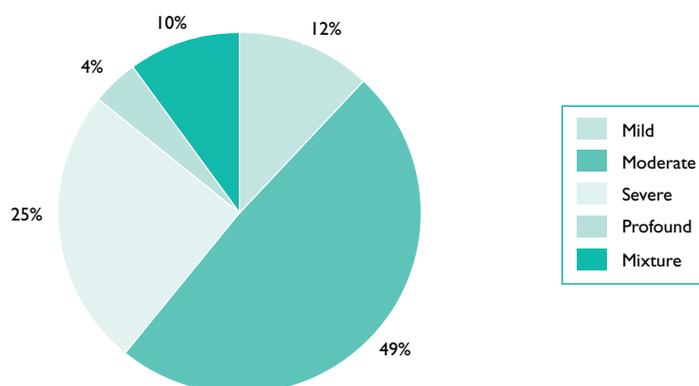
The age profile of the client base of residential care units is shown in Figure 20. Seventeen percent of units had a fairly young client base with residents who were in general under 35 years of age, 31% of units had residents who were mainly between 35 and 55 years of age and 8% of units had an older client base with residents who were generally over 55 years old. However, it was more common for units to have a client age profile that spread throughout these age ranges, these accounted for 44% of the sample.

**Figure 20. The general age profile of the client base of residential care units (n=395)**



The residential care units were asked to classify the general level of intellectual disability of their client base as mild, moderate, severe or profound. The results are shown in Figure 21. A number of units (10%) felt that their client base was best described as a mixture of these categories. However, it should be noted that the category 'mixed' was not actually an option given on the questionnaire. Therefore it may be an under estimate of the number of units with mixed levels of disability as more units may actually have opted for this category if it had been available. Twelve percent of units reported a client base with a mild intellectual disability. Just under half (49%) of the units reported a client base that was in general moderately intellectually disabled. One quarter of the units reported a client base with a severe intellectual disability. Very few units (4%) had mainly clients with a profound intellectual disability.

**Figure 21. The disability profile of the client base of residential care units (n=391)**

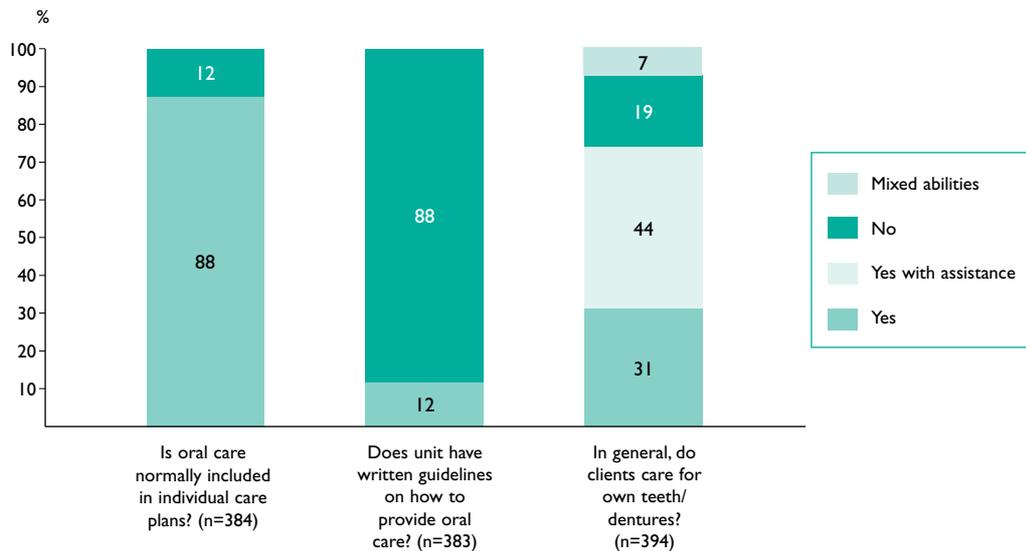


Only 12% of units had written guidelines on how to provide oral health care for clients

## Oral health care practices at residential unit level

The residential units were asked to answer a number of questions relating to their oral health care practices within their unit. The results are presented in Figure 22. Although 88% of units reported that oral health care was normally included in the individual care plans for clients within their unit, only 12% of units had written guidelines on how to provide oral health care for clients. The majority of units reported that in general clients brushed their own teeth or cared for their own dentures, either by themselves (31% of units) or with assistance (44% of units). In 19% of units clients did not perform these tasks and 7% of units reported clients with mixed abilities. Again the category 'mixed abilities' was not an option given on the questionnaire, and therefore again this may be an underestimate of the number of units with clients of mixed abilities.

Figure 22. Oral health care practices within residential care units

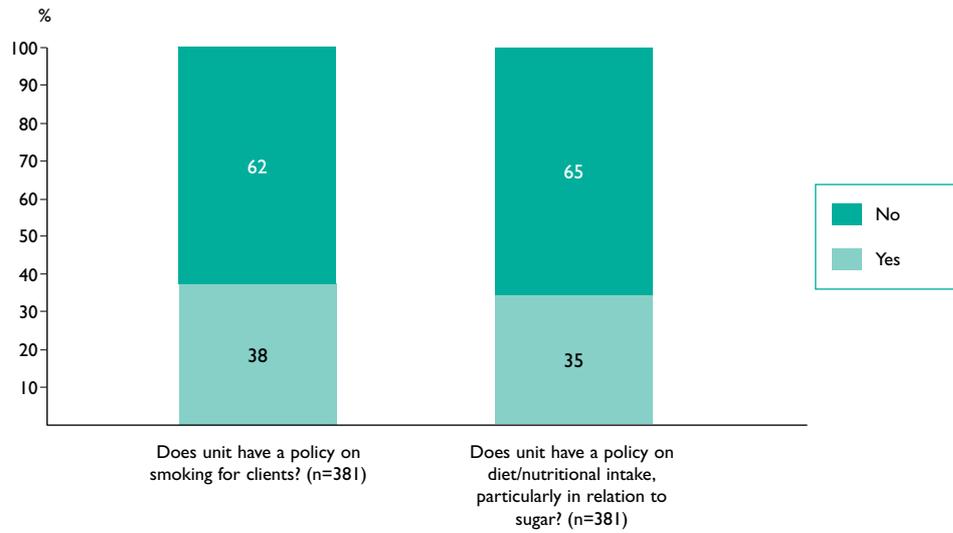


65% of units had no policy in relation to sugar intake for the clients in their unit

The residential care units were asked if they had a policy on smoking for the clients in their unit. (Please note that this study was conducted prior to the introduction of the Health and Safety legislation regarding smoking in the workplace in March 2004). The majority of units (62%) did not have a smoking policy, in many cases this was because they had no smokers resident in their unit. As reported earlier (Table 4) the prevalence of smoking amongst this population particularly in the younger age groups is substantially lower than in the general population.

Thirty eight percent of units did have a smoking policy for their unit, the most common policy reported was to allow smoking in designated areas only (18% of units), while 11% of units did not allow smoking or only allowed it outside the building (Table 35). Units were also asked if they had a policy on the diet/nutritional intake particularly in relation to sugar for clients in their unit. Sixty five percent of units had no policy (Figure 23). Of those who reported the existence of a policy or policies (35%), the most common were the restriction of sugar intake e.g. to weekends or after meals (9% of units), encouraging clients to eat healthy low fat low sugar diets (8% of units), healthy eating plans/nutritional content balanced in 7% of units, 4% of units had policies for individual clients especially those with medical problems and 3% of units had regular advice from a dietician or GP.

**Figure 23. Existence of policies on smoking and diet within residential care units**



**Table 35. Policies on smoking in residential care units**

Type of smoking policy	n = 381
% Smoking in designated areas	18
% No smoking/must go outside	11
% Other policies	3
% No policy stated	6

**Table 36. The five most commonly reported policies on diet/nutrition, particularly in relation to sugar intake, in residential care units.**

Most commonly reported policies	n = 381
% Intake of sugar restricted	9
% Encouraged to eat healthy/low fat low sugar diet	8
% Healthy eating plan/nutritional content balanced	7
% Individual policies for clients	4
% Regular dietician/GP advice	3

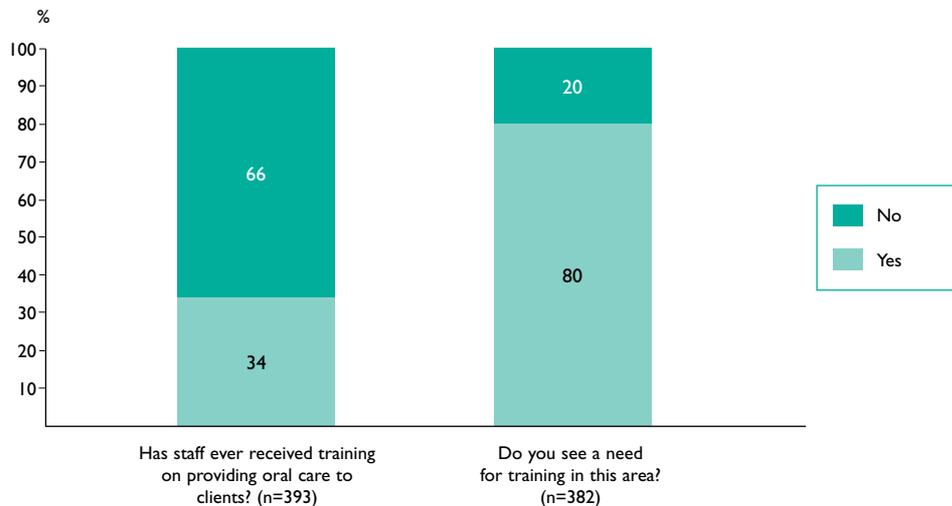
## The level of oral health care training provided for residential care units

66% of units reported that their staff had never received any kind of training in oral care

80% of units see a need for training of their staff in the provision of oral care

Sixty six percent of units reported that their staff had never received any kind of training in the area of providing oral health care for their client group. Considering that the carers for this group of clients reported that the majority of the clients were incapable of taking care of their own oral hygiene (Figure 13) it is imperative that this situation regarding lack of training is remedied. Only 34% of residential care units had received any kind of training for their staff in this area. The residential units are clearly concerned about this situation with 80% of them seeing a need for training in this area (Figure 24). Details of the training that has been received to date are given in Table 37. Only an extremely small number of units (3%) have staff receiving training on an ongoing yearly basis, in most cases (10% of units) staff training in providing oral health care was received as part of their nurse/care assistant training, and therefore may have occurred many years previous, be inapplicable to the current client group and basic in nature. The most common type of training received was practical demonstrations in tooth brushing, oral health and general mouth care (21% of units). Dentists, dental hygienists and dental nurses were the most likely personnel to have provided the training (13% of units).

Figure 24. The level of training received and the perceived need for training in residential care units



**Table 37. Details of the training provided to residential care units in the area of providing oral health care to clients**

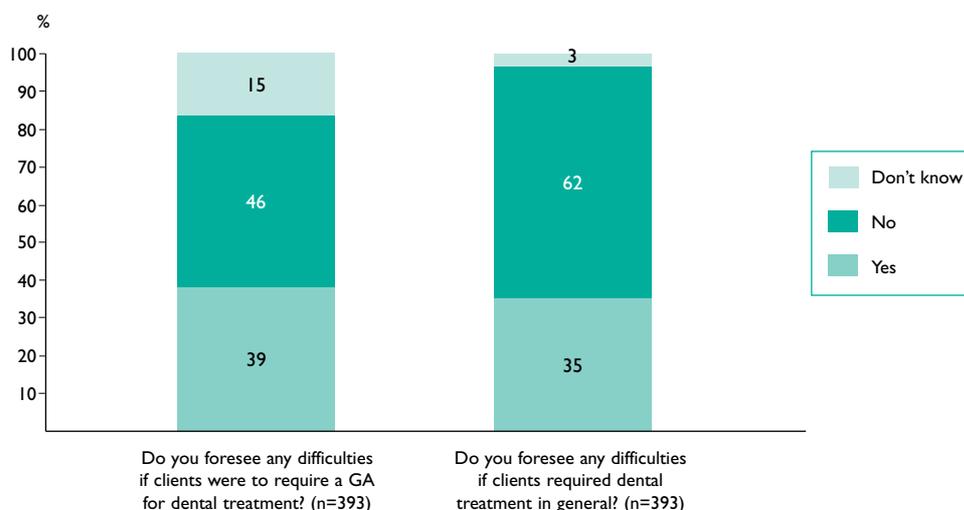
<b>Details of training</b>	<b>n = 393</b>
<b>When was training provided ?</b>	
% Ongoing/yearly	3
% 2001/2002	8
% 1999/2000	4
% Pre 1999	3
% Training on site when setting up unit	2
% During student nurse/care assistant training	10
% Information not provided	5
<b>What kind of training was provided?</b>	
% Practical demonstrations	21
% Others	7
% Information not provided	6
<b>Who provided training?</b>	
% Dentist/hygienist/dental nurse	13
% Nurse tutors	8
% WHB	6
% Others	4
% Information not provided	4

## Access to Dental Services at Residential Unit Level

In order to establish the main barriers to providing a good oral health care service for this population of adults with an intellectual disability, the residential care units were asked a number of questions relating to their current use of dental services and the level of difficulty they experience in accessing these services. The results are presented below.

Thirty-nine percent of units could foresee problems if clients within their unit were to require a general anaesthetic (GA) for dental treatment (Figure 25). Most of the problems foreseen were due to the nature of the population being dealt with, i.e. 16% of units were concerned about complications due to the medical/physical condition of clients, 8% of units were concerned about the resistance and challenging behaviours of clients, 7% reported that obtaining consent and the lack of ability of clients to comprehend this treatment could be a problem and 6% of units were concerned about the anxiety, fear and distress GA treatment could cause their clients (Table 38a). Five percent of units listed service related difficulties such as poor services, delays/ waiting lists and access difficulties e.g. having to travel long distances to receive GA treatment. Thirty-five percent of units could foresee difficulties if clients in their unit required dental treatment in general (Figure 25). Again most of the problems foreseen relate to the management of the adults disabilities (Table 38b).

**Figure 25. Difficulties foreseen if clients were to require a general anaesthetic for dental treatment or dental treatment in general**



**Table 38a. The five most commonly foreseen problems that would arise if clients required a General Anaesthetic for dental treatment**

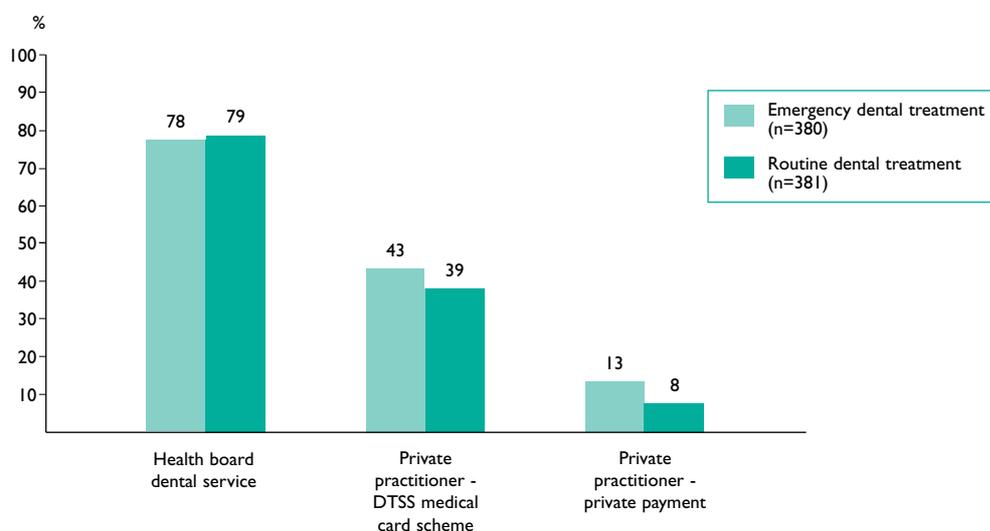
Most commonly foreseen problems if GA required	n = 393
% Complications due to medical/physical condition	16
% Resistance/challenging behaviours	8
% Consent/ability of client to comprehend treatment	7
% Fear, anxiety, distress to client	6
% Poor services, delays, waiting lists, access problems	5

**Table 38b. The four most commonly foreseen problems that would arise if clients required dental treatment in general**

Most commonly foreseen problems if general dental treatment required	n = 393
% Uncooperative/challenging behaviour	16
% Fear, nerves, distress to client	10
% Pre meds required	6
% GA required	3

Both emergency and routine dental treatment are accessed mainly via the health board dental service with almost 80% of residential care units making use of this service (Figure 26). Approximately 40% of units accessed emergency and routine dental treatment via the private practitioner using the Dental Treatment Services Scheme (access is via ownership of a medical card). The use of private practitioners by private payment was recorded by only 13% of units for emergency treatment and 8% of units for routine treatment.

**Figure 26. Where is dental treatment accessed?**

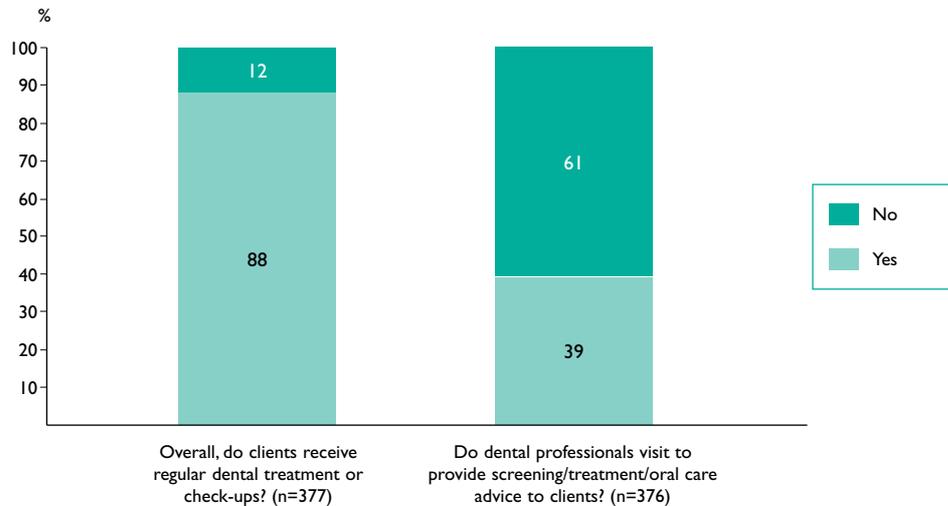


*The vast majority of adults with an intellectual disability living in residential care do receive regular dental treatment or check ups*

It would appear that the vast majority of adults with an intellectual disability living in residential care do receive regular dental treatment or check ups with 88% of units reporting that this is the case for clients within their unit. However, only 39% of residential care units receive visits from dentists or oral health promoters to provide check up/ screening/dental treatment or oral health care advice to clients (Figure 27). From Figure 28 we can deduce that about one quarter of these visits (11%) are dentists providing domiciliary care.

11% of units have dentists providing domiciliary care

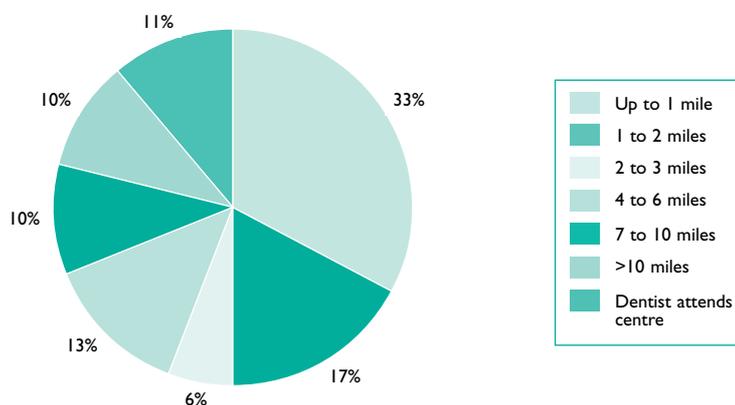
**Figure 27. The level of regular screening, dental treatment and oral care advice received.**



Most residential care units are situated within a reasonable distance of the nearest accessible dentist. As mentioned above, 11% of units have dentists providing domiciliary care, while one third of the residential care units had to travel a short distance of up to one mile to their nearest accessible dentist and half of all residential care units had an accessible dentist within two miles. Nineteen percent of units had to travel between 2 to 6 miles, 10% between 7 and 10 miles and 10% of units had to travel more than 10 miles to their nearest accessible dentist (Figure 28).

The most commonly recorded forms of transport to the dentist are shown in Table 39. Just over one third of residential care units (37%) made use of their own unit transport to take clients to the dentist, 21% of care units made use of private cars, 19% made use of minibuses/wheelchair buses (it was not specified whether these were public or private) and 15% of units made use of taxis. Approximately one fifth of units reported that clients walked (or were taken in their wheelchair) to the dentist. The vast majority of units (93%) said they had not experienced problems transporting clients to the dentist.

**Figure 28. The distance from the residential care unit of the nearest accessible dentist (n=365)**



Training and support of care staff would help address a lot of the difficulties for units in providing good oral care for clients

**Table 39. The five most commonly reported forms of transport to the dentist.**

<b>Most common forms of transport to dentist</b>	<b>n = 368</b>
% Unit transport	37
% Car/Private transport	21
% Own transport – wheelchair/walking	21
% Minibus/Wheelchair bus	19
% Taxi	15

At the end of the postal questionnaire the residential care units were given the opportunity to list the difficulties experienced by them in providing good oral care and in accessing dental services for their clients. The most commonly reported difficulties (i.e. those reported by at least 5% of residential care units) are presented in Tables 40 and 41 respectively.

When asked ‘What are the difficulties for the residential unit in providing good oral care for clients?’ 10% of units made no comment while 19% reported that there were no such difficulties (Table 40). The most common difficulty reported was again to do with the management of each resident’s disability with 29% of units reporting co-operation difficulties and/or challenging behaviours as a problem. In addition to this 10% of units reported difficulties with poor compliance and/or total dependency of clients on their carers for oral care. Training and support of carers in aspects of oral hygiene for this client group would address some of these concerns. Other difficulties listed related again to the client’s condition and were communication difficulties, the degree of disability and dental phobia. Lack of training of care staff was the next most common difficulty, listed by 20% of units. Staff availability/poor staff to client ratios was reported by 6% of units. Other staffing difficulties reported were time pressures, the fact that oral care was not a priority for staff and the high turnover of staff.

**Table 40. The most commonly reported difficulties for residential units in providing good oral health care for clients.**

<b>Most commonly reported difficulties for residential units in providing good oral care for clients</b>	<b>n = 396</b>
% No comments made	10
% Reported ‘No difficulties’	19
<hr/>	
% Co-operation difficulties/challenging behaviours	29
% Lack of training	20
% Poor compliance/total dependence of clients	10
% Staff availability/poor staff client ratio	6

Table 41 presents the most common responses to the question ‘What are the difficulties for the residential unit in providing access to dental treatment for clients in the unit?’. Accessing dental treatment would seem to be perceived less of a problem for residential units than problems encountered in providing good oral care in-house, with over half of the units (52%) reporting that there were no difficulties in accessing dental treatment, while 15% of units made no comment here. Among those units who did list difficulties, long waiting lists and the lack of availability of dental services were the most commonly reported barriers to accessing dental treatment, with each listed by 10% of units. In addition 5% of units reported access difficulties in relation to transport of clients and wheelchair access. Again the management of the client’s disability was a problem, with 6% of units reporting the lack of co-operation of clients/fear experienced by clients as a difficulty.

**Table 41. The most commonly reported difficulties for residential units in providing access to dental treatment for clients.**

<b>Most commonly reported difficulties for residential units in providing access to dental treatment</b>	<b>n = 396</b>
% No comments made	15
% Reported ‘No difficulties’	52
% Long waiting lists	10
% Lack of availability of dental services	10
% Co-operation difficulties/fear	6
% Staffing levels	5
% Access difficulties	5

The residential units were then given the opportunity to comment on dental care for clients in their unit or dental care in general for this group of clients (Table 42). Fourteen percent of units commented that a ‘good service’ was being provided. Ten percent of units would like to see more regular check-ups and hygienist appointments and felt that it would be helpful if appointment reminders could be sent out to clients. Again the need for staff training was commented on (7% of units).

**Table 42. Most frequent comments about dental care in general for the population of adults with an intellectual disability**

<b>Most frequent comments made on dental care in general for this group of clients</b>	<b>n = 396</b>
% No comments made	45
% Good service	14
% Require regular check-ups/hygienist appointments with reminders sent	10
% Training of staff required	7

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Finally the residential units were given the opportunity to make any general comments they felt important. While most units (72%) made no comment here, 8% commented on how good the service was and 6% emphasised the need for staff training.

## Summary

The data compiled from the two questionnaire surveys gives us an insight into the current oral health practices and access to dental treatment for this group of clients. The majority of adults with an intellectual disability living in residential care do receive regular dental treatment or check ups. The majority receive their dental care from the health board dental service.

The majority of residents need help to maintain adequate oral and denture hygiene. Yet only 12% of units had written guidelines on how to provide oral health care for clients and 66% of units reported that their staff had never received any kind of training in oral care. Many of the difficulties encountered by units in providing oral care for their clients relate to the clients disability and dependence on the care staff for oral care. Some of these concerns would be addressed by training and support of carers in oral hygiene methods for their client group.

Eighty percent of units reported a need for training of their staff in the provision of oral care. This provides a real opportunity for the introduction of an oral health education and promotion programme into residential units for adults with an intellectual disability.

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## Domiciliary Care

*The aim of domiciliary care is to deliver appropriate oral healthcare outside of the normal dental environment*

Domiciliary dental care has been defined as a service that reaches out to care for those who cannot reach a service themselves<sup>22</sup>. It includes dental care carried out in an environment where a person is resident either permanently or temporarily, as opposed to care delivered in dental clinics or mobile units. Domiciliary care usually involves visiting residential units, nursing homes, day hospitals, day care centres and individuals own homes. The aim of domiciliary care is to deliver appropriate oral healthcare to people whose circumstances make it impossible, unreasonable or otherwise impracticable for them to secure care in a fixed clinic, hospital or dental mobile. Domiciliary care is an important and growing area of treatment provision. Previously, the most common group receiving domiciliary care were the elderly but a significant number of younger people with disabilities can also benefit from care outside the dental surgery. The main barriers cited in the literature to the provision of domiciliary care (studies mainly on the elderly) are that dentists wait to be asked rather than offer a service and generally there is a lack of domiciliary training and experience by dentists<sup>23</sup>. In order to develop the knowledge and skills necessary to perform such care, adequate training is required<sup>24</sup>. Dentists that don't provide domiciliary treatments say they don't feel adequately prepared or up to date in this area<sup>25</sup>.

*The level of domiciliary care provision to this group is extremely low (11% of units)*

In this study only 39% of residential care units received visits from dentists or oral health promoters to provide check up/screening/dental treatment or oral health care advice to clients (Figure 27). As reported (Figure 28) about one quarter of these visits (11%) are dentists providing domiciliary care. Therefore the level of domiciliary care provision to this particular group is extremely low. As many clients will require assistance (Table 39) and escort to attend a dentist outside the unit this places extra pressure on staff time within the unit. A previous study has reported the provision of domiciliary care to groups with special needs by the health board dental service to be 66%. This data was obtained from a questionnaire survey on "Dental Services for People with Special Needs" <sup>11</sup> conducted in 2000 as part of the National Programme of Dental Epidemiology (Lot 1). This study involved a detailed questionnaire targeted at dental practitioners in the Health Boards dealing with patients with special needs. In total 108 questionnaires were distributed, 78 to targeted dentists in 30 community care areas and 30 to Principal Dental Surgeons as information copies. A total of 62 completed questionnaires representing 78 individuals respondents in 29 community care areas were received and processed. The aim of the questionnaire was to measure the current practices of dental services for people with special needs in the health board dental service and to assess the existence of databases and registers. In addition, information was collected on the provision of domiciliary dental care to all groups with special needs by the health board dental service and factors affecting its provision. From a total of 62 respondents, 41 (66%) answered YES and 21 (34%) answered NO to the question " Do you provide domiciliary dental care in your area?". The respondents from areas who did not provide domiciliary dental care were then asked for reasons why they did not do so. The results are presented in Table 43. The main reasons presented are insufficient demand for the service, management doesn't support domiciliary visits, no domiciliary kits and inadequate equipment, low manpower and cross infection concerns. Of the 41 who answered Yes to providing domiciliary dental care, 15 respondents also answered this question 'If you don't provide domiciliary care ... please tick... reasons why it is not provided'. Their responds are also presented in Table 43 and indicate existing difficulties for those who provide this kind of care.

**Table 43. Factors affecting the provision of domiciliary care to all types of patients with special needs<sup>11</sup>**

	No Domiciliary Care Provided	Yes Domiciliary Care Provided
Number of respondents	21	15
Insufficient demand for service	14	1
Management doesn't support domiciliary visits	7	2
No domiciliary kit or inadequate equipment	6	7
Cross infection control concerns	2	8
Feel it offers a reduced quality of work	0	7
Not feeling adequately experienced or updated in the area	0	1
Dentist fears for his/her safety	0	1
Other reasons	7	2
<p>Other reasons include</p> <ul style="list-style-type: none"> <li>• hassle factor, takes a lot of organisation,</li> <li>• management support, domiciliary visit not priority/other work pressures</li> <li>• demand, service has not been provided in the past, never been requested of us, private practitioners provide service, all patients brought to surgery</li> <li>• manpower, clinic assignments take full time of staff, inadequate time and resources, low manpower</li> </ul>		

Table 43 highlights a number of potential factors affecting the provision of domiciliary care that need to be explored with both the service provider (dental team and management) and the client group in question prior to the development of this kind of service. The aim of domiciliary care is always to provide appropriate high quality care and should not be seen as an inferior service. Increased training for the dental team is required to address the concerns regarding adequate cross infection control and of it offering a reduced quality of service to the clients.

## Concluding comments

This report describes the oral health care needs for adults with an intellectual disability in Ireland. The study highlights the need for the expansion of both primary and secondary care dental services for adults with an intellectual disability in residential care in Ireland. Training of care staff in oral health care for adults with an intellectual disability and oral health promotion programmes for units are urgently required.

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## **Appendix I**

### **Summary of Existing Services for Adults with an Intellectual Disability in full time residential care**

#### **Provided by the Dental Hospitals**

- **Cork Dental Hospital**
- **Dublin Dental Hospital**

#### **Provided by the Health Board Dental Service according to Administration Area**

**(Please note that these reports were written by the credited authors and were not edited in anyway by the authors of this report)**

### **Special Care Dentistry General Anaesthetic Service at Cork University Hospital**

A dental general anaesthetic service is provided at Cork University hospital for severely disabled patients who are unable to receive treatment in any other way. Referrals from a wide geographical area are made by medical consultants, health board dentists and general dental practitioners. The increase in primary and secondary care services continues to place greater demands on the general anaesthetic service. With only one day session per week, the service has a limited capacity. Waiting time is in excess of 12 months after being placed on list. The location of the facility at Cork University Hospital allows compromised patients to avail of the support of the full range of hospital specialities thus permitting even the most severely disabled patients to receive treatment.

The facility opened in 1984 and risk analysis for these disabled and medically at risk patients would indicate the need for a modern facility with comprehensive treatment and recovery facilities. There is a need for the appointment of a Consultant in Special Care Dentistry to lead and further develop this service. The increasing number of referrals results in long waiting lists of more than one year, with disease progression during the waiting periods. Children and adults are currently treated in the same facility which is not desirable. The facility is shared with the speciality of dental surgery and expansion of the special needs service will require dedicated resources.

Author: Professor Martin Kinirons, Professor of Preventive and Paediatric Dentistry, University Dental School and Hospital, Cork

### **Dublin Dental School and Hospital - Special Care Dentistry**

The Dublin Dental School and Hospital is one of the secondary and tertiary referral centres for people (children and adults) with disabilities in the Republic of Ireland. Patients are seen on referral from medical consultants, general dental practitioners, health board dentists as well self referrals. Treatment is provided for these patients either in the Dental or associated Hospitals or referred back to the original dentist with a treatment plan. Out-reach consultant sessions are offered to dentists working in the Health Board Dental Service, for greater efficiency and patient convenience.

Primary dental care for adults with disabilities is provided by undergraduate (UG) students as part of their education and training. Secondary and tertiary care for adults with more complex needs is delivered by postgraduate (PG) students, NCHDs, dental hygienists and consultants. In addition to UG and PG education and training, a post-qualification certificate in Special Care Dental Nursing is planned

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for the autumn of 2005 as part of the team approach to delivery of services. There is an on-going research programme in collaboration with a number of health boards.

Services offered are delivered in an interdisciplinary way and include treatment under inhalation and intravenous sedation. Where clinically indicated, there is intermittent access to a day-stay general anaesthetic list at St Columcille's Hospital, Loughlinstown. In-patient care can be organised on an elective basis at this Hospital or, for oral surgical services only, via the consultants in Oral and Maxillofacial surgery at the Mater and St James Hospitals, Dublin.

Author: Professor June Nunn, Professor of Special Care Dentistry, Dublin Dental School and Hospital

## **Eastern Regional Health Authority**

### **East Coast Area Health Board**

**Health Authority Area - Dunlaoghaire and East Wicklow Dental Areas (formerly ECAHB).**

#### **Summary of Services:**

Dental screening examinations are carried out annually or biannually (depending on resources) at residential centres. Patients are called to the Health Board or referred to the Dental Treatment Services Scheme (DTSS) for routine dentistry as appropriate. Secondary care, if necessary, is organised (e.g. treatment under general anaesthesia (GA)).

More frequent recalls may be provided for selected patients where medical / dental conditions necessitate.

Emergency appointments are available on demand Monday to Friday.

Oral Health Promotion is provided to patients, carers and parents as appropriate.

#### **Challenges:**

Obtaining valid consent and accessing next of kin can be difficult and time consuming.

Communication and providing treatment for patients with challenging behaviour is also difficult and time consuming.

Oral hygiene maintenance problems include managing uncooperative/challenging behaviour, motivating patients/parents/staff and dealing with high turnover of care staff.

Limitations of sedation; may be unsuitable for disabled patients.

Limitations of general anaesthetic; patients often have complex medical histories that complicate GAs; treatment available or appropriate under GA may be limited e.g. repeat cleaning of teeth where toothbrushing not possible.

Authors – Dr. Alastair Boles, Senior Dental Surgeon  
and Dr. Conac Bradley, Senior Dental Surgeon

## **Northern Area Health Board**

The Special Needs Services for adults and children in the Northern Area Health Board were enhanced in 1996 by the appointment of three Senior Dental Surgeons with specific responsibility for Special Needs services. An annual screening programme had been established by the Eastern Health Board to Department of Education special schools and to sheltered workshops in the region. This was

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continued by the Senior Dentists, as well as the development of services to Psychiatric services, homeless services, residential units for persons with disabilities, addiction services, services to Travellers and services to older persons.

The service continued to develop with needs assessments being provided to a range of care units. These developments include development of a new dental unit in St. Ita's Psychiatric Hospital, treatment services and oral health promotion material being provided to the Traveller community in conjunction with Pavee Point, development of special needs education and experience for hygienist students in conjunction with the Dublin Dental Hospital

While children's services continue to be provided directly by NAHB staff, the adults with learning disabilities choose between health board staff and general practitioners who are service providers under the Dental Treatment Service Scheme. All dental staff are involved in providing services for the variety of patients who experience difficulties accessing or accepting dental treatment.

Since 2003, two of the three senior dentist positions became vacant due to staff movements. They remain vacant at present, a situation made more difficult by continuing limitations in recruitment in health services. The limited recruitment potential in health services has reduced the number of dentists available to provide routine care for patients with special needs. However emergency services for all patients have been maintained, with limited annual screening for some units.

The Northern Area Board also provides a dental service under general anaesthesia for adults with disabilities in James Connolly Memorial Hospital. The service provides a full restorative and minor oral surgery service for adults with learning and physical disabilities and is staffed by general dentists from the NAHB dental service. The session operates every Tuesday morning and provides comprehensive dental treatment for a maximum of four patients per week. While this service operates on an out patient basis, the Board continues to have difficulty sourcing inpatient facilities for adults with special needs who require admittance to hospital for dental procedures.

One of the greatest challenges for special care dentistry at present is the turnover of staff in special care units and in dental services. While education programmes can be developed for carers of patients, the high turn over of staff in these units results in the loss of skills acquired in oral health care and an increased need for staff training. In dental services, the reduced availability of dentists and an increased turn over of staff results in limited numbers of appointments for special care patients, reduced recall programmes for patients, no development of rapport with their dentist over time, and a loss of skills acquired from experience in the service.

Challenges specific to the patients include the issue of consent, particularly for adults with learning difficulties and the availability of resources to support the oral health needs of patients who require assistance in their daily oral hygiene routine.

Authors: Dr. Anne O'Neill, Principal Dental Surgeon, Dr. Mary Ormsby, Principal Dental Surgeon, Dr. Jane Renehan, Principal Dental Surgeon

## **South Western Area Health Board**

**Health Authority Area** - Crumlin Dental Area 2 (comprising Dublin South West Community Care Area and parts of Dublin South City Community Care Area).

These clients are screened annually and dental treatment is carried out on-site using a mobile dental

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unit thereby minimising the need to bring clients to clinics for treatment. Specifically designed Oral Hygiene Instruction Programmes are implemented through care staff and clients. The practical application of these preventive programmes has been incorporated into skills programmes in most units to achieve a comprehensive oral health care regime for these clients.

Only those for whom preventive treatment is not possible in the units, those with complex medical histories or those requiring more complex dental treatments attend the dental clinic. This policy has received a favourable response from staff, clients and carers as it has optimised accessibility to services.

These clients do not avail of the DTSS, all dental care being provided by the Community Dental Services.

Clients with intractable behavioural problems or those whose treatment in the clinic is complex are referred for Secondary Care. Normally this entails provision of routine dental treatment under General Anaesthetic on a day case basis only, in James Connolly Memorial Hospital, Blanchardstown. The waiting time on this service from time of referral is about three weeks. In 2004 a similar service was established in Naas General Hospital which gives clients a choice of facility thereby improving accessibility.

However, significant difficulties arise when clients who need treatment under General Anaesthetic and require admittance to hospital. The availability of beds is very limited and a waiting list of over six months exists for this service.

There is currently no structured Secondary Care Oral Surgery Service available in the Eastern Region for patients. This is currently causing some difficulties which have, to date, not been adequately addressed.

Author – Dr. Adrienne Dolan, A/Snr Dental Surgeon

### **Health Authority Area – Cornmarket**

Most of the clients with intellectual disability in our area are living at home. The majority of those in residential care are living in community homes with about 6 residents per home. These units are run by voluntary agencies.

We have 2 large residential units. These units are not under the direct care of the health board but receive funding from the health board.

One unit employs a private practitioner to provide dental care for their residents on site. Health board staff provides dental care at the other unit. It is a need led service. The residents are screened annually and treatment provided on site.

Clients, resident in community homes receive their treatment at local health board clinics. Due to limited resources this service is mainly demand led. Many however access treatment through the annual workshop-screening programme.

GA services for these clients are available at three general hospitals with a waiting time of about 3 weeks provided that they don't have serious medical complications.

Contacting relatives when an extensive course of dental treatment is required can be problematic.

Author – Dr. Triona Mc Alister, Senior Dental Surgeon

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## **Health Authority Area - Kildare/ West Wicklow**

Health board dental staff provide treatment to the above group through liaison with the main service providers. In Kildare/ West Wicklow these are the Sisters of Charity of Jesus and Mary, Saint John of God, Kildare Services, Camphill Community, K.A.R.E. and the Irish Society for Autism.

All units are screened on an annual basis and treatment arranged on site or in the most convenient dental clinic. If clients require more frequent reviews they are recalled as appropriate. Staff and clients are also advised that clients can avail of the DTSS scheme if they wish. This applies more so to those in low support community housing. Oral health promotion is an integral and fundamental part of oral health services for these clients. Programmes are ongoing for clients, care staff and parents. Care staff in Moore Abbey undergo initial and ongoing training on oral care issues for clients.

General anaesthetic services are available in Naas Hospital. This session provides both restorative treatment and oral surgery. A relative analgesia facility is also under development in Naas Hospital. Other specialist dental services are accessed through the Dublin Dental Hospital.

Problems encountered include lack of continuity of care staff, low staffing levels in units and delays in organising consent and medical reports due to the above.

Author – Dr. Maura Cuffe, Senior Dental Surgeon

## **Midland Health Board**

### **Community Care Area: Laois/Offaly**

There is one large residential care unit in Laois/Offaly, Alvernia House in Portlaoise. These patients are screened annually and all necessary is provided locally (if cooperation allows). Once patients are screened initially, they are put on a recall system. This group attend our dental hygienist for preventive treatment. Health Board hygienists visit the residential care units and are involved in the training of carers. We have a general anaesthetic service in Tullamore General Hospital, limited to one patient per week. We provide a comprehensive range of treatments under general anaesthetic (fillings, extractions, sealants and prophylactic treatments). Those patients who live at home or in community houses are encouraged to avail of the Dental Treatment Services Scheme (DTSS). Domiciliary visits are made on request.

### **Challenges**

1. Inadequate staff levels to deal with the comprehensive workload
2. Staff training issues in relation to this group
3. high frequency of cancellations/non-attendance
4. Difficulty in accessing GA for patients with a complex medical history
5. Lack of an oral health programme focused on this group
6. Availability of dedicated hygienists

Author: Dr. Mark Henry, Senior Dental Surgeon

### **Community Care Area: Longford/Westmeath**

The residents at St. Mary's, Delvin are screened twice a year by a private practitioner using a Health

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Service Executive surgery in Delvin. Patients not suitable or unable to access the Dental Treatment Service Scheme and who require a general anesthetic are referred by general dental practitioners to the Principal Dental Surgeon (PDS) in the area for treatment. Currently, there is only one bed available, one morning a week in Tullamore General Hospital for adult clients who require dental treatment under general anesthesia (GA). In many cases the requirements of the patient to be treated are unknown until examined in theatre and no radiographs are available to plan their needs before hand. Complete treatment including fillings is provided for this adult in one visit. Facilities to treat one adult patient under GA a week is insufficient and even this is under threat due to demands on theatre space for Orthopaedics. Presently, most of the adults treated under GA are emergency cases in that they are suffering pain of dental origin.

In Mullingar, Athlone and Longford private practitioners carry out the majority of treatment for this client group under the DTSS. However, some clients require general anesthesia for treatment and are referred to the PDS who organizes their care. Some clients are treated by HSE dental personnel.

Staffing levels: One Senior Clinical Dental Surgeon post in the community care area but on study leave at the moment. When he was in situ he screened residences and carried out treatment or referred as appropriate. One private practitioner in Athlone and one in Mullingar carry out treatment under relative analgesia for clients under the DTSS or (if client has no medical care) are paid direct by the HSE dental service. A new hygienist post has recently been filled and it is planned if resources allow to use this post and Senior Dental Nurses to provide a structured oral health educational service in the near future for groups with special needs.

Author – Dr. Daniel O’Meara, Principal Dental Surgeon

## **Mid-Western Health Board**

### **Community Care Area - Clare**

Adults with intellectual disability have eligibility for dental services under the terms of the 1970 Health Act. In the period before and during the survey, the service profile was as follows: Adults with intellectual disability were in the first instance directed to the Dental Treatment Services Scheme. Those that could not be treated by general dental practitioners under the DTSS because of problems with access or difficulty in cooperation, were seen by the Senior Dental Surgeon, Special Needs, or other Health Board Dental Surgeons.

Access to primary care is not a significant issue for those who are able to attend and co-operate with treatment. Adults with intellectual disability who cannot be treated in a primary care setting have difficulty in accessing restorative treatment under general anaesthesia. Access to Oral & Maxillo-Facial Surgery services is excellent.

The challenges in delivering dental care for this group include the retention and recruitment of experienced staff, and the availability of restorative treatment under general anaesthesia.

Author: Dr. Joe Green, Principal Dental Surgeon

### **Community Care Area – Limerick**

A dental service is provided to those in residential care. Our service provides the clinical skills and the care group (Brothers of Charity) provide the premises and the back up. Those service users who are deemed to be untreatable under

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local anaesthetic are referred to our general anaesthetic special needs clinic (fortnightly) in the Regional Hospital, Dooradoyle. The clinical skills for this service are provided by our staff in the acute hospital setting.

The service users who are living either at home in the community or in sheltered housing in the community are encouraged to utilise the DTSS as a first option. All staff offer a casualty service to this client group if our service is the first port of call. This gives an opportunity to explain to the service user and in particular their carer the opportunities available through the DTSS.

The difficulties encountered in offering the service are no different than in other areas with the issue of consent always being to the fore. The collection of data is time consuming and indeed the explanation of treatment plans often requires a telephone conversation with a relative, who lives a distance away.

Author: Limerick Dental Service

## **Community Care Area – North Tipperary/East Limerick**

### **Summary of Services**

There are approximately 600 clients who are eligible for care, by virtue of their medical card.

A wide range of care is offered.

1. The services of a full-time Senior Dental Surgeon and Nurse covering: routine check-ups, emergency appointments, full mouth rehabilitation under general anaesthesia (where necessary).
2. A Senior Dental Surgeon provides care in nursing homes, psychiatric hospitals, hospitals for the aged. We use a domiciliary dental kit.
3. A Hygienist who devotes 1 and 1/2 days per week to Special Needs clients.

### **Challenges**

The main challenge is manpower and the difficulty of offering an appropriate level of care to all these clients. A recall system was in operation which provided continuity as prioritisation was a necessity.

Work with Special Needs clients is very physically demanding, as well as requiring a high degree of commitment from the whole team.

### **Referral**

We were happy in this area with the facilities for second level care. The Department of Oral Surgery in the Mid-West Regional Hospital are a tremendous help, as are the dental hospitals in Cork and Dublin.

### **D.T.S.S.**

A systematic effort was made in 2002 / 2003 to introduce some of the more able clients to dentists who were employed in the D.T.S.S. The outcome here was satisfactory, but limited.

### **St. Josephs Psychiatric Hospital, Limerick.**

We see full time residential patients. All patients are screened circa every year to assess their dental needs and these are met. Their needs are met in the on-site dental clinic and this is open every second Wednesday.

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We screen patients in residential care in the Hospital of the Assumption, Thurles. This is a Health Board run nursing home. Essential dental needs are met, depending on funds. Non emergency needs may be met in the future.

We see patients in private nursing homes or in their own home, who are unable to travel. A portable dental unit assists greatly in certain treatments.

Authors – Dr. Nora Gallagher, Senior Dental Surgeon  
and Dr. Adrian O’Neill, Senior Dental Surgeon

## **North Eastern Health Board**

### **Community Care Areas: Louth, Meath, Cavan/Monaghan**

It should be noted that the NEHB (HSE- North East) was the only Health Board area in the whole of Ireland who were unable to take part in the National Survey of Adults with Intellectual Disability because of the inadequate resources and facilities within this Special Needs Group.

#### **Summary of Services**

There are two main residential units for adults with intellectual disability in the NEHB region St. Davnet’s Hospital Monaghan and St. Mary’s Drumcar. There are approximately twenty group homes. Screening of clients in their residential units on an annual or biannual basis as resources allow. Treatment in nearby dental clinics is organised as needed. There are three Health Education Officers (oral health) available for oral health promotion. Secondary care under general anaesthesia is available in Our Lady of Lourdes Hospital in Drogheda. On average, up to 10 sessions are currently available annually. Relative analgesia services are being developed on four separate sites, within each county. Domiciliary visits can be made on request.

#### **Challenges**

- Inadequate staff levels to deal with current workload.
- Difficulty in accessing secondary care under general anaesthesia in a timely and responsive manner.
- Inadequate training for staff for dealing with complex issues

Authors: Dr. Declan Quinn, Senior Dental Surgeon and Dr Mary O’ Farrell, Principal Dental Surgeon.

## **North Western Health Board**

### **Community Care Area – Donegal**

Adults with an intellectual disability in residential care within the Donegal Community Care are offered an annual dental examination. The dentist carries out this examination within the residential unit. Subsequent to this examination, follow up dental treatment is provided at the local health board dental clinic e.g. fillings, dentures, extractions etc. If this is not possible then the individual is referred to the main dental clinic in Letterkenny where the patient is assessed for treatment under general anaesthesia or sedation. A pre-general anaesthetic assessment clinic has been in operation in Letterkenny for over one year and it enables the operating dentist to assess the dental needs of the patient and to discuss any potential problems that may be encountered with the individual’s carer etc. It also allows discussion with the consultant anaesthetist prior to appointment for treatment.

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Restorative work and extractions are provided under general anaesthetic. Health board dental hygienists also visit the residential units and provide health promotion and dental education advice to the families and carers.

Author: Dr. Dan Thompson, Senior Dental Surgeon

### **Community Care Area – Sligo/Leitrim**

Care protocols for all persons with learning disability in residential care include an annual dental check up. Dental services for adult persons with learning disability in health board institutions in Sligo and Leitrim are provided mainly by the senior clinical dental surgeon for special needs and by two health board dental hygienists with the support of their dental surgery assistants. Those living in community group homes are encouraged to avail of the Dental Treatment Services Scheme (DTSS) and increasing numbers now use this scheme. Where general practice dentists feel unable to provide treatment, health board dental staff provides dental services. Treatment is provided under local anaesthetic or general anaesthetic as required. Restorative treatment under general anaesthesia is available but is limited because of lack of anaesthetic time and an additional dentist. The emphasis of the health board service is on prevention of dental disease. Carers are motivated about and are given detailed instructions on oral care. An oral health promotion programme for this group would be desirable.

Author: Dr. Brian Mercer, Senior Dental Surgeon

## **South Eastern Health Board**

### **Community Care Area – South Tipperary**

In South Tipperary, there are currently 94 adults with intellectual disability in residential care, 74 of whom also receive a mainday service. In South Tipperary we strive to provide a service based on the needs of our clients. Therefore the service is varied between individuals and centres. We do not have our own General Anaesthetic service. As a result patients who need this service are referred usually to University Dental School and Hospital, Cork. This is an obvious barrier to dental care for this group. The following is an outline of the services provided to clients attending the various centres:

Damien House is a residential unit for 10 severely disabled adults. They generally attend the Health Board clinic in Clonmel unless the patient is particularly upset or not mobile, in which case we visit the centre. It is usually not possible for these patients to cooperate adequately for dental care in the dental clinic and they are therefore generally referred for General Anaesthesia if other more comprehensive treatment is deemed necessary.

They are screened annually, and more often if needed. Also if any emergency arises, they are seen immediately.

Brothers of Charity have several residential units in the area with most residents attending a day care centre in a separate house. They sometimes come to the clinic but more usually are screened annually at their day care centre. They are re-appointed to the clinic to examine more thoroughly, if deemed necessary or to have a scale and polish if cooperative enough. Usually it is necessary to refer for General anaesthesia if more comprehensive treatment is required. Emergencies are seen in local clinics on demand.

Camphill Communities have 2 houses in the area with residents that usually access dental care through

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DTS Scheme for adult medical card holders, though on occasions emergencies are dealt with on request in our clinics.

The Nagle Centre Workshop, Cashel is a day care centre which also has some adults in residential care. These adults always attend Cashel Clinic and are usually cooperative enough to have routine treatment in the dental clinic.

Moorehaven Workshop, Tipperary Town:

The service to this centre is varied. In the past the residents received all their care in the local clinic. As the residents all had medical cards they were encouraged to access dental care from local practitioners through the DTS scheme in recent years. However this situation has been reviewed and it is now planned to provide dental care for this group in the local clinic.

Author – Dr. Sharon Kingston, Senior Dental Surgeon

### **Community Care Area – Waterford**

Approximately 25 residents of Parkside Programme in Belmont Park Training Centre chose to access dental services through the D.T.S.S The Community Dental Service provides dental care for all other adults with learning disability in residential care in our area (200 people approx.).

Those who avail of our service are screened annually by the Community Dental Service, either on campus or in the dental clinic. Treatment is provided to meet any identified need using local anaesthetic, inhalation/oral sedation or general anaesthesia as necessary and individuals are recalled as appropriate, to the dentist or hygienist.

The majority of service-users are treated under local anaesthetic with 15% approximately requiring sedation of some form and a small proportion (primarily those with severe/profound learning disability) requiring general anaesthetic treatment. The waiting list for non-emergency general anaesthetic treatment is currently 5 months and we have 6 adults with learning disability on this list at present. Emergency general anaesthetic treatment is provided within 2-4 weeks. Non-GA emergency treatment can be provided on the day of presentation if necessary and there is no waiting list for provision of routine treatment with or without sedation.

A full range of treatment is provided. Although treatments most commonly provided are fillings, extractions, prosthodontics and periodontal therapy, treatments such as endodontics, orthodontics and crowns are also provided as appropriate. Treatment for severely/profoundly disabled residents is provided on campus where possible (primarily scaling and extractions).

The only challenge to the delivery of dental care for this group is the difficulty in getting care staff involved in supervision and assistance of oral hygiene although some staff are excellent in this regard.

Author – Dr. Maura Haran, Senior Dental Surgeon

### **Community Care Area – Wexford**

Special Needs patients are referred to the Health Board Dental Service either by the manager of the residential unit or by the patient's family.

The patient is then assessed by a HBDS and arrangements are made to have the patient:

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1. Treated under local anaesthesia in the Dental Clinic or
  2. Referred to the Acting Senior Dental Surgeon (Special Needs) and Placed on a General Anaesthetic Waiting List

Currently we have one general anaesthetic list, limited to one patient, per week in Wexford General Hospital. This results in a waiting list of approximately 6 months.

The General Anaesthetic patients are intubated (nasal where possible) and receive a basic comprehensive course of treatment, including fillings, extractions, fissure sealants, root planning/scale and polish and prophylaxis treatment as appropriate.

It is an unwritten policy that patients requiring general anaesthesia are not treated within a three year period, except in the event of pain or other emergency.

Author – Dr. Joseph O’Byrne, Senior Dental Surgeon

## **Southern Health Board**

### **Community Care Area - Kerry**

Adults with intellectual disability in Kerry are in residential care either in Father Corridon Centre in Rathmore, St. Finan’s in Killarney or St. Mary of the Angels in Beaufort. The majority of adults with intellectual disability are in residential community homes or attend day workshops (e.g. The Old Monastery in Killarney or St. John of God in Tralee). The carers in all these institutions are aware of the need to telephone the Dental Service if any resident has a dental problem for an appointment at the nearest health clinic. The Senior Dental Surgeon Special Needs conducts a dental screening annually at these establishments.

If the resident has a valid medical card and is amenable to treatment in the dental chair, they are encouraged to visit their own general dental practitioner under the Dental Treatment Services Scheme. The majority however, are examined and treated if necessary by health board dental surgeons. Those who cannot tolerate any treatment while conscious in the dental chair are treated under general anaesthesia in the Bons Secour Hospital, Tralee. Here, the health board dental surgeon can provide both restorative and extraction services. The rare multiple extraction or dental clearance cases are attended to in theatre under general anaesthesia in Kerry General Hospital.

Author: Dr. John Jones, Principal Dental Surgeon

### **Community Care Area – North Cork**

**CHARLEVILLE WORKSHOP:** Total 160 approximately \_ residential. Need driven service clinic.

**KANTURK:** Cope Foundation 12-14 residential. Routine treatment clinic. Hospital-Demand service clinic.

**MALLOW:** Long stay Health Board Institutions – Demand service. Non Health Board Institutions – M/C D.T.S.S.

**FERMOY:** Cope Foundation – partially need driven. Others M/C D.T.S.S.

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Patients unsuitable for treatment in primary care situation referred for G.A. to either Cork Dental Hospital (CDH) or St. Camillus', Limerick.

Quite a high proportion of these patients are not amenable to treatment under L.A; the lack of hospital based G.A. facilities is the greatest barrier to the delivery of dental care.

Author – Dr.T.C. Hanley, Senior Dental Surgeon

### **Community Care Area - North Lee and South Lee**

#### **Summary of Services:**

The provision of routine dental services to the adult special needs cohort is a priority in these dental areas. Dental screening examinations are carried out annually in the various centers and workshops. Certain patients are on a regular recall list. Emergency appointments are available on demand. Oral Health Promotion is provided to patients and carers as appropriate. A general anaesthesia session for routine dental treatment is available each week in Cork University Hospital. However, the waiting list for this service is over 12 months.

#### **Challenges:**

Limitations of general anaesthetic service

Authors – Dr. Mary O`Connor, Principal Dental Surgeon  
Dr. Michael Thornton, Principal Dental Surgeon

### **Community Care Area - West Cork**

The main challenges to delivering a satisfactory service to this group are met by

- The creation of a data base
- Oral health promotion programmes for carers and clients
- Immediate access to primary care locally
- Referral for secondary care.
- Continuing training for the dental teams.

#### **Creation of a data base**

The identification of locations, numbers of long-stay clients and screening of dental needs is an ongoing and challenging process.

#### **Oral health promotion programmes for carers and clients**

The dental hygienist delivers an oral health promotion programme in the residential units. Availability of staff to participate has to be carefully negotiated with line managers. Carers are actively involved in the evaluation and development of this programme.

#### **Primary care delivery**

Those clients that can access and accept treatment under local anaesthesia are readily treated locally either through the DTSS or the Public Dental Service, the latter dealing mostly with the more demanding and time consuming cases. General anaesthesia is available at Bantry General Hospital for emergency extraction.

#### **Referrals for Secondary Care**

Those requiring more specialised treatment under General Anaesthesia are referred to the Cork

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Dental School and Hospital. The waiting lists system involved in this system can incur hardship on this vulnerable group particularly on those unable to adequately communicate their needs.

**Regular training for the dental teams.**

Training is essential for all dental teams involved in treating this category of patients.

Author: Dr. T.Nylan, A/Principal Dental Surgeon

## **Western Health Board**

### **Community Care Area - Galway**

Services for intellectual disability in Galway are provided by Galway County Association, Brothers of Charity, Enable Ireland (Galway). All dental department dentists screen Day and Residential centres for intellectual disability every 12-18 months. The hygienist visits on a yearly basis, assisting with oral hygiene instruction, support to carers, and follow up of client's where co-operation permits. Adults in residential care who can co-operate, source their dental care through the DTSS. Experience of the scheme shows that appropriate back up and continuing education would facilitate practitioners/hygienists with treating more clients. DTSS patients and others unable to cooperate are referred for dental treatment under General Anaesthetic, in operation since 1980, and held fortnightly at University College Hospital. This service provides restorative, preventive, and surgical care. Access to ICU at UCHG is a problem and arranged exceptionally. This issue needs to be resolved. Provision of Oral Surgery at UCHG would reduce hardships to this deserving group: currently oral surgery is referred outside the area.

Author : Dr. Antoinette Nolan, Senior Dental Surgeon

### **Community Care Area - Mayo**

The dental services available for adults with intellectual disability are very limited. We do not have any specific service for adults with intellectual disability in residential care. Under the DTSS, if the patient is living at home and is ambulant they can source their dental treatment through the DTSS. If co-operation is a problem and the patient is referred into our general anaesthetic service we do our best in terms of providing dental extractions, restorations, and periodontal treatment. We provide the service on demand to adults in the institutions in our area. We do domiciliary visits if requested.

We have a Senior Clinical Dental Surgeon Special Needs as a result of the internal promotion set up by the Department of Health some three or four year ago. This is a part-time post wherein post holders are expected to discharge their additional duties approximately two days a week. The post came without any facility for training either as distance learning or course modules in any of our dental schools. The post holder in this area concentrates his efforts on children in primary school and the equivalent special needs schools in the area.

Author – Dr. Antonia Hewson, Principal Dental Surgeon

### **Community Care Area - Roscommon**

The main providers of services to adults with intellectual disability in Roscommon Community Care

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is the Brother's of Charity. This care is provided through a number of day centres and group homes throughout the County. The latter provide overnight and respite care to the client. Individuals in these centres are screened every 12-18 months. Treatment is provided, where necessary, under General Anaesthetic at the County Hospital, Roscommon where "Special Needs" G.A. sessions are held on a fortnightly basis. A full range of dental care is available at this facility including oral surgery, conservative and prevention. In about 20% of cases, because of the lack of I.C.U. at the Hospital external referral of these patients is necessary. This can cause difficulties and some amount of hardship for those involved. Recruitment of a Senior Clinical Dental Surgeon Special Needs Dentist to the area has also been a handicap. Regionalisation of these services would be an advantage.

Author – Dr. Matt Walshe, Principal Dental Surgeon

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## Appendix 2

### Examining Survey Teams

<b>Health Board/Health Authority</b>	<b>Dental Examiner</b>	<b>Dental Examiner</b>
East Coast Area Health Board	Dr. Alastair Boles	Ms. Alison Lynch
Northern Area Health Board	Dr. Ruth Gray	Ms. Jean Stacey
South West Area Health Board	Dr. Maura Cuffe	Ms. Jean Stacey
Midland Health Board	Dr. Mark Henry	Ms. Mary Flanagan
Mid-Western Health Board	Dr. Joe O'Connor	Ms. Helen Liddy
North Western Health Board	Dr. Brian Mercer	Ms. Elizabeth Mulvihill
South Eastern Health Board	Dr. Sharon Casey	Ms. Aisling Halpin
	Dr. Maura Haran	Ms. Karen Coleman
Southern Health Board	Dr. Geraldine Breen	Ms. Johann Oregan-Moran
Western Health Board	Dr. Antoinette Nolan	Ms. Sabina Burke

### User Group Members and Contributors

Dr. Elizabeth Barrett, Higher Executive Officer, DH&C,  
Dr. Alastair Boles, Senior Dental Surgeon Special Needs, ECAHB  
Dr. Conac Bradley, Senior Dental Surgeon Special Needs, ECAHB  
Dr. Geraldine Breen, Senior Dental Surgeon, SHB  
Dr. Sharon Casey, Senior Dental Surgeon Special Needs, SEHB  
Dr. David Clarke, Principal Dental Surgeon, ECAHB  
Dr. Fergal Connolly, Principal Dental Surgeon, NEHB  
Dr. Pdraig Creedon, Principal Dental Surgeon, SEHB  
Dr. Maura Cuffe, Senior Dental Surgeon Special Needs, NAHB/SWAHB  
Dr. Maurice Delaney, Principal Dental Surgeon, MWHB  
Dr. Adrienne Dolan-Mulhall, Senior Dental Surgeon Special Needs, SWAHB (A)  
Dr. Gerard Gavin, Chief Dental Officer, DH&C  
Dr. Nora Gallagher, Senior Dental Surgeon Special Needs, MWHB  
Dr. Fiona Graham, Senior Dental Surgeon, SHB  
Dr. Ruth Gray, Senior Dental Surgeon Special Needs, SWAHB  
Dr. Joe Green, Principal Dental Surgeon, MWHB  
Dr. T.C. Hanley, Senior Dental Surgeon Special Needs, SHB  
Dr. Maura Haran, Senior Dental Surgeon Special Needs, SEHB  
Dr. Mark Henry, Senior Dental Surgeon Special Needs, MHB  
Dr. Antonia Hewson, Principal Dental Surgeon, WHB  
Dr. Joe Hogan, Senior Dental Surgeon Special Needs, MHB  
Dr. John Jones, Principal Dental Surgeon, SHB  
Dr. John Kelly, Principal Dental Surgeon, NEHB  
Dr. Maria Kenny, Principal Dental Surgeon, MHB  
Dr. Sharon Kingston, Senior Dental Surgeon Special Needs, SEHB  
Prof. Martin, Kinirons, University College Cork  
Dr. Brian Mercer, Senior Dental Surgeon Special Needs, NWHB  
Dr. Triona McAllister, Senior Dental Surgeon Special Needs, SWAHB  
Dr. Michael Mulcahy, Senior Dental Surgeon Special Needs, MHB  
Dr. Joe Mullen, Principal Dental Surgeon, NWHB  
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Prof. June Nunn, Trinity College Dublin  
Dr. Tom Nylan, Principal Dental Surgeon, SHB (A)  
Dr. Joseph O'Byrne, Senior Dental Surgeon Special Needs, SEHB  
Dr. Mary O'Connor, Principal Dental Surgeon, SHB

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Dr. Mary O'Farrell, Principal Dental Surgeon, NEHB  
Dr. Daniel O'Meara, Principal Dental Surgeon, MHB  
Dr. Adrian O'Neill, Senior Dental Surgeon Special Needs, MWHB  
Dr. Anne O'Neill, Principal Dental Surgeon, NAHB  
Dr. Colleen O'Neill, Principal Dental Surgeon, SWAHB  
Dr. Mary Ormsby, Principal Dental Surgeon, NAHB  
Dr. Carmel Parnell, Senior Dental Surgeon, NEHB  
Dr. Declan Quinn, Senior Dental Surgeon Special Needs, NEHB  
Dr. Jane Renehan, Principal Dental Surgeon, NAHB  
Dr. Deirdre Sadlier, Director, Dental Health Foundation  
Dr. Margaret Shannon, Dental Advisor, DH&C,  
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Dr. Dan Thompson Senior, Dental Surgeon Special Needs, NWHB  
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Dr. Marie Tuohy, Principal Dental Surgeon, SHB  
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Ms. Pauline Mellett, Director, St. John of Gods Residential Centre, Bray,  
Ms. Rosemary O'Connell, Director, Brothers of Charity, Southern Services,  
Ms. Winifred O'Hanrahan, National Director of Brothers of Charity

### **Trainers**

Dr. Helen Whelton, Principal Investigator, Director, Oral Health Services Research Centre and Senior Lecturer in Dental Public Health and Preventive Dentistry, University College Cork  
Dr. Evelyn Crowley, Senior Research Fellow, University College Cork

### **Dental Nurse assisting trainers**

Ms. Theresa O'Mahony, Research Assistant, University College Cork

### **Project group - University College Cork**

Dr. Helen Whelton, Principal Investigator  
Dr. Evelyn Crowley, Senior Research Fellow  
Ms. Virginia Kelleher, Data Analyst  
Ms. Angela Murphy, Statistician/Report Writer  
Ms. Theresa O' Mahony, Research Assistant  
Ms. Maria Tobin, Projects Manager  
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Ms. Edel Flannery, Statistician  
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Ms. Ann Daly, Executive Assistant  
Ms. Ita Rattray, Executive Assistant  
Ms. Eileen MacSweeney, Research Assistant  
Ms. Maura Gallagher, Research Assistant  
Ms. Susan O'Donovan, Personnel Manager

### **Special Contributor**

Professor June Nunn, Trinity College Dublin

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## Appendix 3

### Page 1: National Survey of Adult's with an Intellectual Disability in residential care – Clinical Record Form

Examiner Name & No:  \_\_\_\_\_  
Recorder Name & No:  \_\_\_\_\_

Residence ID No.

HB(1)    CC Area (2)    Examiner(2)    Subject (3) 001 - 999

Subject No.                Gender     Name \_\_\_\_\_

Day    Month    Year    Day    Month    Year

DOB            19     DOE.            20

Incomplete Exam tick

Unable to Examine at all tick

#### DENTAL STATUS

- Wearing**
- Upper
- Lower

#### DENTURE STATUS

- Need**    **Affecting**
- Upper     Upper
- Lower     Lower

**DENTURE HYGIENE**

UR    UL

#### TRAUMA OF INCISORS

       RX NEED

2    I    I    2

LR    LL

#### PERIODONTAL HEALTH

Gingival Health   

Periodontal Health   

Calculus   

#### LESIONS OF THE ORAL MUCOSA

**RX NEED**

**RX NEED**

**Page 2**

	UR								MAXILLA								UL							
Tooth	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8								
Presence	53	56							77							98								
Condition	54												0			99								
Rx Needed	55			64		70										100								

	LR				MANDIBLE								LL			
Tooth	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8
Presence	101															146
Condition	102						120									147
Rx Needed	103									130						148

**Overall Treatment Need for Teeth**

**Manageability Index**

**Overall Needs Assessment**

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## **Coding Sheet (A)**

### **National Survey of Adult's with an Intellectual Disability**

#### **Gender:**

- Code 1 male
- Code 2 female

#### **Dental Status Codes**

- Code 0 - edentulous
- Code 1 - Dentate
- Code 2 - no uppers
- Code 3 - no lowers

#### **Denture Status Codes**

##### **A. Wearing Dentures**

Code 0 - Not possessing a denture.

##### **Partial -**

- Code 1 – Possessing and wearing
- Code 2 - Possessing and not wearing.

##### **Full Denture**

- Code 3 - Possessing and wearing
- Code 4 - Possessing and not wearing

##### **B. Need for Dentures**

- Code 0 - No denture needed
- Code 1 - Need for partial denture
- Code 2 – Need for partial denture but not appropriate at this time
- Code 3 - Need for full Denture
- Code 4 – Need for full Denture but not appropriate at this time
- Code 5 - Need for denture repair
- Code 6 – Need for adjustment - Easing

##### **C. Affecting**

- Code 0 - Not affecting
- Code 1 - Affecting
- Code X- Not applicable

#### **Denture Hygiene**

- Code 0 – Satisfactory
- Code 1 – Poor
- Code 2 – Urgent Need

#### **Trauma**

- 0 No evidence of trauma;
- 1 Discolouration;
- 2 Fracture involving enamel and dentine;(not restored)
- 3 Fracture involving enamel, dentine and pulp;(not restored)
- 4 Missing due to trauma;
- 5 Acid-etch composite restoration which has been placed to repair trauma;
- 6 Semi-permanent restorations (treatment on-going). e.g. stainless steel crowns, pinch bands, cellulose acetate crowns, "Directa" crowns, pinned inlays;
- 7 Permanent Restorations (treatment complete) e.g Porcelain bonded crown
- 8 Denture provided due to traumatic loss of this tooth;
- B Bridge provided due to traumatic loss of this tooth;

---

X Assessment cannot be made, there is no permanent incisor present and it has not been lost due to trauma.

### **Trauma – Treatment Need**

- Code 0 – No treatment required
- Code 1 – Treatment appropriate at this time
- Code 2 - Treatment required but not appropriate at this time
- Code 3 – Treatment need undetermined
- Code X – Not applicable as no trauma experience

### **Gingival Health**

- Code 0 – Healthy
- Code 1 – Not ‘healthy’ but not Code 2
- Code 2 – 3 or more teeth with moderate/severe gingivitis

### **Periodontal Health**

- Code 0 – Healthy
- Code 1 - not ‘healthy’ but not Code 2
- Code 2 – Moderate/severe periodontal disease.

### **Calculus**

- Code 0 – no visual calculus present
- Code 1 – Calculus > 1/3 on worst tooth surface
- Code 2 – Calculus 1/3 – 2/3 on worst tooth surface
- Code 3 – Calculus >2/3 on worst tooth surface

### **Periodontal Tissues – Treatment Need**

- Code 0 – No treatment required
- Code A – Simple OH required
- Code B – Scaling (simple) required
- Code C – Deep scaling/root planning required
- Code 2 – Treatment required but not appropriate at this time
- Code 3 – Treatment need undetermined

### **Lesions of the Oral Mucosa**

- Code
- 0 – None
- 1 – Acute necrotizing ulcerative gingivitis
- 2 – Suspect oral neoplasm
- 3 – Oral Lichen planus
- 4 – Leukoplakia of oral mucosa
- 5 – Candidiasis
- 6 – Sinus associated with infected tooth
- 7 – Aphthous ulceration
- 8 – Amalgam Tattoo
- 9 – Erythroplakia
- 10 – Median rhomboid glossitis
- 11 – Denture stomatitis
- 12 – Smoker’s palate
- 13 – Flabby Ridge(s)
- 14 – Denture Granuloma
- 15 – Cheek and Lip Biting

- 
- 16 – Geographic tongue
  - 17 – Frictional keratosis
  - 18 – Discoid Lupus Erythematosus
  - 19 – Leukodema
  - 20 – Lesions that can not be clearly identified
  - 21 – Other

### **Lesions of the Oral Mucosa – Treatment Need**

- Code 0 – No treatment required
- Code 1 – Treatment appropriate at this time
- Code 2 – Treatment required but not appropriate at this time
- Code 3 – Treatment need undetermined

## **Caries**

### **Tooth Status Code**

- Code A Permanent tooth present
- P Deciduous tooth present
- U Permanent tooth unerupted
- K Permanent tooth extracted

### **Condition Status – Dental caries**

- Code R – Fissure sealant
- Code S – No Caries
- Code V – Visual Caries
- Code D – Decayed, cavity
- Code K – Filled Amalgam and Primary Decay
- Code L – Filled (restoration not amalgam) and Primary Decay
- Code Y – Filled Amalgam and Secondary Decay
- Code Z – Filled (restoration not amalgam) and Secondary Decay
- Code F – Filled - Amalgam Restoration
- Code G – Filled – Non Amalgam Restoration
- Code C – Crowned
- Code Q – Crowned and Decayed
- Code T – Trauma
- Code P – Pontic of bridge present in space
- Code X – Excluded

### **Treatment Code for Tooth/Space**

- Code
- 0 – No treatment required
- 1 – one surface restoration
- 2 – Two surface restoration
- 3 – Three or more surface restoration
- 4 – Fissure sealant or preventive resin restoration
- 5 – Crown.
- 6 – Pulp treatment /caries /by filling.
- 7 – Pulp treatment/ caries/ crown.
- 8 – Extraction Due to Coronal Caries
- 9 – Extraction due to periodontal Disease.

- 
- W – Extraction due to other reasons
  - P – Implant required to replace tooth
  - R – Replacement with removable prosthesis
  - S – Replacement with resin bonded bridge
  - F – Replacement with conventional fixed bridge
  - V – Veneers
  - X – Other treatment for Dental Caries :

### **Overall Treatment need for teeth**

- Code 0 – No treatment required
- Code 1 – Treatment appropriate at this time
- Code 2 – Treatment required but not appropriate at this time
- Code 3 – Treatment need undetermined

### **Manageability Index**

1. Adult is likely to accept routine dental care, conscious, without the necessity for adjuncts like sedation or GA .
2. Adult will accept minimal intervention. More extensive treatment, as in (1) may require sedation or GA.
3. Adult will not allow comprehensive examination; tooth brushing possible with assistance, invasive dental care will need to be carried out under GA.
4. Adult will not allow any examination and requires GA facilities for examination and all treatment.

### **Overall Treatment Need Status**

- Code 1 – Maintenance
- Code 2 – Non – urgent
- Code 3 – Urgent

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## Appendix 4

Health Board Paper

Date

Name of Director of the unit

Address of unit

Dear Director,

**Re: Assessment of the Oral Health Needs of Adults with an Intellectual Disability in residential care in Ireland**

The Department of Health and the Health Boards have funded a National Survey to assess the Oral Health Needs of Adults with an Intellectual Disability in residential care in Ireland. The study is being co-ordinated by University College Cork.

Your residential unit has been randomly selected to be included in the sample. I am writing to ask you for permission to conduct the study in your unit.

Participation in the study will involve the following

- Completion of a questionnaire by the director of the unit to obtain information on the oral care, diet and smoking policies of the unit, level of involvement of carers, training needs of carers, barriers to care perceived by the staff, proximity and access to dental services for residents.
- A simple dental examination of the residents in the unit by a Health Board dentist who is experienced in examining this group. Dental examinations can take place in the unit itself. Consent or assent to conduct the examination on a resident will be obtained prior to any examination being carried out.
- Completion of a short number of questions relating to a resident's general medical and dental history and oral care practices by the team leader or supervisor prior to the dental examination taking place.

The Health Board has given a written commitment that any individual resident participating in this study who is found to have pain, sepsis or a suspect oral mucosal lesion will be referred and followed up for care. In the long term, adults in this group should be expected to benefit from the survey by the development of the dental services for this group.

I will contact you in the next few days regarding general logistics, obtaining consent or assent for residents and to answers any questions you may have on the study.

Yours Sincerely,

Name of examining Dentist

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Health Board Paper

Date

Name of Next of kin

Address

Dear Name of Next of kin

The Department of Health and the Health Boards have funded a National Survey to assess the Oral Health Needs of Adults with an Intellectual Disability in residential care in Ireland. The study is being co-ordinated by University College Cork.

The residential unit where *your son/daughter/other* is a resident has been randomly selected to be included in the sample. I am writing to ask you for permission to allow *your son/daughter/other* to participate in this study.

Participation in the study will involve the following

- A simple examination of *your son/daughter/other* teeth in the unit by a Health Board dentist who is experienced in examining and providing care for this group of residents. The dental examination will take place in the unit itself.

It may sometimes be necessary both for the safety of *your son/daughter/other* and the dentist to use appropriate restraint in order to carry out the dental examination. The level of restraint used will be no more than that required by the normal carer to perform normal activities for example shaving or brushing *your son/daughter/other* hair.

The Health Board has given a written commitment that any individual resident participating in this study who is found to have pain, sepsis or a suspect oral mucosal lesion will be referred and followed up for care. In the long term, adults in this group should be expected to benefit from the survey by the development of the dental services for this group.

If you give your permission for *your son/daughter/other* to participate, I would appreciate if you could sign the attached assent form and return it to the director of the unit. If you have any questions about the survey, please do not hesitate to contact me at .....

Yours Sincerely,

Name of examining Dentist

---

**Information and Informed Assent Form**

**To be completed by the resident's next of kin**

**Protocol No: OHSRC00302**

**Residents Name:** \_\_\_\_\_

**Screening No:** \_\_\_\_\_

**Resident No:** \_\_\_\_\_

**Dentist directing the Research: Dr Helen Whelton, Oral Health Services Research Centre, University Dental School and Hospital, Cork**

You are being asked to give permission to allow the above named resident to participate in a research study. The doctors at University College Cork study the nature of disease and attempt to develop improved methods of diagnosis and treatment. In order to decide whether or not you should give permission to allow the above named resident be a part of this research study, you should understand enough about the risks and benefits to make an informed judgement. This form gives detailed information about the research study. Once you understand the study, you will be asked to sign this form if you wish to give permission to allow the above named resident to participate.

The purpose of this study is assess the oral health needs of adults in residential care. Participation in this study will involve an examination of the teeth to measure dental decay, fillings/crowns and missing teeth. It may sometimes be necessary to use appropriate restraint in order to carry out the dental examination. The level of restraint used will be no more than that required by the normal carer to perform normal activities for example shaving or brushing their hair. All information is strictly confidential.

It should be noted that procedures conducted during this study do not replace regular dental check-ups. The Health Board has given a written commitment that any individual resident participating in the study who is found to have pain, sepsis or a suspect oral mucosal lesion will be referred and followed up for care. You are free to refuse permission to allow the above named resident to participate in this study or to allow them to withdraw from the study at any time for any reason.

**To grant permission**

The research project and the examination procedures associated with it have been fully explained to me. I have had the opportunity to contact an appropriate person in order to answer any questions concerning any and all aspects of the project and any procedures involved. I am aware that participation is voluntary and that I may withdraw my permission at any time. I am aware that my decision not to give my permission to allow the above named resident to participate or to withdraw will not restrict their access to health care services normally available to them. I understand that their records may be stored on a computer programme but that confidentiality of records concerning their involvement in this survey will be maintained in an appropriate manner. When required by law, the records of this research may be reviewed by government agencies.

I, the undersigned, hereby give permission to allow the above named resident to participate as a subject in the above-described project conducted by the Health Boards. I can receive a copy of this form for my records if I so request. I understand that if I have any questions concerning this research I can contact the dentist listed above. If I have any questions concerning the above named resident rights in connection with the research, I can contact the Clinical Research Ethics Committee of the Cork Teaching Hospitals at 021-4345599. If I have any queries about the study procedure I can contact Dr Helen Whelton at (021) 4901210.

After reading of the entire form, if you have no further questions, please sign where indicated

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**What relationship are you to the above named resident:** \_\_\_\_\_

**Witness:** \_\_\_\_\_ **Date:** \_\_\_\_\_

---

## Subject Information and Informed Consent Form

To be read out to subjects deemed by the director of the unit to be capable of giving their own consent

**Protocol No: OHSRC00302**

**Residents Name:** \_\_\_\_\_

**Screening No:** \_\_\_\_\_

**Resident No:** \_\_\_\_\_

**Dentist directing the Research: Dr Helen Whelton, Oral Health Services Research Centre, University Dental School and Hospital, Cork**

You are being asked to participate in a research study on oral health. In order to decide whether or not you want to be a part of this study, you should understand enough about the risks and benefits to make an informed judgement, this is called informed consent.

The purpose of this study is to find out what the oral health needs of adults in residential care is. If you participate in this study you will have a dental examination of your teeth and/or dentures to measure dental decay, fillings and missing teeth. All information is strictly confidential.

The survey examination is not intended to replace regular dental check-ups.

You are free to refrain from participation in this study, it is entirely voluntary. You can withdraw from the study at any time, for any reason.

If you wish to participate in this study you will be invited to have your teeth examined today.

### Agreement to Consent

The research project and the examination associated with it have been fully explained to me. I have had the opportunity to ask questions about the study.

After reading of the entire consent form:

If you have no further questions about giving consent, I would like you to sign the consent form to give your permission to be examined today by a dentist as part of this study.

**Signature of Subject:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Witness:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Subject No.

Residence ID No.

## PRE ASSESSMENT – INTERVIEW TYPE QUESTIONNAIRE A

A. Carer or Supervisor is to answer the questions on behalf of the client.

B. The interview is to be conducted prior to the dental examination on the same day

C. Tick applicable box

Example: Yes   
No

Q1 a). Does this client have any physical limitations?

Tick one box

Yes 1   
No 2

b) If Yes, please give details?

---

Q2a). Does this client have a sensory disability e.g. hearing impairment or visual impairment?

Tick one box

Yes 1   
No 2

b) If Yes, please give details?

---

Q3a). Does this client have any challenging behaviours?

Tick one box

Yes 1   
No 2

b) If Yes, please give details?

---

Q4. Does this client have diabetes?

Tick one box

Yes 1   
No 2

b) If yes, is the diabetes controlled?

Tick one box

Yes 1   
No 2

Q5a). Does this client have epilepsy?

Tick one box

Yes 1   
No 2

b) If yes, is the epilepsy controlled?

Tick one box

Yes 1   
No 2

Q6. How long has this client been in this unit?

Years   Months

Q7. How long has this client been in residential care?

Years   Months

**Q8. Does this client brush his/her own teeth or care for their own dentures?**

**Tick one box**

- Yes 1   
No 2   
Don't know 3

**Q9a). In your opinion, is this client capable of properly brushing his/her own teeth and/or able to take care of their dentures adequately?**

**Tick one box**

- Yes 1   
No 2   
Don't know 3

**b) If answer is No or Don't know to part a), is there someone responsible for the care of this client's teeth/dentures?**

**Tick one box**

- Yes 1   
No 2   
Don't know 3

**c) If answer is No or Don't know to part b), can you tell me why there is no one responsible for the oral care of this client? Outline the difficulties/problems?**

**Q10a). Has this client received any dental treatment while residing in this unit?**

**Tick one box**

- Yes 1   
No 2   
Don't know 2

**b) If Yes to part a) where did they access treatment last?**

**Tick one box only**

- Health Board Dental Service 1   
Private Practitioner/  
General Practice 2   
Dental Hospital 3   
Don't know/Not sure 2

**Q11. The last time this client received dental treatment was it for?**

**Tick one box**

- An emergency i.e. they were in pain 1   
Check up/routine treatment/  
new dentures 2   
Don't know 3

**Q12. Has this client ever refused dental treatment?**

**Tick one box**

- Yes 1   
No 2   
Don't know 3

**If Yes, please give details:**

**Q13. What medication is this client currently taking?**

For office use only No of different medications

**Q14. Does this client smoke?**

**Tick one box**

- Yes 1   
No 2

**Q15. Is there any other information you think we should be aware of prior to conducting the clinical examination on this client?**

**Thank you for your help and co-operation**

Residence ID No.	<input type="text"/> <input type="text"/> <input type="text"/>
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**Oral Care for Adults with an Intellectual Disability**  
**Residential Unit Questionnaire**

**How to fill in this questionnaire**

**A: To be completed by the director of the residential unit**  
**B: One questionnaire is to be completed for each unit**  
**C: Answer questions for the unit as a whole**  
**D: If you do not understand any questions, please write that also beside the question**  
**E: Tick applicable box**

Example:	Yes	<input checked="" type="checkbox"/>
	No	<input type="checkbox"/>

**All information is strictly confidential**

**Q1. What is the name and address of the unit?**

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Contact number of unit

\_\_\_\_\_

**Q2. How many clients are currently in the unit?**

**Q3. What is the general age range of clients in the unit?**

**Tick one box**

- Under 35 years of age
- Over 35 but under 55 years of age
- Over 55 years of age
- Spread through out these age ranges

**Q4. In general, do clients in this unit have:**  
**Tick one box**

- A mild intellectual disability
- A moderate intellectual disability
- A severe intellectual disability
- A profound intellectual disability

**Q5. Is oral care normally included in the individual care plans for clients in your unit?**

**Tick one box**

- Yes
- No

**Q6. In general, do clients in this unit brush their own teeth or care for their own dentures?**

**Tick one box**

- Yes
- Yes with assistance
- No

**Q7. Does your unit have written guidelines on how to provide oral care for clients?**

**Tick one box**

- Yes
- No

If Yes, please enclose copy of written guidelines

**Q8. Does the unit have a policy on smoking for the clients?**

**Tick one box**

- Yes
- No

If Yes, what is the policy?

**Q9. Does the unit have a policy on the diet/nutritional intake particularly in relation to sugar intake of clients in the unit?**

**Tick one box**  
Yes   
No

**If Yes, what is the policy?**

---

**Q10. Has your staff ever received training on providing oral care to clients?**

**Tick one box**  
Yes   
No

**If Yes, when was the training provided?**

**What kind of training was provided?**

**Who provided the training?**

---

**Q11. Do you see a need for training in this area?**

**Tick one box**  
Yes   
No

**Q12. Do you foresee any difficulties if any clients were to require a general anesthetic for dental treatment?**

**Tick one box**  
Yes   
No   
Don't know

**If Yes, please give details:**

---

---

**Q13. Do you foresee any difficulties if clients in this unit were to require dental treatment in general?**

**Tick one box**  
Yes   
No   
Don't know

**If Yes, please give details:**

---

**Q14. Are you concerned that clients in this unit may be currently experiencing pain?**

**Tick one box**  
Yes   
No   
Don't know

**If yes, would you consider that the source of the pain could be dental in nature?**

**Tick one box**  
Yes   
No   
Don't know

**Q15. If clients in this unit required emergency dental treatment where would they access treatment?**

**Tick all boxes that apply**

Health Board Dental Service   
Private Practitioner/ General Practice through the medical card scheme   
Private Practitioner- Private payment   
Don't know/Not sure

**Q16. If clients in this unit required routine dental treatment for example check up or fillings where would they access treatment?**

**Tick all boxes that apply**

Health Board Dental Service   
Private Practitioner/ General Practice through the medical card scheme   
Private Practitioner- Private payment   
Don't know/Not sure

**Q17. Overall, do the clients in this unit receive regular dental treatment or check-ups?**

**Tick one box**  
Yes   
No

**Q18. Does a dentist (s) or oral health promoter visit the unit to provide checkup/screening, dental treatment or oral care advice to any of the clients?**

**Tick one box**  
Yes   
No

**Q19. How far is your nearest accessible dentist for the clients in this unit (in miles) ?**

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**Q20. How are client transported to the dentist?**

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**Q21. Have you had problems in the past in providing transport for clients to the dentist?**

**Tick one box**

Yes

No

**Q22. What are the difficulties for the residential unit in providing good oral care for clients?**

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**Q23. What are the difficulties for the residential unit in providing access to dental treatment for clients in the unit?**

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**Q24. Have you any comments about dental care for the clients in the unit or dental care in general for this group of clients?**

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**Form completed by**

---

**Position held in unit**

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**Please feel free to write any comments in this section**

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**Thank you for your help  
and co-operation**

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## Appendix 6

### INFORMATION FORM RESIDENTIAL CENTRES FOR PERSONS AGED 16 YEARS AND OVER WITH AN INTELLECTUAL DISABILITY

*(to be completed separately for each residential centre)*

< PLEASE PRINT USING CAPITAL LETTERS >

Health Board/Authority \_\_\_\_\_

Community Care/Dental Area \_\_\_\_\_

Name of Residential Centre \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

Name of Director \_\_\_\_\_

Please fill in **NUMBER OF PERSONS** currently in the residential centre by **AGE GROUP** and **GENDER** :

AGE GROUP	MALE	FEMALE
16 - 24		
25 - 34		
35 - 44		
45 - 54		
55- 64		
65 and over		

**Information Supplied By :**

Name \_\_\_\_\_

Position Held \_\_\_\_\_

Telephone No. \_\_\_\_\_

Date \_\_\_\_\_

Please return complete form to:

*All information supplied will be kept strictly confidential.*

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