Department of Health

Northern Ireland Older Person's Oral Health Improvement Plan

OLDER PERSON'S ORAL HEALTH OPTIONS GROUP

August 2023

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Introduction

Northern Ireland Population Demographics

The world's population is ageing, with virtually every country in the world experiencing growth in the size and proportion of older persons within their population. There were 727 million persons aged 65 years or over in the world in 2020 with this number projected to more than double to over 1.5 billion by 2050[1].

The population in Northern Ireland (NI) was estimated to be around 1.903 million in mid-2021[2]. This number was the highest ever recorded. At this time, approximately one in six of the population were aged 65 and over (17%, 326,477 people) and approximately 39,391 adults were aged 85 years and over. Over the last 10 years, the number of older adults (aged 65 & over) in NI has increased by 23% (Figure 1). The population of Northern Ireland is projected to reach 1.939 million by mid-2045[3].

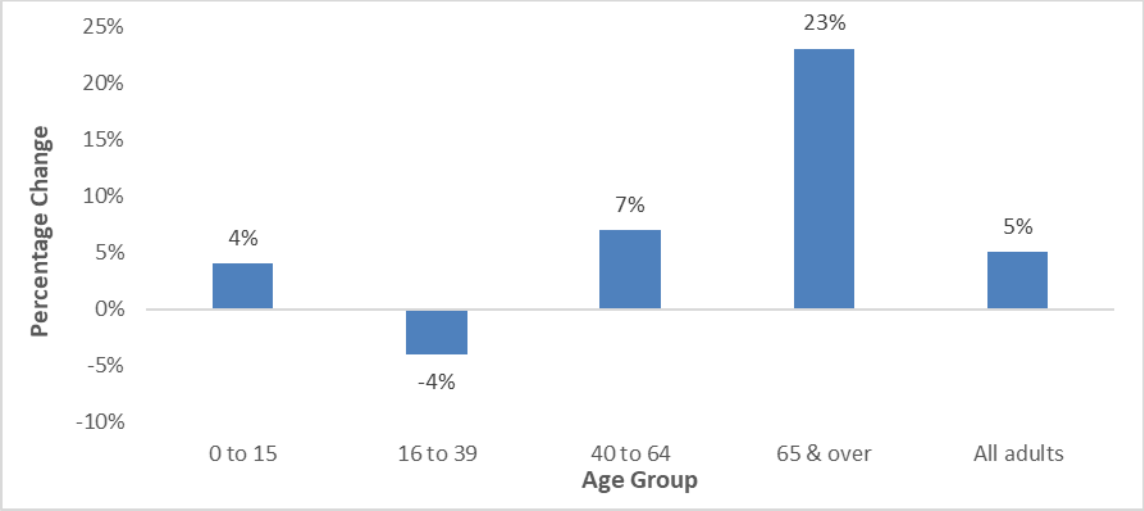


Figure 1: NI Population Change by Age Groups (mid-2010 to mid-2020)

As well as a projected growth in the overall numbers of people in Northern Ireland over the 25-year projection period, the age structure of the population is also projected to change. Like many European countries, the population of Northern Ireland is projected to become older over the next 25 years[4]. The largest growth is projected to be amongst the age groups: 65 years and over and 85 years and over. The number of older people aged 65 and over is projected to increase from 319,900 to 481,500, (50.5 per cent) over the next 25 years. By mid-2027, Northern Ireland is projected to have more older people aged 65 and over, than children[5].

The changing demographics within NI will continue to drive change in the provision of general health care with the impacts of these trends becoming increasingly apparent in oral health care.

Oral Disease Profile

The oral disease profile of older adults differs from younger age groups. In general, dental health has improved significantly since national population level surveys began in the United Kingdom in 1978. The proportion of adults in Northern Ireland who have no remaining natural teeth (edentate) has fallen by 26 percentage points in the last 30 years from 33% in 1979 to 7% in 2009 [6].

1979

33% **of all adults in Northern Ireland had lost all their teeth.**

2009

7% **of all adults in Northern Ireland had lost all their teeth.**

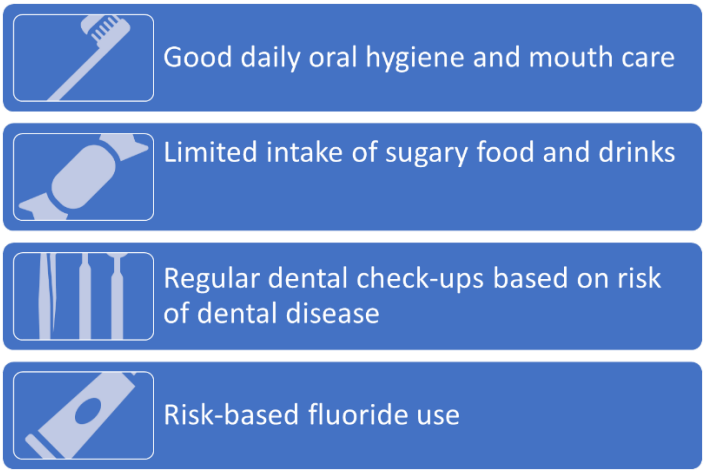
Dental decay (caries) is prevalent amongst older adults; however, it often affects the root surface of the tooth as opposed to the crown in this older age group. This reflects the fact that root surfaces become exposed as the gum recedes over time. These root surfaces are more susceptible to decay, particularly when toothbrushing is suboptimal. As a result, 20% of dentate adults aged 75-84 had roots with active decay in 2009[7].

Oral cancer is also more common in older adult populations. In 2018, 290 people in Northern Ireland were diagnosed with oral cancer, 188 males and 102 females. The median age at diagnosis was 63 and 62 years respectively, however, 30 (12%) of those diagnosed were aged under 50 years. Over the 25-year period from 1993 to 2018, the number of patients diagnosed with oral cancer in Northern Ireland has increased by more than 80% with the relative increase being greater among women[8].

The increase in the dentate older adult population now means that there are considerable numbers of older people in our population who are at increased risk of dental disease, including oral cancer, but for whom it may be difficult to provide dental care.

When considering how we meet the dental needs of our ageing population we need to take into account that a proportion of these people are living independently in their own homes, some are at home but have complex needs and are receiving domiciliary care input and others are in nursing/residential care including those with advanced dementia.

Irrespective of age or domicile, the same basic approach to maintaining oral health applies:



By using this approach, the potential for unwanted consequences like dental pain, dental decay, gum disease and infection is minimised, and the benefits of a functioning dentition (nutrition, quality of life and self-esteem) are optimised. This approach also facilitates the early identification of oral cancer.

Due to the synergistic relationship between oral health and general health, greater health gain and efficiency is achieved when oral health is embedded into health and social care policy relating to the overall care of older people. It is important to highlight that a balance between oral health and general health must be reached to ensure optimal diet and calorie intake is managed, alongside oral health messages in relation to sugar intake.

Why is Oral Health Important?

Good oral health is much more than healthy teeth. The World Health Organisation (WHO) define oral health as:

"A state of being free from mouth and facial pain, oral diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking and psychosocial well-being." [9]

Figure 2: Why is Oral Health Important for Older Adults?

Poor oral health affects general health and wellbeing and can adversely affect an individual's ability to eat, speak and socialise. New research is pointing to associations between chronic oral infections and heart and lung disease, stroke, and nutritional status.

Associations between periodontal disease and diabetes have long been noted. The role of poor oral health in aspiration pneumonia amongst older patients in residential care is also reported.

Oral Health Inequalities

Income-related inequality in the oral health of older adults is a major issue across the UK, with the least affluent consistently having the worst oral health[10] [11]. In addition, evidence shows that the prevalence of edentulism and loss of periodontal attachment is greater in individuals from lower socio-economic status. Studies also indicate that there is a significant socio-economic gradient with oral cancer - the risk of developing oral cancer is significantly greater among those from deprived communities.

Dental registration rates in Northern Ireland vary by geographical location and in 2022-23 60.25% of the population aged 60 and above were registered with a general dental practitioner (GDP)[12]. There are currently limited opportunities for GDPs to be implementing preventative interventions and ensuring older adult patients are orally fit.

Registration rates by age and gender for the NI population in 2022 are shown below:

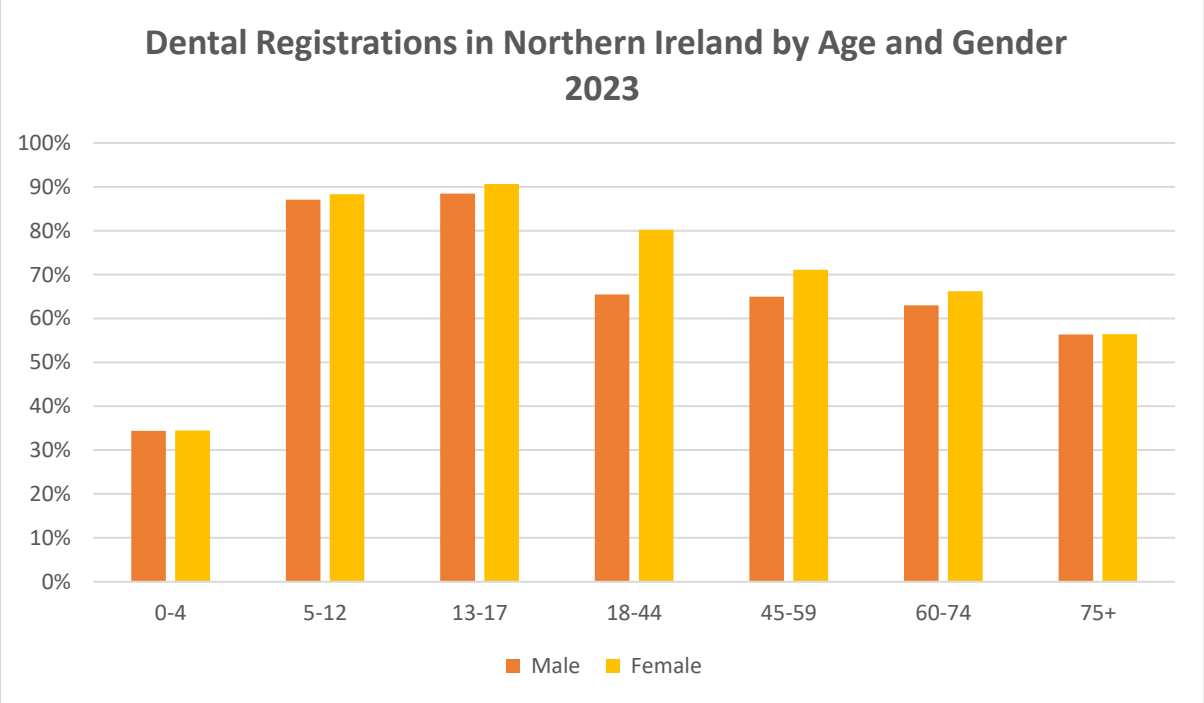


Figure 3: Dental Registrations by Age and Gender in Northern Ireland 2023[1]

[1] Northern Ireland Statistics and Research Agency. General Dental Statistics for Northern Ireland Annual Statistics 2022/23.

Older Adults in Residential Care Homes

Published Research

Poor oral health, including dental caries and periodontal disease, is an emerging public health challenge for older adults residing in care homes.

Approximately half of all care home residents now retain some of their natural teeth[13]. With increasing age, the ability for self-care deteriorates, polypharmacy leads to dry mouth and diets become rich in sugars. The reduction in self-care highlights the need for support from carers, care home staff and dental professionals to assist with oral care provision to help decrease the risk of tooth decay and gum disease.

Studies demonstrate that the oral health of care home residents is worse than their community living peers. Among care home residents aged 75-84, decay prevalence is 73% compared to 40% for those living in their own home[14].

People living in residential care homes also have higher levels of untreated caries than people in the general adult population. They are more likely to be edentulous or less likely to have functional dentition[15].

The Northern Ireland Service Framework for Older People (DoH, 2014) states: *"Older people in care facilities may have poor levels of oral health which can impact on optimal nutrition levels. A diminished oral function has been linked to malnutrition, weight loss and poor recovery from illness.*

Quality of Life Indicators

Evidence shows that oral conditions can impact negatively on the quality of life of care home residents, their general health and diet[16 17 18 19]. The ability to speak, eat, laugh and, in some cases, swallow may be compromised, leading to a loss of self-esteem and confidence. Poor oral health may also exacerbate a range of medical conditions including pneumonia, delirium, increased likelihood of choking in those patients suffering from dysphagia, along with increasing healthcare costs.

Policy and Guidance

The Guideline and Audit Implementation Network (GAIN) produced guidelines in 2012 for the oral care of older adult care home residents in Northern Ireland[20] and in 2016, a NICE guideline[21] (NICE NG48) was published on this topic area. The latter delineates the responsibilities of all parties involved in the care of older adult patients in residential care including recommendations on mouth care plans as well as medication and dietary management. Oral health is also referenced in the Nursing Home Standards (2015)[22].

In 2019, the Care Quality Commission (CQC) published a report, *Smiling Matters*[23] , which explored how care home and dental providers were implementing the NICE guidance (NG48) relating to the oral health of older adults in care homes. The report highlighted that many people living in care homes were not being supported to maintain and improve their oral health. The report set out a number of recommendations for improvement, which included:

- A training programme for key health professionals in both acute and community care on how oral health should be established.
- All those receiving social care should have an oral health assessment included as part of their care plans.
- Preventative advice should be made easily available for patients, families and carers.
- All stakeholders should work collaboratively to develop a strategy for improving access for older adults to dental services.
- Regulators should ensure that standards of oral care are assessed during their inspection of care homes.

The 2023, *Oral Health in Care Homes-Progress Report*[24] indicated that *Smiling Matters* appears to have had an impact on the awareness and management of the oral health of adults living in care homes. However, more needs to be done, and several further recommendations were introduced to ensure that people living in care homes are supported to maintain and improve their oral health.

At a local level, the 2014 Department of Health *Service Framework for Older People Standards*[25] stipulates that:

- Older people and their carers (where appropriate) should have access to a variety of health information, advice, support services and programmes to maintain and improve their nutritional and oral health.
- Those in receipt of community care packages or in residential care should have access to oral health screening and appropriate dental treatment and care.

It should be noted that there is currently no formal oral health inspectorate standard in place for residential and nursing care homes in NI.

Barriers to Implementing the Quality Care Standards

Recent surveys[16] have concluded that barriers to care home staff providing mouth care for older adult care home residents include:

- Little or infrequent oral health care training for staff.
- High staff turnover.
- Staff do not feel that looking after resident's oral hygiene is part of their job.
- Staff shortages make it difficult to have protected training time.
- A belief that the process will be onerous.
- Provision of mouth care for residents is not a standard checked by RQIA inspectors and is therefore deemed a low priority.

Current Model of Care for Older Adults in Care Homes in Northern Ireland

Historically, provision of oral care for care home residents was largely limited to cleaning dentures and mouths without teeth. In contrast, care staff are now required to support dentate patients with their oral hygiene and assist them in maintaining good oral health.

Depending on the circumstances of the older person, oral health treatment and mouth care may be provided by one or more of the following:

- General Dental Services.
- Community Dental Services.
- Carers/Care home staff.
- Self-Care/Family members.

General Dental Services (GDS)

GDS dentists account for approximately 90% of all dentists in NI. Given the relative size of the GDS, it seems reasonable to expect this branch of dentistry to shoulder a heavier burden of older adult dental care. In 2021/2022, the GDS undertook 1,469 domiciliary visits, a reduction from the pre-pandemic figure of 2,651 visits in 2019/2020[26]. Restoration of activity level for this cohort of patients would likely require changes to the GDS contract or the establishment of a new Personal Dental Services (PDS) contract both of which would necessitate additional funding or a reprioritisation of resources.

It is a contractual obligation of General Dental Practitioners (GDPs) to provide domiciliary care or make appropriate arrangements for any registered patient who is unable to attend a dental surgery. The current contracting arrangements have been in place since 1990 and reflect the numbers of older adults, the levels of edentulousness and the regulatory environment of that time.

The barriers[27] cited by GDPs in relation to the provision of domiciliary care are:

- Fear of litigation
- GDPs contend that remuneration for domiciliary care is not sufficient to warrant the time out of practice.

- Increasingly complex comorbidities and drug regimens combined with no access for GDPs to NI-ECR[2].
- GDPs view the organisation of dental services in NI to be confusing.
- Increased regulatory requirements.
- Difficulty with providing care in a non-clinical environment.
- Indemnity concerns around mental capacity and consent.
- The cost of purchasing portable dental equipment.
- Insurance costs associated with transporting portable dental equipment.

GDPs and their teams continue to play a vital role in providing tailored preventative advice and interventions for those who are able to attend local dental surgeries.

Community Dental Services (CDS)

The CDS service is made up of approximately 82 dentists (69.27 WTE) based within the five Health and Social Care (HSC) Trusts. The CDS primarily provides dental care for adults and children with special needs, but their remit also includes the provision of oral healthcare to those unable or unwilling to attend a GDP for example, patients with dental phobias, the medically compromised, the housebound as well as residents of care homes.

The CDS have other priority work areas such as the co-ordination of oral health improvement programmes and are required to manage their resources across these areas. CDS clinical directors cite inadequate staffing as a significant limitation in the provision of comprehensive care for older adults in care homes.

The change in disease patterns, as previously outlined, adds additional pressure on resources. There are other challenges to the effective provision of domiciliary care by CDS teams:

- Increased regulation around consent and safeguarding.
- The increasing need for prevention in a dentate aging population.
- The requirement to educate and train care home staff.
- The physical and medical condition of domiciliary patients often lengthens treatment times and time out of the clinic.

[2] The Northern Ireland Electronic Care Record (NIECR) is a computer system that health and social care staff can use to get information about a patient's medical history.

- Increasing complex oral clinical care required by residents e.g., dental implants.

Whilst there is a regional CDS scope of service specification issued by the Department of Health (DoH)[28], HSC Trusts take a variety of approaches in relation to oral disease assessment of care home residents, often influenced by number of care homes in their respective areas.

All CDS teams operate oral health programmes for residents of care homes and carry out periodic oral health assessments in care homes and many day facilities. HSC Trusts aim to assess all care home residents in their area at least once every two years. One-to-one patient treatment and training of care home staff are targeted on a needs-based approach based on the outcomes.

Figure 5 sets out the screening activity in the five HSC Trusts in 2017/18 and is representative of the situation pre-pandemic up to March 2020.

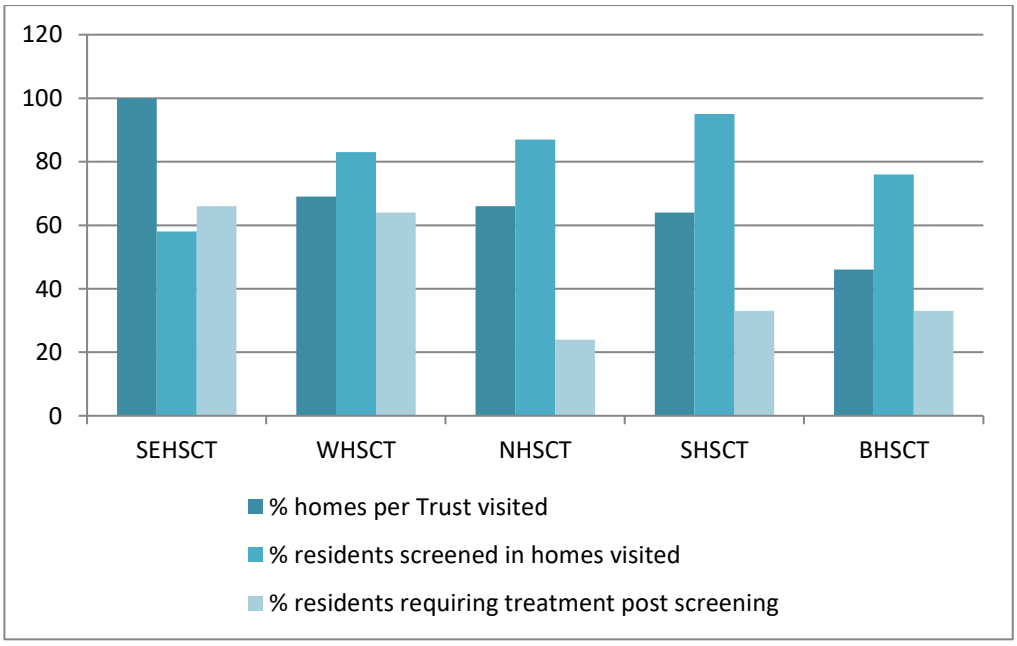


Figure 4: Oral Health Assessment of older adult care home residents in Trusts (2017/18)

Hospital Dental Services

The current model for hospital dental services is one where consultant-led teams for the various dental specialties deliver clinical care and/or diagnostic services in a range of hospitals

across Northern Ireland. The scope of the hospital dental service includes the provision of consultant advice and treatment for cases of special difficulty, for patients who have been referred to the hospital dental service, or for patients who have been admitted to hospital as a result of orofacial trauma or dental disease. Health service consultants also fulfil an important role in the training of undergraduate and postgraduate students, dental research, management, and leadership.

Dental Care Professionals (DCPs)

In addition to dentists, some HSC Trusts employ dental hygienists and therapists in their Community Dental Service (CDS) teams to provide a range of dental treatment in clinics or on a domiciliary basis to older adults in care homes, under the direction of the dentist, and in line with the General Dental Council *Scope of Practice.* Dental hygienists, dental therapists or dental nurses with extended duties may clean dentures, apply fluoride varnish and brush teeth to demonstrate to staff in care homes the importance of good oral care. Currently, the headcount of dental hygienists and therapists employed by HSC Trusts in NI is low, and training of therapists and hygienists does not currently take place in NI.

Carers/Care Home Staff

CDS teams in some HSC Trusts pro-actively provide training to care home staff on the provision of oral hygiene and mouth care for care home residents. Residents with decreased manual dexterity rely on care home staff to provide their oral care. As previously outlined, there are many barriers to care home staff providing mouth care for older adult care home residents, but the responsibilities of carers are clearly highlighted in NICE guidance (NG48).

Future Arrangements

The Role of General Dental Practices in Provision of Care

Historically dental treatment in care homes has been provided almost exclusively by Community Dental Service (CDS) dentists and their teams, who have developed skills in clinical care and patient management in the challenging environment. Suitably trained and accredited dental practice teams could work in partnership with or in place of CDS teams by local arrangement. This would provide the necessary support for currently stretched CDS teams and help address the increasing demand. It would also be important to facilitate additional training for staff working within the GDS, in order for them to acquire the necessary skills and competence to facilitate increased provision of care to the older adults in a range of settings.

Dental Treatment

The increasing requirement for treatment provision has been addressed in Scotland by providing a tailored training module for dental practice teams to enhance their skills in delivering domiciliary care[29]. This is coordinated and delivered by the relevant postgraduate education provider, NHS Education for Scotland (NES). The training addresses patient management and clinical challenges for the dental team. Practices are accredited for successfully completing training and retention of accreditation is dependent on ongoing CPD in this area. All necessary equipment is provided for participating practices to overcome barriers and risks relating to care delivered outside of a dental surgery setting.

A similar training programme here could be provided by the Northern Ireland Medical and Dental Training Agency (NIMDTA) in partnership with the Centre for Dentistry at Queen's University Belfast, with appropriate funding support. Training would need to be accompanied by amendments to the remuneration arrangements for GDPs so that they were suitably incentivised to undertake domiciliary visits. Any funding mechanism would need to take account of not just the time out of the surgery for dentists and dental care professionals, but also additional costs associated with providing domiciliary care e.g., purchasing portable equipment, increased indemnity costs and insurance costs.

However, the merit of all this would be questionable if the care home does not already have an oral health assessment and treatment pathway in place.

Preventative Treatment

A study to evaluate the effectiveness of professionally applied fluoride varnish on the incidence of dental caries amongst older adults' resident in long term care facilities in Northern Ireland showed that, at 12 month follow up, the professionally applied fluoride varnish intervention group had a significant reduction in mean number of carious lesions[30].

Fluoride varnish application can be carried out by a Dental Care Professional (DCP). A dental nurse can do so under the prescription of a dentist while a hygienist or therapist can do so independently. NIMDTA have experience of delivering an extended competency-based training programme on fluoride varnish application for DCPs, which was supported through a transformation funding bid and was accessed predominantly by DCPs working within CDS. This in turn highlights the fact the current contractual model does not support a viable integration of skill-mix in this way in primary care.

The impact of the fluoride varnish programme delivered through the transformation funding programme was evaluated with positive impacts demonstrated in caries reduction compared to controls.

Oral Health Promotion

Maintaining the health of those in older adult care is now accepted to be a shared responsibility between four key parties; the dental professional, care home staff, patient carers and self-care, where the latter is possible.

Figure 5: Who is responsible for the oral health of older adults?

NIMDTA have facilitated the “oral health educator” extended competency certification training in the past. This enables DCPs to effectively deliver oral health care messages, educate various patient groups and can adapt information and communication to the specific needs of the patient.

Educators can in turn certify care home staff and carers in the community to promote oral heath as an integral part of their role and service. This qualification would allow for the identification of “Oral Health Champions” and “Ambassadors” within a care home setting ensuring that oral heath remains a key element on the agenda.

The three key areas highlighted above where training provides an opportunity to improve oral health have been integrated into a single comprehensive training framework in other UK regions such as the Residential Oral Care Sheffield (ROCS) scheme. The ROCS scheme is a comprehensive dental service for adults in care homes[31]. GDS staff work in partnership with CDS to provide oral health needs assessment screening and any necessary treatment required for all consenting adults in care homes. ROCS also deliver training to care home staff and work in partnership with hygiene therapy students to deliver oral health care training[32].

NIMDTA should take cognisance of the learning from other regions to develop a training framework for NI dental professionals and those with caring responsibilities to meet the needs of the Northern Ireland older adult population. This should be co-produced with those involved in shared care; patients, carers, dental professionals, and care home staff. Training could be blended, availing of digital technology and available as an on-demand resource.

Prevention Provision and Initiatives across the UK

Other UK countries have begun to address their older adult oral health challenges by involving other health professionals in the management and support of older adult oral health care and mouth care. Increased awareness through training and education packages, a strong emphasis on prevention and the use of skill-mix within dental teams are core elements in the GB schemes.

England

The Mouth Care Matters[33] programme responds to the fact that evidence suggests oral health can quickly deteriorate when people are in hospital. Many health care professionals may have

had no previous training on how to support patients with cleaning mouths and dentures. *Mouth Care Matters* seeks to address this by funding and promoting the role of mouth care champions embedded within acute sites, focusing on four core principles:

- Knowledge – provide staff/carers with knowledge of why mouth care is so important.
- Skills – ensure staff/carers are skilled to provide good mouth care.
- Access – patients have access to effective mouth care products.
- Support – staff/carers/patients have support from staff with enhanced oral health skills.

Other resources within *Mouth Care Matters* include the product order guide, which directs staff to what products are available, and how to order them.

Public Health England have produced an Oral Health in Care Homes Toolkit[34] to support care homes to implement the NG48 guidance. The toolkit contains useful links for care home staff, residents, their families and friends to support good oral health and reduce oral health inequalities.
Dental fact sheets have been jointly produced by the dental and pharmacy teams to support and refresh knowledge in managing urgent dental and oral symptoms.

Scotland

Scotland published their Oral Health Improvement Plan[35] in 2018, which also reiterated the need for collaborative working with population health improvement bodies to tackle older people's oral health. In a demonstration of the common risk factor approach, oral health is to be featured in alcohol, smoking and diet strategies going forward.

Caring for Smiles is Scotland's national oral health promotion, training and support programme, which aims to improve the oral health of older people, particularly those living in care homes.[36] The training has been developed for:

- Care Staff.
- Nursing Staff.
- Oral Health Champions.
- Care Home Managers.

NHS Scotland also developed a best practice statement around working with dependent older people to achieve good oral health. The statement includes raising nurses' awareness of the

need to promote good oral health, care of the mouth and teeth, education and training and assessment. It draws together many of the recommendations in other key policy documents and is seen as an excellent step forward in the provision of oral care and support for older people who live in care homes[37].

Wales

The *Gwên am Byth*[38] (A Lasting Smile) oral health programme for people living in care homes was launched in 2015. Although primarily led and delivered by DCPs, most Welsh health boards used additional funding to employ a CDS dental registrant to support programme delivery. These new employees were dental care professionals who formed the core of the team delivering *Gwên am Byth* in line with the principles of prudent healthcare.

The key aim of *Gwên am Byth* is to improve oral hygiene and mouth care for older people living in care homes through the development of a consistent all-Wales approach. Gwên am Byth aligns with the Oral Health and Dental Services Response to *A Healthier Wales*, with the programme principles being that care homes will ensure:

- An up-to-date mouth care policy is in place.
- Staff are trained in mouth care and the home keeps a register of training.
- Residents have a mouth care assessment at appropriate intervals.
- The assessment leads to an individual care plan, designed to support good oral hygiene.
- Residents are referred to the dental team if necessary.

Funding for *Gwên am Byth* is allocated to health boards and is ring-fenced for use on the programme only, mirroring the approach taken with resources for the Designed to Smile child oral health improvement programme.

The Welsh Government has also commissioned a report into improving oral health for older people living in care homes for the third consecutive year. Experience from the first five years of the programme has shown that delivering improved oral health to the care home population is complex and challenging. [39]

There has been positive feedback from care home staff, residents, carers and Community Dental Service staff who deliver *Gwên am Byth*. In addition, care home staff are engaging with the programme, which is leading to a better understanding of how good oral, health can affect their residents.

The CDS, Welsh Government and Public Health Wales worked collaboratively with other healthcare professionals and care home staff to develop, test and implement the programme. Whilst *Gwên am Byth* focuses on oral hygiene in the care home, it is recognised that it needs to be complemented by dental care services for the pre-care home population.

Northern Ireland

Recognition should be given to several on-going initiatives within Northern Ireland:

'Keep it Clean' - South Eastern Health and Social Care Trust (SEHSCT)[40]

Community Dental Service staff in SEHSCT undertook a quality improvement project specifically to address poor oral care in nursing/residential homes. This important piece of work involved intensive collaboration with a Trust-owned care home. Each resident was screened and provided with an individual oral care plan specific to their needs. Engagement with care home staff formed a large part of the work and listening to their feedback allowed the dental staff to modify the training and record daily mouth care in a meaningful way. This project has been extremely successful, resulting in recognition at both regional and national level, winning *Best Community Initiative* in the UK Oral Health Awards 2018.

Key challenges included a high level of dental support required to train and assist carers in supporting good mouth care. Additional costs included denture boxes, denture naming kit and additional staff time to carry out home visits to ensure compliance. This would require additional resource if it were to be rolled out across Northern Ireland.

Fluoride Varnish Project - Western Health and Social Care Trust (WHSCT)

The evidence base suggests that twice-yearly application of fluoride varnish is effective in preventing dental decay in older adults[41]. Furthermore, cost effectiveness is increased when dental nurses rather than dentists apply the fluoride varnish.

Nine nursing homes in WHSCT took part in the fluoride varnish scheme with over 400 patients participating. An ad hoc control group of matched care homes were also identified for the purposes of evaluation. Analysis demonstrated a statistically significant reduction ($P < 0.001$) in the incidence of carious lesions amongst dentate residents who received professionally applied fluoride varnish compared to residents in matched controls where usual care was provided.

Despite the provision of oral health training for care home staff as part of the QI project, significant improvements in oral cleanliness as demonstrated by plaque scores were not observed after 12 months.

In recent years the General Dental Council (GDC) have allowed extension to the scope of practice for dental nurses, so that with additional training, they are now able to apply fluoride varnish to teeth. This intervention has strong evidence to support its effectiveness as a preventative measure for dental caries in older adults.

Helping Older People Achieve Healthier Outcomes Through Better Oral Health - Northern Health and Social Care Trust (NHSCT)

The Northern Trust launched a new, educational resource aimed at helping older people achieve healthier outcomes through better oral health.

Launched during National Smile Month (16 May -16 June 2022), the new video resource aims to help staff support the oral health care needs of older people in acute and community settings including care homes. The resource outlines the principles of good oral health care and practical support. It also provides advice from General Practice on when to refer to a dentist and GP, advice on supporting residents with a dysphagia, and the importance of providing oral health care at the end of life. The resource is available online at https://www.northerntrust.hscni.net/2022/06/13/helping-older-people-achieve-healthier-outcomes-through-better-oral-health/

Oral Health Initiative - Southern Health and Social Care Trust (SHSCT)

In SHSCT, the CDS team trained all domiciliary care staff within their Trust (approx. 1,000) on the importance of oral health. They continue to offer this training on an ad hoc basis for new members of staff in this sector.

They also developed a referral form for each resident on admission to a care home to initiate an oral health assessment and subsequent care plan personalised to that patient's needs. This is reviewed once a year and there are regular audits carried out of oral hygiene, dry mouths, pathology etc. A calibration exercise is also carried out with all the dentists involved to ensure standardisation and this is reported back to the homes in a report. The aim is to

formalise this report and start an anonymous comparative report of care homes in the SHSCT area.

As with domiciliary care services, care homes in the SHSCT area can request training for their staff in oral health.
The CDS team also developed end of life packs with special toothbrushes and toothpaste for patients receiving palliative care and carried out training and awareness with specific groups such as Macmillan Cancer Support, Alzheimer and Dementia groups.

A campaign in care homes in relation to changing the use of diluting juice with water for residents has been successful and a poster campaign to raise awareness for relatives visiting the homes on healthy snacks and drinks has also been carried out.

Feedback from the SHSCT CDS team would be to scale and spread initiatives regionally to both domiciliary care and residential patients. However, to achieve this, investment in workforce is necessary, including the clinical workforce and administrative support.

Enhancing Clinical Care Framework (DOH)

In June 2020, the Health Minister for Northern Ireland announced plans for the Chief Nursing Officer to produce a new framework for enhancing clinical care for residents in care homes. The aim of the Enhancing Clinical Care Framework (ECCF) project is to ensure that people who live in care homes are supported to lead the best life possible and that their right to access equitable healthcare provision.

This ECCF document makes recommendations that people living in care homes should have:

- an oral health risk assessment on admission by someone appropriately trained and suitably skilled who knows how and when to refer to other appropriate services. This should be used to inform a preventative oral health plan developed with them as part of their overarching care plan which considers how deteriorating oral health may manifest in them as an individual.
- their oral health inspected and monitored. Care Standards for nursing homes should ensure that oral health risk assessment is included in all aspects of the care people receive in a care home. RQIA should ensure that standards of oral care are assessed during their inspection of care homes.

REFleCt Trial

A National Institute of Health Research (NIHR) funded study (the REFLECT trial) which is examining the effectiveness of high-strength fluoride toothpaste in preventing caries in older adults attending with dental care with GDPs. Fifteen Northern Ireland practices and around 400 patients are currently involved in the study.

uSing rolE-substitutioN In care homes to improve ORal health (SENIOR)

This study is also supported by a grant from the National Institute for Health Research awarded in 2018 (under the Health Services and Delivery Research Programme). The aim of the study is to determine whether Dental Care Professionals could reduce plaque levels of dentate older adults (65 + years) residing in care homes. A two-arm cluster-randomised controlled trial will be undertaken in care homes across Wales, Northern Ireland and England. In the intervention arm, the dental therapists will visit the care homes every 6 months to assess and then treat eligible residents, where necessary. All treatment will be conducted within their Scope of Practice. Dental nurses will visit the care homes every month for the first 3 months and then three-monthly afterwards to promulgate advice to improve the day-to-day prevention offered to residents by carers. The control arm will be 'treatment as usual'. Ten care homes in Northern Ireland have been recruited for the study with over 40 homes recruited in total across the UK[42].

Improving the oral health of older people in care homes (TOPIC)

Also supported by the National Institute for Health Research, TOPIC is an ongoing study focused on training for care home staff as described by NG48. A series of co-produced resources have been developed with care home staff, residents and researchers and form the basis of a training package for each participating care home. An evaluation is currently ongoing within care homes in Northern Ireland and London including a process evaluation and a cost-consequence model[43].

Recommendation Themes

Set out under four broad themes, the report makes a series of recommendations that we believe will make the greatest difference to the oral health of older people both now and in the future.

Theme 1: Improving oral and dental health of older people.

Reduce the prevalence and severity of oral disease in older people and focus on upstream prevention of oral disease in later life.

Theme 2: Utilising the skills of the dental team.

Ensuring the right dental workforce to meet the needs of the older persons population: training, workforce, and skill mix.

Theme 3: Empowering families and allied health professionals.

Families, carers, and other non-dental staff should be empowered to proactively improve the oral health of the older people they look after.

Theme 4: Governance.

Policy development for older people should include promotion of good oral health, prevention of dental disease and management of oral conditions.

Recommendations

RECOMMENDATION THEME 1: IMPROVING ORAL AND DENTAL HEALTH OF OLDER PEOPLE		
	Reduce the prevalence and severity of oral disease in older people and focus on upstream prevention of oral disease in later life.	**Recommended Actions/ What this looks like**
1.1	Patients aged 65 years and over should be encouraged to be registered with a general dental practitioner.	This should take a multi-professional approach, with all healthcare professionals involved in the patient's care actively promoting attending a general dental practitioner where possible. Ensure consistent messaging from dental practices and health professionals on timing of dental examinations in line with NICE guidance[3].
1.2	The General Dental Services contract should support practitioners to provide preventive and operative care for older adults	Considering the growth of older persons' population and the complex needs of older people with a natural dentition, any primary dental care contract reform work should support new models of care delivery and should support the dental registration of older people. The Department of Health should critically examine the role of the GDS in provision of oral care to older people within both the current contract and the wider contract reform process.
1.3	Future oral health care needs should form part of the patient pathway, ideally before people become frail.	Preventative advice on maintaining good oral health should be easily available for older people, their families, and their carers. Preventative advice should be age appropriate and in line with *Delivering Better Oral Health V.4*[4]

[3] https://www.nice.org.uk/guidance/cg19 Dental checks: intervals between oral health reviews

[4] https://www.gov.uk/government/publications/delivering-better-oral-health-an-evidence-based-toolkit-for-prevention

1.4	Targeted evidence-based programmes should be aimed at older people who are at higher risk of dental disease (e.g., care dependent older people) and preventative initiatives should be supported by a strong evidence base. Consideration should also be given to the cost effectiveness of any initiatives	Oral Health initiatives successfully piloted in local HSC Trusts should be considered for regional roll out, ensuring appropriate resource is factored in for sustainability.
1.5	Oral Health assessment for new residents in care homes should be completed on admission to promote and protect the resident's oral health with a personalised oral care plan developed, as recommended by the Enhancing Clinical Care Framework (ECCF)[5]	Robust policies should be in place in care homes to facilitate attainment of the NG48 standards on oral health assessment, mouthcare and care of dentures. The introduction of a standardised Oral Health Risk Assessment (OHRA) and preventative care pathway as per NG48 recommendations should be implemented regionally.
1.6	Arrangements should be in place with local dental services to provide access to appropriate dental care for older people, when the need arises, particularly for those at higher risk of developing dental disease.	There should be a regionally standardised approach to the Oral Health Risk Assessment (OHRA) for triage and ongoing dental care of nursing home residents. Access to dental services for older people should be timely and without barriers.
1.7	Techniques used by dentists for the treatment of dental caries and oral disease should be in line with best available evidence.	The use of minimum intervention dentistry and atraumatic restorative treatment may be beneficial in the dental treatment of this patient cohort.
RECOMMENDATION THEME 2: UTILISING THE SKILLS OF THE DENTAL TEAM		
	Ensuring the right dental workforce to meet the needs of the older persons population: training, workforce and skill mix	**Recommended Actions/ What this looks like**
TRAINING		

[5] https://www.health-ni.gov.uk/publications/enhancing-clinical-care-framework-eccf-ni-care-home-residents-documents

2.1	The training of dental care professionals should include practical experience in the management of older people, especially those at higher risk of developing dental disease.	The Department of Health should commission NIMDTA to review their continuing professional development programmes for dentists and dental care professionals, and assess the feasibility of courses including: - A domiciliary training programme for dental practice teams, - Extended competency-based training programme on fluoride varnish application for DCPs - Oral health educator training for dental nurses. - These programmes may be integrated into a single comprehensive training framework, similar to the ROCS scheme[6] There should be provision of formal postgraduate training programmes for dental practitioners through local higher education providers including QUB.
2.2	Development of a digital training repository	Consideration should be given to the development a digital repository for people to access on-demand oral health information and training. This could be used to support refresher training, and act as a record of links to UK-wide training and digital learning platforms for oral health.
WORKFORCE		
2.3	The General Dental Services (GDS) contract should support practitioners to carry out domiciliary care.	Dental contract reform should support the dental registration of older people. Upward revision of the pre-existing GDS domiciliary care visit fee is recommended, along with the need for funding to support the acquisition of requisite equipment for practices participating in any associated domiciliary training programme. Domiciliary care provision by general dental services should be a specific consideration of the GDS contract reform programme of work.

[6] https://www.nice.org.uk/sharedlearning/residential-oral-care-sheffield-rocs-domiciliary-dental-care-scheme-to-improve-oral-healthcare-for-patients-in-care-homes

2.4	Increase capacity within the Community Dental Service (CDS) for increased demands on service and support wider skill-mix within the CDS team.	Given the predicted demographic and oral health changes over the next 10 years, investment is required in the Community Dental Service workforce to adequately meet future oral healthcare needs of older persons and special needs groups.
2.5	Increased numbers of dental nurses, dental therapists and dental hygienists should be planned, to expand the dental workforce appropriately and support collaborative models of care between CDS & GDS.	Collaborative working with both CDS and GDS colleagues should be strengthened. A demand capacity analysis of both the CDS and GDS should be undertaken, with specific regard to meeting the challenges of oral care for older people. There should be a new School of Dental Hygiene and Dental Therapy in Northern Ireland to facilitate training of Dental Care Professionals and increase skill-mix in dental teams. A large component of this should be practice based training. A demand-capacity exercise could help identify the numbers of nurses, therapists and hygienists required to adequately expand the dental workforce.
SKILL MIX		
2.6	Widening the oral care system	Future oral care systems should consider models of oral care which extend outside the general dental practice setting.
2.7	There should be opportunities, support, and resources available to develop and upskill the dental team	Support HSC dental nurses to develop further knowledge and skills in extended clinical duties including the opportunity to undertake extended competency training, where possible, to gains skills in oral health education, oral health promotion and applying fluoride varnish under the direction of an appropriate dental professional.
2.8	Promotion of new ways of working and developing skill mix within dental teams	There is a need to consider the skill-mix of the dental team to meet the oral health needs and demands of an ageing population. Dental care professionals can play a major role in building care capacity. Any use of skill-mix needs to take account of: ▪ The skills available in the workforce currently to support any new policy. ▪ The dental undergraduate curriculum.

		▪ The GDC scope of practice guidance
2.9	Ensure that skill mix does not impact on delivery in the GDS	Whilst it is recognised that supporting the skill-mix of the dental care professionals could be better utilised in the provision of care outside the dental surgery, this must not be at the detriment of their dental practice. There should be sufficient skilled dental nursing staff to backfill and a need therefore to expand the current pool of staff, especially post pandemic.
RECOMMENDATION THEME 3: EMPOWERING FAMILIES AND ALLIED HEALTHCARE PROFESSIONALS		
	Families, carers, and other non-dental staff should be empowered to proactively improve the oral health of the older people they look after.	**Recommended Actions/ What this looks like**
3.1	Key health professionals in both acute and community settings should receive training on oral health and should be empowered to take an active role in the prevention of dental disease	This should provide an understanding of what constitutes good oral health (including how to undertake an effective assessment of the mouth), how to maintain it, the implications of poor oral health for a patient's general health, and what should be done if an oral health problem is discovered. It should also explain how to provide oral care for people with dementia and those who lack the capacity to consent in the context of oral health. All health and social care providers, and professionals working with older people, should be trained to deliver basic oral care messages, ensuring every opportunity counts. Key consistent messages should be delivered to older people across a range of settings: GP surgeries, pharmacies, social services via relevant health workers. In hospitals and other acute care settings all junior doctors, nursing staff, allied health professionals and support staff should receive oral health training, while in the community it should be provided for pharmacists, community nurses, geriatricians and all other healthcare professionals who have regular contact with older people. The Mouth Care Matters programme, which is already being delivered in

		hospitals Southeast England, provides an excellent example of good practice in this area.
3.2	Healthcare partnerships should be strengthened to integrate oral health with other projects focused on general health of older people. There should be improved collaboration between those involved in the prevention of oral disease and those involved in the prevention of general disease.	The introduction of a regional oral health promotion campaign, which incorporates training of care home staff and support programmes for managing older people's oral health, should be considered, learning from the existing Scottish model. The use of tele mentoring programmes, such as Project ECHO, should be explored to facilitate a multi-disciplinary approach for management of complex patients who require professional input. Stronger connections with pharmacy, dietetics and head and neck oncology teams should be established to support complex patients in maintaining oral health.
3.3	Families and carers should be empowered to proactively improve the oral health of the older people they look after. Carers and families should be supported with basic oral health advice to assist their dependent family members.	Carers and families should receive information on how to prevent oral disease and how to access dental services. Dental attendance be the encouraged as recommended by the dentist and in line with NICE guidance.[7]
RECOMMENDATION THEME 4: GOVERNANCE		
	Policy development for older people should include promotion of good oral health, prevention of dental disease and management of oral conditions.	**Recommended Actions/ What this looks like**
4.1	Regulatory inspections should include an oral health element in their assessment.	RQIA should include oral health in the monitoring and inspection of care home facilities. A review of the current Nursing Home Inspection Standards is necessary to ensure that oral health risk assessment and training in line with NG48 is included in Nursing Home routine processes.

[7] https://www.nice.org.uk/guidance/cg19 Dental checks: intervals between oral health reviews

4.2	Relevant stakeholders should develop and embed an oral epidemiology programme in Northern Ireland to provide information and intelligence to improve oral health and provision of services. This could be supported using digital technology.	Oral health assessment data should be collected, analysed and used to the best effect by all stakeholders
4.3	Promotion of good oral health and prevention of dental disease among older people should be included in all strategic plans and policy development dealing with the general health of older people.	Consideration, where relevant, of oral health in the development and review of Departmental Health Strategies e.g., Enhanced Clinical Care Framework (ECCF)[8] In the implementation of Public Health strategic frameworks and health initiatives, e.g. 'A Fitter Future for all'[9] and 'Making Life Better'[10], dental and non-dental healthcare staff should work collaboratively to raise awareness of good oral health and its influence on general health.

[8] https://www.health-ni.gov.uk/publications/enhancing-clinical-care-framework-eccf-ni-care-home-residents-documents
[9] https://www.health-ni.gov.uk/publications/obesity-prevention-framework-and-reports
[10] https://www.publichealth.hscni.net/about-us/making-life-better

Appendix

Older person's recommendations and targets from the Northern Ireland Oral Health Strategy (2007)

Recommendation 3.15

Oral Health professionals should be aware of the causes of falls among older people and should support local and regional programmes for falls prevention.

Recommendation 4.1

The philosophy of lifelong prevention of dental disease should be adopted by all dentists.

Recommendation 4.2

Older adults have the poorest levels of dental attendance, innovative approaches should be employed by the DHSSPSNI, Health Boards and General Dental Practitioners to increase dental service utilisation among this group.

Recommendation 4.3

The levels of root caries in older people living in institutions has been shown to be almost twice that of those living in the community. Boards and Trusts should continue to work with residential and nursing home staff to improve levels of oral hygiene and to reduce the cariogenicity of foods provided.

Recommendation 4.4

The awareness among carers of the elderly of the risk factors for the development of tooth decay should be raised. Training should be provided to all carers in how to effectively clean their client's teeth and dentures.

Recommendation 4.8

Dentists should opportunistically screen "at risk" patients for oral cancer.

Recommendation 4.9

The uptake of dental services by older adults who live independently is low. A concerted effort needs to be made to encourage regular asymptomatic attendance in this group, who by virtue of their age, are at greater risk of developing oral cancer.

Recommendation 4.11

An oral health assessment should form part of the multidisciplinary health assessment given to new residents of nursing and residential homes.

Recommendation 4.12

The Care Standards for residential and nursing homes currently being developed in Northern Ireland should include simple indicators that allow the quality of oral healthcare provided by the home to be determined.

Recommendation 4.13

The new Primary Care Dental Strategy should take account of the projected increase in treatment needs among older adults and consideration should be given to increasing dental service utilisation among this group.

Target 4.1

To reduce the proportion of adults without any natural teeth to 8% or less by 2008 (baseline 12% in 1998).

Target 4.2

To increase the proportion of adults with 21 or more natural teeth to 78% by 2008 (baseline 71% in 1998).

Target 4.3

To reduce the proportion of dentate adults with at least one tooth with active root decay to 10% by 2008 (baseline 12% in 1998).

Target 4.4

To reduce the proportion of dentate adults with visible plaque present on their teeth from 66% to 50% by 2008.

Target 4.5

To reduce the proportion of dentate adults with attachment loss of 4mm or more on at least one tooth from 39% to 34% by 2008

Link to full document: Oral Health Strategy for Northern Ireland (health-ni.gov.uk)

Glossary and Abbreviations

BDA	British Dental Association
BHSCT	Belfast Health and Social Care Trust
BSO	Business Services Organisation
CDS	Community Dental Service
CPD	Continuing Professional Development
CQC	Care Quality Commission
DCP	Dental Care Professional
DoH	Department of Health, Northern Ireland
GAIN	Guidelines and Audit Implementation Network
GDP	General Dental Practitioner
GDS	General Dental Service
GMP	General Medical Practitioner
HDS	Hospital Dental Service
HSC	Health and Social Care
HSCB	Health and Social Care Board
NES	NHS Education for Scotland
NHSCT	Northern Health and Social Care Trust
NI	Northern Ireland
NICE	National Institute for Health and Care Excellence
NIHR	National Institute of Health Research
NIMDTA	Northern Ireland Medical and Dental Training Agency
OHA	Oral Health Assessment
ROCS	Residential Oral Care Sheffield
SHSCT	Southern Health and Social Care Trust

SET	South Eastern Health and Social care Trust
StR	Specialty Trainee, Specialty Registrar
WHO	World Health Organisation
WHSCT	Western Health and Social Care Trust
WTE	Whole Time Equivalent

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