NHS SCOTLAND

Scottish Dental Needs Assessment Programme

Older Adults
Dental Needs Assessment Report

Executive Summary

Foreword

The field work for this needs assessment report was conducted before the COVID-19 pandemic, and therefore consideration should be given to possible impacts of the pandemic while interpreting the results. The publication of this report was preceded by the Scottish Government reform of NHS dental services, effective from 1 November 2023. It is anticipated this reform may address some of the issues raised in the needs assessment. An evaluation will be necessary to assess the impact and effectiveness of the implemented changes.

Scottish Dental Needs Assessment Programme

NHS Lanarkshire Headquarters
Kirklands
Fallside Road
Bothwell
G71 8BB

Telephone: 01698 858238

Fax: 01698 858283

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Working group membership, the titles mentioned reflect the members' positions as of December 2019 when the working group was active

Michael McGrady	Consultant in Dental Public Health, NHS Greater Glasgow and Clyde – Chair
Praveena Symeonoglou	Public Health Researcher, Scottish Dental Needs Assessment Programme (SDNAP)
Maura Edwards	Consultant in Dental Public Health, Lead for Caring for Smiles, NHS Ayrshire and Arran
Gillian Elliott	Specialist in Special Care Dentistry and Public Dental Service Lead for Older Adults, NHS Tayside
Patrick Fee	Clinical Research Fellow and Specialty Registrar in Restorative Dentistry, NHS Tayside
Patrick Ferry	General Dental Practitioner, NHS Lothian, Representative Urban Area
Jon Godwin	Professor of Statistics, Glasgow Caledonian University
Terrence Lowe	Consultant in Oral and Maxillofacial Surgery, NHS Grampian
Simon Morrow	Dental Practice Advisor, NHS Ayrshire and Arran
Morag Muir	Specialty Registrar in Dental Public Health, NHS Ayrshire and Arran
Louise O'Dowd	Senior Clinical Lecturer / Honorary Consultant in Restorative Dentistry, NHS Lothian
Michael Paterson	Specialty Registrar/Honorary Clinical Lecturer, Restorative Dentistry, Glasgow Dental Hospital and School
David Ricketts	Professor of Evidence Based Operative Dentistry, University of Dundee. Previously Consultant in Restorative Dentistry, Head of Restorative Dentistry, NHS Tayside
Marguerite Robertson	Patient Representative
Lee Savarrio	Lead Clinician and Consultant in Restorative Dentistry, NHS Greater Glasgow and Clyde
Christopher Sharp	General Dental Practitioner, NHS Forth Valley, Representative for Rural Area
Stephen Turner	Senior Researcher, Dundee University

1 Executive Summary

1.1 Background

The Scottish Dental Needs Assessment Programme (SDNAP) was asked (prior to the COVID-19 pandemic) by the National Dental Advisory Committee to conduct a needs assessment of oral health and dental services for older adults and the potential future needs of this population group. One of the main aims of the group's work sought to explore dental service provision to adults aged 45 and over, and to forecast what their dental needs may represent when they reach old age. The population in Scotland (and other European countries) is ageing at a faster rate than many other areas of the world (Scottish Government, 2021a). It has been observed for some time that the increasingly ageing population were retaining more of their own natural teeth. Some of these individuals have received more complex dental treatment in the past, such as fixed prostheses and implants, which have been associated with an increased complexity of maintenance (Information Services Division, 2019). Many older adults also have other confounding patient modifying factors, such as multiple co-morbidities and polypharmacy – further compounding patient management (Barnett et al., 2012).

Good health and wellbeing in later life should be expected to be the norm, but the impact of social determinants of health can lead to health inequalities in older adults. Invariably as people age they become more dependent on others and may require additional support to access nutritious food, suitable accommodation and timely health care interventions (Age UK, 2019). Oral health is an integral part of overall health and wellbeing and should be prioritised as such.

The philosophy of 'leaving no one behind' was set out in 2015 by the United Nations 2030 Agenda for Sustainable Development Goals (SDG) (United Nations, 2015). The Scottish Government launched the first National Performance Framework (NPF) in 2007. The framework set out to measure national wellbeing beyond Gross Domestic Product. The NPF was revised in 2018, representing the Scottish Government commitment to ensuring the 2030 Agenda for Sustainable Development adopted by all United Nations is part of what it does in Government. Scotland was one of the first countries to publicly commit to the UN's SDG's (Scottish Government, 2015).

Each of the 17 SDG's were mapped against NPF National Outcomes:

- SDG 3 ‘Enable healthy ageing, wellbeing and access to health and care services’
- SDG 10 ‘Reduce inequalities and end discrimination later in life’

A Fairer Scotland for Older People framework for action was published in 2019 to challenge the inequalities faced by older people, focusing on maintaining financial security, access to health care, and housing (Scottish Government, 2019). The Oral Health Improvement Plan (OHIP), published by the Scottish Government in January 2018 identified challenges for meeting the needs of an ageing population and introduced arrangements to enable enhanced skills dentists to provide treatment in care homes to help reduce the gap in the provision of dental care for the care home population (Scottish Government, 2018).

The Caring for Smiles Programme 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. The programme will need to evolve to meet the changing needs of this population group into the future.

During the period of investigation, an additional oral health improvement programme for younger adults with additional care needs (16 to 65 years of age) called Open Wide was launched. Hence, this programme was out with the scope of this report. As this develops, it too may need to adapt to the changing oral health needs of adults who need support with their oral health into old age. Consideration may be needed on the possible impact on other oral health improvement programmes including Smile4Life and Mouth Matters, for older adults who may experience homelessness or living in prison.

The aim of the SDNAP Report on Older Adults was to gain quantitative and qualitative insight into the future challenges for this population group to help inform and support the direction of travel for dental services in Scotland. This formed the basis for the exploration of data and information on adults aged 45 and over.

Much of the investigation of the working group took place between January 2018 and March 2020, before the COVID-19 pandemic, and as such the findings should be viewed with a consideration of the impact of the pandemic on dental services and the progress made towards the recommendations of the OHIP. The pandemic had a

devastating impact on the older population, increasing social isolation and loneliness (National Records of Scotland, 2020). A statement of intent was published by Scottish Government in March 2021 to address the impact the pandemic has had on older people, with an emphasis on prevention, person centred care, a home first approach, integrated health and social care, and dignity and respect at end of life (Scottish Government, 2021b).

The following is a summary of the methods and findings of a series of surveys and interviews with stakeholders as well as investigation of available service data. These data support the direction of travel as set out in the OHIP and aim to inform the changes required in relation to systems change, training and education, the role of prevention and the essential part these will play in meeting the future needs and demands of older adults in Scotland.

1.2 Methods

The report is based on the technique called Health Needs Assessment (HNA), a systematic method commonly used to evaluate health services. A HNA can be defined as a process of identifying the unmet health and healthcare needs of a population, and what changes are required to meet those unmet needs.

There were two main sources for information gathering to inform the HNA process. These consisted of the gathering of quantitative data to provide information on service delivery and activity, and qualitative data from surveys and interviews of the various stakeholders. The quantitative data exercise sought to explore age cohort data over time for NHS dental treatment provided to adults aged 45 and over. The aim of this was to identify possible patterns or trends, which could provide insight or indicators of possible future treatment/maintenance needs of these age cohorts as they transition into older age.

The quantitative data included:

- Primary care registration and participation data, Statement of Dental Remuneration (SDR) claims data and hospital activity data collected from Information Services Division (now part of Public Health Scotland (PHS))
- Population figures and projections obtained from National Records of Scotland
- Population trends and other data obtained from national reports and data sources

- Prospective audit of referrals received in restorative dentistry departments of four dental hospitals

The qualitative data consisted of:

- Survey of clinical directors/leads of the Public Dental Service (PDS), including activity in the PDS
- General dental practitioner (GDP), Dental Care Professionals (DCPs) and Care Home Managers Surveys (to determine the scope and nature of services being provided)
- Semi-structured interviews with General Dental Services (GDS) and PDS dentists and hospital consultant workforce (to gather perceptions regarding the service being provided)
- Structured questionnaires with service users (to gather perceptions regarding the service being provided)

1.3 Results and Discussion

1.3.1 Data Intelligence

The data obtained from Information Services Division (ISD) (now part of Public Health Scotland) provided an overview of the NHS dental service provision to patients in Scotland. It should be noted there were no data available for provision of care under non-NHS arrangements: this information was out of scope for this needs assessment and this impacts on what inferences can be made from the data.

What is of interest from the available data was the cost of NHS dentistry. When adjusted for inflation, there has been little change in the cost per head of population since 2000, but a marked reduction in the cost per registered patient. In 2000/01 the adjusted cost per head of population was £44, and the cost per registered patient was £89. In 2018/19 these figures were £50 and £53 respectively. It is not clear if this is influenced by improved population oral health, less engagement with dental services i.e. registered patients who have not attended or participated with services, particularly since the introduction of lifelong registration or a greater proportion of dental care being provided on a non-NHS basis. As such, caution must be taken with any inferences made from these data.

What has been seen from the data were the impacts of significant changes to the system of care. For example, following the implementation of the Scottish Dental Action Plan from 2005 and a revised Scottish Dental Access Initiative from 2007, there was an increase in provision of NHS dental services. This resulted in an upward change in the number of examinations performed. There was a steady increase in treatment claims under the SDR for examinations across all age groups aged 45 and over. A similar pattern was seen for simple scale and polish, but not for the provision of more intensive periodontal care.

There had been a steady rise in the number of permanent fillings claimed under the SDR since the year 2000. There was, however, more fluctuation in the numbers for adults aged 45-64, with a shift in the proportion of amalgam and tooth-coloured restorations. This may also have been influenced by provision of restorations on a non-NHS basis and could also account for a sharp fall in the provision of NHS crowns and inlays for patients aged 45-54 since 2013.

In recent years, the provision of NHS dentures for patients aged 45-54 has declined. This may be as a result of fewer extractions in this age group, but may also be influenced by a preference of patients to have fixed prostheses, such as bridges and implants.

The available data for secondary care dental treatment provision were limited and of low quality. Audit data gathered from dental hospitals in Scotland revealed removable prosthodontics, periodontics, endodontics-canal location, endodontics-retreatment and tooth wear were main reasons for referral to restorative dentistry departments. Referrals were received for patients spread across the Scottish Index of Multiple Deprivation (SIMD) quintiles. One dental hospital captured data on case complexity (as part of a service review) revealing approximately one-fifth of referrals had a treatment complexity that could conceivably be managed by GDS.

1.3.2 Qualitative Data from Surveys and Interviews

There was a wide range of responses from the surveys and interviews conducted across service providers and service users. Dentists from urban and rural localities contributed to this process. There were a number of key themes which were represented, which included:

- An increasing complexity of care
- A recognition of the role that prevention plays in managing oral health

- The NHS System of Remuneration (SDR)
- The impact on training, workforce requirements and the relationship between the various service providers

These will now be explored in more detail.

1.3.3 Increasing Complexity of Care for Older Adults

A prevalent theme in the feedback from service providers was an acknowledgement of the management of older adults was becoming more challenging. This included patient modifying factors, such as increased medical complexity. Some dentists reported they were making changes to their practice through education and improvements to premises to increase accessibility. However, many dentists felt unprepared for patients with increased medical complexity and this was reported as an increasing reason for referral of patients to the PDS and secondary care. This was reflected in the data on referrals and the views of PDS and secondary care service providers.

In addition to the challenges of patient modifying factors, dentists reported changes to oral disease patterns and treatment requirements for older adults. Over three-quarters felt significant periodontal disease was increasing, as was non-carious tooth surface loss (tooth wear). Other common conditions reported were failing advanced restorations, such as crowns and bridges, denture problems and dry mouth. For patients where treatment complexity was compounded by patient modifying factors, such as complex medical history, it often prompted referral into the PDS or secondary care. Another significant finding was the impact of increasing patient expectations, whereby there has been a growing demand for missing teeth to be replaced by fixed prostheses rather than dentures. Patients were becoming more dentally aware, due to access to the internet and social media, and were expressing increased demand for aesthetic and cosmetic treatments.

The observations of GDPs were reflected and supported by the feedback received from the PDS and secondary care. Both services recognised the increased challenges of patient management in primary care and reported increased numbers of referrals of older adults into their services. In some areas PDS and secondary care had needed to review their clinical offer and acceptance criteria to address demand management pressures.

A significant finding was the views from within the PDS and secondary care of an overlap between the complexity of the dental treatment required and the complexity of patient modifying factors. The former group of patients would be managed by specialty or specialist dentists, such as restorative dentistry or oral surgery. The latter would generally be managed by special care dentists, recognised in itself as a dental specialty. It was reported there has been an increasing need to ensure patient management on referral was cognisant of both treatment complexity and patient modifying factors, which were often, in the case of older adults, not mutually exclusive.

There was additional feedback from DCPs and care home managers regarding an observed increase in the complexity of maintaining oral health for patients retaining more of their teeth and those with fixed prostheses and partial dentures. This may present challenges in ensuring staff remain trained and supported to deliver Caring for Smiles as the needs of this population group change.

1.3.4 The Role of Prevention in Managing Oral Health

There was unanimous acceptance across all service providers and patient groups of the importance of a preventative approach to securing and maintaining oral health. Dentists expressed a desire for a more prevention-focused approach across the life course, but they felt that a greater focus on prevention would require a change towards a more comprehensive, transparent and fairly remunerated system with prevention a key component. All services felt that prevention would reduce future pressures on dental professionals. Overall, respondents were in favour of a wider offer of preventative advice to cover other health conditions, in a common risk factor approach. There were differing views expressed during the survey and interviews, with some dental professionals stating they offered preventative advice to all patients, others only to those patients at higher risk.

The views from patients indicated an increasing awareness of the importance of prevention. GDS patients valued preventative advice offered to them and were not only open to receiving preventative advice relating to gum disease, oral cancer and other conditions from their dental team – they felt it was essential.

Interestingly, the views of patients from PDS and secondary care differed slightly. The secondary care patient group expressed gratitude for the advice they received from secondary care, but some felt their dental health (particularly gum health) would have

been better if they had received this from their own dentist earlier. This was suggestive of potential variation in the preventative messages from GDS but will be influenced by differences between patients who engage with services and self-care, and those who do not.

1.3.5 The NHS System of Remuneration (SDR)

There was significant feedback on how dentists felt the existing system was impacting on the dental care provided to older adults. There has been expressed dissatisfaction within the profession on the SDR. This has been acknowledged by Scottish Government and work was underway prior to the COVID-19 pandemic on the development of a new model of care.

The major themes from the profession centred on the difficulties in offering care owing to the constraints of the SDR. Frequent examples quoted insufficient remuneration to support adequate prevention. This was also cited as a problem for the additional time required to appropriately manage patients with increased complications, such as a complex medical history. It is clear these perceived issues were not mutually exclusive and whilst they represent the views of practitioners who responded, they do not explore the attitudes of the wider dental profession towards the provision of care to older adults, including those with increased complexity.

The SDR has been perceived to lack scope and remuneration for the management of certain conditions, such as periodontitis and tooth wear. The example of periodontitis is interesting as it is known to be a prevalent condition, yet beyond the high number of SDR claims for a simple scale and polish, there were scarce claims for the management of more significant periodontal disease. The condition resulted in a high number of referrals into secondary care. Some dentists reported the lack of scope within the SDR often forced patients down a non-NHS pathway of care, but only for those patients who could afford it.

The feedback from secondary care consultants reflected their opinion that many patients seen in secondary care on referral could be managed in primary care if there was an appropriate system in place.

1.3.6 The Impact on Training and Workforce Requirements

Whilst some dentists felt they did not consider the management of complex medical histories as part of their role, many reported they perceived this as a gap in their

knowledge. The remit of the report did not include exploration of the attitudes of the profession towards providing care for patients with complex medical histories, however, the comments received in the surveys and interviews suggested a need to explore this in more detail. Most dentists reported they had not received any specific training for the management of older patients. There was also an acknowledgement from some that increased medical complexity was not limited to older adults and increasing numbers aged 55 and over were living with complex medical conditions. There was a clear identification of a need for additional training opportunities in order to support better patient care, for both increased medical complexity and the management of associated dental conditions for older adults.

At the time of the survey, many dentists stated they did not perform domiciliary visits and would require additional training. (It should be noted this occurred at the time when the training for enhanced skills practitioners in domiciliary care was commencing).

The PDS and secondary care were actively seeking the possibility of skill mix and people working to the top of their licence i.e. utilising their full range of competencies, to help meet the increasing demands on services. There had been increased pressures owing to staff losses to retirement and a shortage of staff specifically for oral medicine and special care, but also specialists and senior clinicians with experience in treating older adults.

The Caring for Smiles programme provides an essential means of supporting oral health for older adults. Findings of this report demonstrated the dental needs of this client group were evolving and becoming more complex. Therefore, there will be a need to ensure this programme (and other oral health improvement programmes) will continue to provide relevant training and support to care providers in maintaining good oral health for their clients.

1.4 Conclusions and Recommendations

This report contains a wide spectrum of views across service providers and patient groups on the future dental needs of older adults. Some of these are strong views, in particular in relation to the SDR. They are not unsurprising and it should be noted work was underway prior to the COVID-19 pandemic on implementing the recommendations of the OHIP and exploring a new model of care, with prevention as a key theme.

The findings of the report are consistent with existing views in relation to the increasing challenges in the dental treatment and maintenance of oral health for older adults. The report provides additional insight and context from the profession and patients on historic and current challenges and how these may inform how we move forward beyond the recovery of services following the COVID-19 pandemic. It remains the intention of the SDNAP report on older adults to contribute towards informing this process.

1.4.1 Data Quality

The findings of the report are based upon the available data and the responses received through surveys and interviews. It should be stated there are gaps in the evidence. The lack of robust service activity data for secondary care and the limitations in the primary care data, where there is no information available for non-NHS treatment, mean it is difficult to make unequivocal inferences. Nevertheless, combining the available data and the feedback from the profession and patients provides a useful indication and insight.

The sample size (and response) to the GDP surveys provided were sufficient to achieve 95% confidence. There was a mix of rural and urban dentists and a distribution across all Territorial Boards. However, the sample size was too low to compare responses at an individual Board or at a rural vs. urban area level. There were points raised regarding access to services in rural areas, but this was also reflected in urban and city areas, with difficulties in accessing premises, as opposed to distance from, and numbers of clinical sites in rural areas.

The findings of the SDNAP Report on Older Adults recommend the following:

1. The profession should continue to support the work of Scottish Government on the ongoing new model of care with prevention at the centre and across the life course. The scope and clinical offer of the new model should be reflective of the changing needs of the population and be supportive of the profession as well as affordable for patients.

2. The review, evaluation and adaptation processes for the national oral health improvement programmes, particularly Caring for Smiles, will need to consider the changing population demographic to ensure they are ‘future-proof’ and

continue to meet the training requirements of staff and the needs of more vulnerable and older adults.

3. Opportunities for education and training for existing and future dental workforce should be provided to meet the needs of an older population with an increasing complexity of care and to explore the attitudes of the GDS workforce in meeting the needs of older adults.

4. A review of the relationship between PDS and hospital specialist dental services, special care dentistry and GDS is required to close the gap in service between treatment complexity and complexity of patient modifying factors.

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