

This is a repository copy of Barriers and facilitators to accessing oral healthcare for older people in the UK: a scoping review.

White Rose Research Online URL for this paper: https://eprints.whiterose.ac.uk/id/eprint/232045/

Version: Preprint

Preprint:

Beaven, A. orcid.org/0000-0001-7386-2144 and Marshman, Z. orcid.org/0000-0003-0943-9637 (Submitted: 2023) Barriers and facilitators to accessing oral healthcare for older people in the UK: a scoping review. [Preprint - Research Square] (Submitted)

https://doi.org/10.21203/rs.3.rs-3685946/v1

© 2023 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (https://creativecommons.org/licenses/by/4.0/)

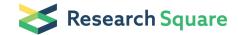
Reuse

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here: https://creativecommons.org/licenses/

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.





Barriers and facilitators to accessing oral healthcare for older people in the UK: a scoping review

Anna Beaven (

anna.beaven@nhs.net)

NHS England https://orcid.org/0000-0001-7386-2144

Zoe Marshman

School of Clinical Dentistry, University of Sheffield https://orcid.org/0000-0003-0943-9637

Research

Keywords: access, older people, barriers, facilitators, dental healthcare, oral healthcare

Posted Date: December 16th, 2023

DOI: https://doi.org/10.21203/rs.3.rs-3685946/v1

License:
This work is licensed under a Creative Commons Attribution 4.0 International License. Read Full License

Additional Declarations: There is no duality of interest

Abstract

Introduction

Access to dental services is a growing problem for older people in the UK. The aim of this scoping review is to identify the barriers and facilitators influencing older people's ability to accessing oral healthcare in the UK based on the existing literature.

Methods

The scoping review followed the framework proposed by Levac and colleagues (2010). Peer-reviewed literature was retrieved in April 2023 from Web of Science, MEDLINE, PsychINFO and CINAHL for the period 1973–2023. After screening, data was extracted to identify barriers and facilitators mapped to individual, organisational and policy level factors. The themes generated were used to identify gaps in the literature and policy recommendations.

Results

Overall, 27 studies fulfilled the inclusion criteria. Most studies published were from England; there was a large representation of opinion pieces. The main barriers and facilitators related to cost of services, perceptions of dentistry, availability of services, and both the dental and social care workforce.

Conclusion

Multiple barriers exist surrounding access to dental care for older people. Various facilitators exist but not all are successful. More research needs to be carried out on older people's access to dental services in the community, particularly for the oldest old and minority groups.

Introduction

Within the United Kingdom, a significant proportion of people are aged 65 or older 1.2. This is leading to a larger population subgroup who require access to dental services, but who may suffer difficulties doing so due to the ageing process. The extent and prevalence of oral diseases is greater in older people, which is a result of multiple factors such as greater difficulty with self-care practices, dry mouth from polypharmacy, and the development of comorbid conditions which influence oral health such as diabetes. In addition, as more older people are retaining their teeth into old age, those with heavily restored dentitions require increased maintenance than other population groups and previous generations 5.6. This typically leads to older people facing a greater level of impact of poor oral health on their quality of life, and can cause oral and general frailty and malnutrition 4.7.8,9,10.

Access to dental services is an important factor in being able to support older people's oral health. Dental teams may assist with ongoing prevention, symptomatic relief of odontogenic pain, xerostomia and pathological mobility earlier detection and screening of oral cancer, and provision of dentures^{11,12,13}. There is limited guidance on oral healthcare for older people in the UK, where guidance on oral healthcare does exist, this typically focuses on those in care homes which only constitute 3.2% of older people in England and Wales¹⁴, such as the National Institute for Health and Care Excellence (NICE) guidelines and the Care Quality Commission (CQC) guidance^{15,16}. To effectively design healthcare policy and inform commissioning decisions, a clear evidence base needs to be established to highlight comprehensively what is important in accessing oral healthcare.

Many studies have assessed access to oral healthcare for specific groups, such as vulnerable adults, people with mental health issues, those with protected characteristics, and those in care homes ^{17,18,19,20}. Scoping reviews have been undertaken on one aspect of access to oral healthcare, such as the provision of rural geriatric care, tele-dentistry, and geriatric dental education, and older people's views on accessing oral healthcare ^{21,22,23,24}. To date, however, no studies have been carried out summarise the barriers and facilitators for all older people.

The aim of this study is to identify the barriers and facilitators influencing older people's ability to accessing oral healthcare in the UK.

Materials and Methods

The objectives of this study were:

- Review current literature related to accessing oral healthcare for older people in the UK since 1973, and identify the evidence available
- · Identify barriers and facilitators for access and organise them into categories: individual, organisational and policy levels
- · Identify areas for further research, commissioning, and policy recommendations for older people in the UK

A scoping review was considered necessary to map the evidence surrounding access to dental services for all older people. The scoping review followed the enhanced framework from Levac and colleagues which used the stages described by Arksey and O'Malley^{25,26}. A protocol was drafted and followed to ensure adherence to the Joanna Briggs Institute (JBI) guidelines²⁷.

Inclusion criteria were as follows:

- · Studies in English language only
- Any peer-reviewed research or opinion piece evaluating older people's access to oral healthcare, particularly evaluating access to dental services
- · Any appropriate study found post-hoc where additional search terms were discovered.
- Studies based in the UK and/or any devolved nation
- Studies carried out between 1973-2023

Exclusion criteria were:

Studies not carried out in English

- Studies evaluating only populations under age 60 or where the population is not specified as "older people," unless the study involves those caring for, or providing healthcare for, older people
- Case reports, case series, letters, and conference abstracts and proceedings
- Studies which evaluated oral healthcare or mouth care without describing access to dental services, did not discuss access to oral healthcare for older people
- · Scoping review protocols
- · Systematic reviews

Age 60 years was chosen as the cut-off as some older studies used this to reflect historical retirement ages for women, and shorter life expectancies in the UK ²⁸. As the review sought to advise policymakers within the UK, non-UK sources were excluded.

Search terms (Dental OR oral) AND (healthcare OR service*) AND ("older people*" OR elderly OR senior OR geriatric) AND (challenge OR facilitators OR "barrier* and facilitator*" OR hindrance OR access* OR avail* OR enabl* OR motivators). A librarian was consulted for clarification with Boolean operators relevant to each database search. Databases searched were: Web of Science (including MEDLINE), PsychINFO, and CINAHL.

Abstracts and papers were retrieved. The number of studies selected is shown in Fig. 1. Due to time constraints, there was no hand-searching of reference lists. Some papers were unobtainable. The final search was carried out on 25th April 2023.

Study titles and abstracts were screened for inclusion into the study. Full-text articles were viewed where the study was thought to address access to oral healthcare for older adults but where this was not explicitly discussed in the abstract. Two reviewers then carried out full-text screening of a sample of articles. Figure 1 shows the PRISMA-ScR flowchart of study selection (Preferred Reporting Items for Systematic Reviews and Meta-Analyses, Scoping Review). The results were exported to the reference management software Endnote Online, and duplicates removed. The JBI Extraction Template was used ²⁷. This instrument was piloted by one reviewer. A second reviewer provided feedback and the data extraction form was finalised. Data extraction was carried out by a single reviewer in June 2023, following training from a second reviewer. Data extraction included the following information: title, lead author, year of publication, country, population, setting, age of participants, study type, study aims, key results, facilitators and barriers according to individual/organisational/policy-level, research gaps, and additional notes. Due to the nature of the scoping review, whilst some study limitations were identified, studies were not assessed for quality²⁹. Results of the barriers and facilitators were categorised into individual, organisational and policy-level factors: they are summarised in Tables 1 and 2. A qualitative thematic analysis was conducted to identify themes which could link barriers or facilitators together into sub-categories, these were agreed by both reviewers.

Using individual, policy-level, and organisational factors may can identify clear areas where policy and commissioning at both national and community levels can occur, whilst highlighting ways that local factors may also be addressed. Organisational and policy-level factors were compared between studies and used to create specific policy recommendations, in line with other scoping reviews on access to dental care^{17,18,19}.

Figure 1: PRISMA flowchart.

Results

The initial search of peer-reviewed articles yielded 1272 papers; the overall number of included studies was 27. The PRISMA flowchart shows the number of included studies (Fig. 1). Most studies were qualitative (n = 10, 37%). Five studies did not specify the age of participants apart from describing them as "older adults." Three studies included adults over the age of 60; for one of these, women were included over age 60 and men

were included over age 65, reflecting the sex differences in the legal pensionable age at the time the study was undertaken. Other age ranges given were unspecified (5 studies), over 75 (1 study), over 63 (1 study), and mostly over 85 (1 study). The years included in the study ranged from 1984 to 2021. Of the studies included, eight were opinion pieces, three were mixed-methods studies, ten were qualitative studies, two were quantitative. There was one audit, one service evaluation and one strategy review. Of the English studies, a mixture of localities was reported: London (4), North West (3), North East (3), South East (2), South West (1). There were two studies from Scotland, one from Wales, and none from Northern Ireland. Of the 21 primary studies included, the mean sample size was 1811, range 21 – 10,600. These samples included a combination of older adults, care home staff, dental workforce, and other stakeholders in dentistry. Two studies specifically included an ethnically diverse sample, and four studies assessed ethnic minority groups exclusively.

Barriers and facilitators are summarised in Tables 1 and 2.

Table 1: Barriers to accessing oral healthcare for older adults

Table 2: Facilitators to accessing oral healthcare for older adults

The main barriers related to cost, dental anxiety, mobility issues, generational attitudes, and beliefs about dentistry and dental services. Overall, 17 (63%) papers mentioned cost as a barrier to care ^{30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46}. Cost was a barrier to care either directly or indirectly, including the fear of cost ^{34,36,37,41,44,44}. Cost was more of a barrier for those living in the community; those in residential homes relied on the family to pay which was sometimes a barrier ^{31,46}.

Dental anxiety and past negative experiences of dentistry were barriers to care^{38,45,47}. Negative experiences included past painful, frightening or unsuccessful treatments, or disliking the dental surgery or dentist's character^{34,41,42,47}.

Six papers discussed living alone, isolation or lack of social support as being a barrier to care ^{34,35,43,44,48,49}. This was more for adults aged over 85, males, those living alone, and not having an escort ^{34,35,36,41,53}. Living in a care home with dementia became a barrier due to lack of ability to communicate oral health needs⁴⁴.

In total, 11 papers identified mobility as a barrier to attendance which was from having difficulty living the house, being disabled, frail, or unable to use stairs 30,31,32,34,35,36,38,41,45,48,53. Issues existed with not being able to get to the practice due to distance, parking, public transport or other health conditions 33,33,35,37,39,41,48. For those with dementia, the resultant confusion or disorientation from journeying to appointments resulted in care-resistant behaviour 38,39.

Five studies identified generational attitudes as a barrier which did not change over life^{32,44,48} 30,33,36,37,44. These included the fear of bothering the dentist, fatalistic attitudes towards oral health in ageing, and a preference to manage problems at home^{35,37}. In total, 13 studies identified lack of perceived need for dental visits as a barrier to accessing care which related to older people being born when edentulous was more common, particularly before the NHS ^{30–37,40–43}. Some people believed that dentists were profit-driven and were influenced by social networks, negative media representation of dentistry, and lack of knowledge of available services^{33,41,47}. Some older people considered seeing doctors rather than dentists for mouth problems^{31,32,38}.

The main individual facilitators were related to dental beliefs. These included being motivated to attend and seek care, having positive experiences of dentistry, and a belief that visits are beneficial and a moral duty^{30,32,34,38,41,42}.

Older people from ethnic minority groups experienced additional challenges to accessing care. These included experiences of racism and hostility from services, lack of knowledge of local services, and not having dentists nearby who could speak the same language^{33,37,47}. Specific cultural beliefs reinforced the lack of perceived need for dentists, such as that tooth loss was not serious, that treatments could be inappropriate, and the fear of being perceived negatively for help-seeking behaviours³⁷.

The number of dentists carrying out NHS care, community dental services, NHS dental practices, and services providing domiciliary care, was both varying and inadequate^{39,46,54,56}. Not all dental practices offered domiciliary appointments, even upon request^{41,46}. For general dentists, this was due to lack of remuneration, equipment difficulties, anxieties around medical emergencies and personal safety, and not being able to provide quality care in a non-dental setting^{30,38,49}.

The referral pathways for both domiciliary and community dental services were often complex and included long waiting times^{46,56}. For in-practice appointments, barriers included a lack of accessible parking, no ground floor surgeries, no wheelchair access, and small surgeries which could not accommodate mobility aids^{41,49,54}. Some dental services did not have any relationship with local care homes, nor did they contact older people for recall visits, yet older people could not book appointments in advance^{31,41,43,46,50}.

The main facilitators surrounding the organisation of dental services related to increasing the availability of domiciliary, outreach and/or teledentistry appointments^{34,38,46}, ensuring waiting times were reduced⁴¹, and becoming more wheelchair-friendly³⁸.

Dentists' attitudes could create an unfriendly surgery environment which became a barrier to accessing care; a positive and friendly, listener-oriented attitude was considered a facilitator^{41,52}. One older study identified dentists as not understanding their role in maintaining oral health as part of healthy ageing; a more recent study highlighted aspects of non-verbal communication, such as being rushed^{41,50}.

Workforce issues related to the need to upskill both dentists and the social care workforce around oral health and care for older people, as well as raising awareness and planning services to promote oral health in other sectors, and to become more culturally competent, were proposed facilitators^{31,35,39,43,44,45,51,52,54,57}

Studies highlighted that both formal and informal carers lacked knowledge and held unhelpful attitudes for older people in seeking care^{31,35}. These were more severe if carers were older, dentally anxious, unpaid, or not regular dental attenders themselves³¹. Carers were often busy and had little time to attend to dental issues or appointments; where they did, they did not have the required information on medications and exemption charges that the dentist needed to provide care ^{36,43,43,49,51,52}. Care staff sometimes acted as gatekeepers for making appointments when oral health needs of residents was considered unimportant or not a priority, or from a belief that the older person would be unamenable to receiving treatment^{31,35,44,46,48,51}. They also made inappropriate referrals to doctors for oral issues^{46,52}.

The key organisational facilitators related often to raising the importance of oral health in care homes to improve referrals care homes, including more training for caring staff and implementing oral health assessments^{31,35,39,51,52,54,57}.

Policy-level barriers identified were the lack of free dental services for older people^{40,41,46}, lack of automatic exemption charges⁴¹, lack of adequate remuneration for domiciliary services^{44,56}, changes to the NHS contract system resulting in privatisation of practices^{46,48,57}, lack of needs-based workforce planning and service commissioning, especially for domiciliary care^{36,38,39}, and lack of training of health and social care workers in mouth care^{38,54}. The facilitators surrounding policymaking were proposed solutions, commissioning services according to need, including care home services,^{30,31,39,40,41,47,49,52} and guidelines relevant to older people^{38,39,47,52}, and improving referral pathways^{39,41,46,49,56}, including blending in-surgery with domiciliary appointments³⁸, improving referral pathways. They also included upskilling the dental workforce and improving training to manage generational values and communication needs^{33,39,41}. Six studies identified the need for collaboration between all aspects of health and social care ^{38,40,41,43,46,46}. Ensuring media representations of dentistry were more balanced was also highlighted⁴¹.

Policy recommendations are synthesised from the primary results are shown in Figs. 2 and 3.

Figure 2: Policy Recommendations

Figure 3: Research Gaps

Discussion

The aim of this study was to identify and map existing research surrounding access to oral healthcare for older adults to provide policymakers and commissioners with an evidence-base to improve access for this population subgroup. Whilst not all barriers and facilitators may apply to all older people, the results of the study nevertheless highlighted age-specific factors. Many of the barriers and facilitators overlapped with those experienced by other vulnerable groups as shown in other studies ^{18,19,20,21,58,59}. This was the first study to limit the search to dental care in the UK whilst extending the time period to encompass the last 50 years.

A key finding was that over a 50-year period, many of the barriers and facilitators to accessing dental care had not in fact changed. For example, education and workforce issues surrounding training for geriatric dentistry were the same as studies mentioned 20 years previously⁴⁸. Almost half of the studies reported the lack of perceived need to see a dentist as a barrier to care. Whilst this may be interpreted as a call to educate older people as to the importance of visiting a dentist, it signifies that there is a discrepancy between an older people's health needs and priorities and what the dental profession considers to be important for their health. This highlights the need for dental services to be co-produced by older people, to meet older people's felt needs, rather than only considering normative need^{52,60}.

In the last 50 years, the health and social care landscape has become increasingly dominated by neoliberal marketisation⁶¹. Dental practices in the UK operate as small businesses, which ultimately must be profit-driven to succeed⁶². Potential policy-level facilitators for care included the Disability Discrimination Act, which was later replaced by the Equality Act^{38,63}. However, later studies describe lack of wheelchair access as a continued barrier to attending dental practices physically despite these policies existing^{41,46,54}. Policymakers must consider how to commission and support dental services to accommodate older people so that practices are not financially disincentivised from seeing this population.

A limitation of the study was due to changes in terminology. Some studies were retrieved post-hoc from the primary reviewer's own research knowledge, despite the original terms being supported by a librarian. Another limitation was that grey literature was not included despite an exploratory search revealing that guidelines do exist surrounding oral healthcare for older adults 1,15,16,64,65,66. This is an area which could be explored in the future; yet, notably much of the existing guidance focuses on those in care homes or with dementia.

This scoping review highlighted multiple gaps in the literature (Fig. 3). There were not many studies available to assess barriers and facilitators to accessing dental care for people living in the community, particularly for those in the 85 + age group. This could be supported by future studies on family members, informal carers and other health and social care professionals. Other marginalised subgroups of older people that had not been studied in the last 25 years were ethnic minorities living outside of London, women, and older people living in the devolved nations, especially Northern Ireland.

Multiple studies identified the beliefs and attitudes held by older people towards dentistry, particularly the factors which distinguished an older person from having positive rather than negative perceptions of dentists and oral health. Aspects which were identified but not explored in depth included negative media attention around dentistry, lack of dental health education of older people, culturally hostile healthcare services, and dentists' varying attitudes towards older people. Research into these fields could provide insights into the development of more inclusive services.

Conclusion

In conclusion, many barriers and facilitators exist relating to older peoples' access to dental services. Future research is required to explore specific barriers and facilitators within the diverse subgroup of older people, beyond those in care homes. Without addressing older peoples' needs now, the problem of access is likely to worsen as the ageing population grows.

References

- Public Health England. What is known about the oral health of older people. Published online 2015. Accessed November 21, 2022. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/489756/ What_is_known_about_the_oral_health_of_older_people.pdf
- 2. Office for National Statistics. Population and household estimates, England and Wales: Census 2021. Census 2021. Published 2022. Accessed November 15, 2022. https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/populationandhouseholdestimatesenglandandwales/census2021
- 3. Alpert PT. Oral Health: The Oral-Systemic Health Connection. *Home Health Care Management & Practice*. 2017;29(1):56-59. doi:10.1177/1084822316651658
- 4. Ramsay SE, Whincup PH, Watt RG, et al. Burden of poor oral health in older age: findings from a population-based study of older British men. *BMJ Open.* 2015;5(12):e009476. doi:10.1136/bmjopen-2015-009476
- 5. Chenery V. 11: Adult Dental Health Survey 2009 England Key Findings. *The Health and Social Care Information Centre*. Published online 2011:1-64.
- 6. Steele J. NHS dental services in England An independent review. Department of Health. Published online 2009:86.
- 7. Wilson L. State of the nation: older people and malnutrition in the UK today. Published online 2017. Accessed August 4, 2023. https://www.ageuk.org.uk/globalassets/age-uk/documents/programmes/malnutrition-taskforce/mtf_state_of_the_nation.pdf
- 8. Tanaka T, Takahashi K, Hirano H, et al. Oral Frailty as a Risk Factor for Physical Frailty and Mortality in Community-Dwelling Elderly. *The Journals of Gerontology: Series A.* 2018;73(12):1661-1667. doi:10.1093/gerona/glx225
- 9. Minakuchi S. Philosophy of Oral Hypofunction. Gerodontology. 2022;39(1):1-2. doi:10.1111/ger.12606
- 10. Zenthöfer A, Rammelsberg P, Cabrera T, Schröder J, Hassel AJ. Determinants of oral health-related quality of life of the institutionalized elderly. *Psychogeriatrics*. 2014;14(4):247-254. doi:10.1111/psyg.12077
- 11. Thomson W, Ma S. An ageing population poses dental challenges. *Singapore Dental Journal*. 2014;35:3-8. doi:https://doi.org/10.1016/j.sdj.2014.10.001
- 12. Public Health England. Oral cancer in England: a report on incidence, survival and mortality rates of oral cancer in England, 2012 to 2016. Published online 2020. Accessed August 2, 2023.
 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/891699/Oral_cancer_report_170420.pdf
- 13. Matear D, Barbaro J. Caregiver puterspectives in oral healthcare in an institutionalised elderly population without access to dental services: a pilot study. *JOURNAL OF THE ROYAL SOCIETY FOR THE PROMOTION OF HEALTH.* 2006;126(1):28-32. doi:10.1177/1466424006061171
- 14. Office for National Statistics. Changes in the Older Resident Care Home Population between 2001 and 2011 Office for National Statistics. Published 2014. Accessed March 13, 2023.
 - https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/changesintheolderresidentcarehomepopulationbetween2001and2011/2014-08-01

- 15. Care Quality Commission. Smiling matters: oral health in care homes. Published online 2019. Accessed March 13, 2023. https://www.cqc.org.uk/publications/major-report/smiling-matters-oral-health-care-care-homes
- 16. National Institute for Clinical Excellence. Improving oral health for adults in care homes. NICE. Published 2023. Accessed March 6, 2023. https://www.nice.org.uk/about/nice-communities/social-care/quick-guides/improving-oral-health-for-adults-in-care-homes
- 17. Slack-Smith L, Hearn L, Scrine C, Durey A. Barriers and enablers for oral health care for people affected by mental health disorders. *Australian Dental Journal*. 2017;62(1):6-13. doi:10.1111/adj.12429
- 18. El-Yousfi S, Jones K, White S, Marshman Z. A rapid review of barriers to oral healthcare for vulnerable people. *Br Dent J.* 2019;227(2):143-151. doi:10.1038/s41415-019-0529-7
- 19. El-Yousfi S, Jones K, White S, Marshman Z. A rapid review of barriers to oral healthcare for people with protected characteristics. *Br Dent J.* 2020;228(11):853-858. doi:10.1038/s41415-020-1637-0
- 20. Göstemeyer G, Baker SR, Schwendicke F. Barriers and facilitators for provision of oral health care in dependent older people: a systematic review. *Clin Oral Invest*. 2019;23(3):979-993. doi:10.1007/s00784-019-02812-4
- 21. Legge AR. Older Patients' Views of Oral Health Care and Factors which Facilitate or Obstruct Regular Access to Dental Care-Services: A Qualitative Systematic Review. *Community Dental Health*. 2021;38(3):165-171. doi:10.1922/CDH_00326Legge07
- 22. Nilsson A, Young L, Glass B, Lee A. Gerodontology in the dental school curriculum: A scoping review. *Gerodontology*. 2021;38(4):325-337. doi:10.1111/ger.12555
- 23. Ben-Omran MO, Livinski AA, Kopycka-Kedzierawski DT, et al. The use of teledentistry in facilitating oral health for older adults. *The Journal of the American Dental Association*. 2021;152(12):998-1011. doi:10.1016/j.adaj.2021.06.005
- 24. Chandel T, Alulaiyan M, Farraj M, et al. Training and educational programs that support geriatric dental care in rural settings: A scoping review. *Journal of Dental Education*. 2022;86(7):792-803. doi:10.1002/jdd.12885
- 25. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*. 2005;8(1):19-32. doi:10.1080/1364557032000119616
- 26. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implementation Sci.* 2010;5(69). doi:10.1186/1748-5908-5-69
- 27. Joanna Briggs Institute. Appendix 11.1 JBI template source of evidence details, characteristics and results extraction instrument JBI Manual for Evidence Synthesis JBI Global Wiki. JBI Manual for Evidence Synthesis. Published 2022. Accessed November 27, 2022. https://jbi-global-wiki.refined.site/space/MANUAL/4687579
- 28. Moneyfarm. UK Retirement Age: What is retirement age? When can I retire? Insights. Published June 1, 2023. Accessed July 18, 2023. https://blog.moneyfarm.com/en/pensions/retirement-age-in-the-uk-when-can-you-retire-and-get-your-state-pension/
- 29. Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies: A typology of reviews, *Maria J. Grant & Andrew Booth. Health Information & Libraries Journal.* 2009;26(2):91-108. doi:10.1111/j.1471-1842.2009.00848.x
- 30. Steele L. Provision of Dental Care for Elderly Handicapped People. A Community Dental Officer's View. *Journal of the Royal Society of Health*. 1984;104(6):208-209. doi:10.1177/146642408410400604
- 31. Hoad-Reddick G, Grant AA, Griffiths CS. Knowledge Of Dental Services Provided: investigations in an elderly population. *Commun Dent Oral Epidemiol.* 1987;15(3):137-140. doi:10.1111/j.1600-0528.1987.tb00501.x
- 32. Tobias B, Smith J. Barriers to dental care, and associated oral status and treatment needs, in an elderly population living in sheltered accommodation in West Essex. *British Dental Journal*. 1987;163:293-295.
- 33. Diu S, Gelbier S. Oral health screening of elderly people attending a Community Care Centre. *Commun Dent Oral Epidemiol*. 1989;17(4):212-215. doi:10.1111/j.1600-0528.1989.tb00614.x
- 34. Mattin D, Smith J. The oral health status, dental needs and factors affecting utilisation of dental services in Asians aged 55 years and over, resident in Southampton. *British Dental Journal*. 1991;170:369-372.
- 35. Merelie DL, Heyman B. Dental needs of the elderly in residential care in Newcastle-upon-Tyne and the role of formal carers. *Commun Dent Oral Epidemiol.* 1992;20(2):106-111. doi:10.1111/j.1600-0528.1992.tb00688.x
- 36. Lester V, Ashley FP, Gibbons DE. Reported dental attendance and perceived barriers to care in frail and functionally dependent older adults. *Br Dent J.* 1998;184(6):285-289. doi:10.1038/sj.bdj.4809604
- 37. Kwan S, Holmes M. An exploration of oral health beliefs and attitudes of Chinese in West Yorkshire: a qualitative investigation. *Health Education Research*. 1999;14(4):453-460. doi:10.1093/her/14.4.453
- 38. Fiske J. The Delivery of Oral Care Services to Elderly People Living in a Noninstitutionalized Setting. *J Public Health Dent.* 2000;60(4):321-325. doi:10.1111/j.1752-7325.2000.tb03342.x
- 39. Bell M, Davis D, Easterby-Smith V, Ellis J. National Working Group for Older People. Meeting the challenges of oral health for older people: a strategy review. Chapter 4: Dental services access and provision. *Gerodontology*. 2005;22 (Suppl 1):16-22. doi:https://doi.org/10.1111/j.1741-2358.2005.00095_1.x

- 40. Lane EA, Gallagher JE. Role of the Single Assessment Process in the Care of Older People. How Will Primary Dental Care Practitioners be Involved? *Primary Dental Care*. 2006;13(4):130-134. doi:10.1308/135576106778529080
- 41. Borreani E, Wright D, Scambler S, Gallagher JE. Minimising barriers to dental care in older people. *BMC Oral Health*. 2008;8(7). doi:10.1186/1472-6831-8-7
- 42. Borreani E, Jones K, Scambler S, Gallagher JE. Informing the debate on oral health care for older people: a qualitative study of older people's views on oral health and oral health care. *Gerodontology*. 2010;27(1):11-18. doi:10.1111/j.1741-2358.2009.00274.x
- 43. Austin RS, Olley RC, Ray-Chaudhuri A, Gallagher JE. Oral Disease Prevention for Older People. *Primary Dental Care*. 2011;18(3):101-106. doi:10.1177/2050168411os1800302
- 44. Sullivan J. Challenges to Oral Healthcare for Older People in Domiciliary Settings in the Next 20 Years: A General Dental Practitioner's Perspective. *Primary Dental Care*. 2012;os19(3):123-127. doi:10.1308/135576112802092206
- 45. Beacher N, Sweeney MP. The Francis report implications for oral care of the elderly. *Dent Update*. 2015;42(4):318-323. doi:10.12968/denu.2015.42.4.318
- 46. Patel R, Mian M, Robertson C, Pitts NB, Gallagher JE. Crisis in care homes: the dentists don't come. *BDJ Open.* 2021;7(20). doi:10.1038/s41405-021-00075-4
- 47. Boneham MA, Williams KE, Copeland JRM, et al. Elderly people from ethnic minorities in Liverpool: mental illness, unmet need and barriers to service use. *Health & Social Care in the Community*. 1997;5(3):173-180. doi:10.1111/j.1365-2524.1997.tb00112.x
- 48. Walls AWG, Steele JG. Geriatric oral health issues in the United Kingdom. *International Dental Journal*. 2001;51:183-187. doi:10.1002/j.1875-595X.2001.tb00865.x
- 49. Ahmad B. Dental Public Health In Action: Barriers to oral healthcare provision for older people in residential and nursing care homes: A mixed method evaluation and strategy development in County Durham, North East England. *Community Dental Health*. 2018;(35):136-139. doi:10.1922/CDH_4143Ahmad04
- 50. Hamilton F, Sarll D, Grant A, Worthington H. Dental care for elderly people by general dental practitioners. *British Dental Journal*. 1990;168(3):108-112. doi:10.1038/sj.bdj.4807096
- 51. Sweeney MP, Williams C, Kennedy C, Macpherson LMD, Turner S, Bagg J. Oral health care and status of elderly care home residents in Glasgow. *Community Dental Health*. 2007;24:37-42.
- 52. Howells EP, Davies R, Jones V, Morgan MZ. Gwên am Byth: a programme introduced to improve the oral health of older people living in care homes in Wales from anecdote, through policy into action. *Br Dent J.* 2020;229(12):793-799. doi:10.1038/s41415-020-2400-2
- 53. Aminu AQ. Adult Dental Health Survey 2009: association between oral health outcomes and living arrangements of older adults in the UK. *Br Dent J.* 2019;227(2):115-120. doi:10.1038/s41415-019-0487-0
- 54. Doshi M, Lee L, Keddie M. Effective mouth care for older people living in nursing homes. *Nursing Older People*. 2021;33(3):18-23. doi:10.7748/nop.2021.e1320
- 55. White M, Adams J, Heywood P. Chapter Five: How and why do interventions that increase health overall widen inequalities within populations? In: *Social Inequality and Public Health.* Britsol University Press; 2009. https://doi.org/10.1332/policypress/9781847423207.003.0005
- 56. Longhurst RH. Availability of Domiciliary Dental Care for the Elderly. *Primary Dental Care*. 2002;9(4):147-150. doi:10.1308/135576102322482045
- 57. White V, Edwards M, Sweeney M, Macpherson L. Provision of oral healthcare and support in care homes in Scotland. *Journal of Disability and Oral Health*. 2009;10(3):99-106.
- 58. Curtis SA, Scambler S, Manthorpe J, Samsi K, Rooney YM, Gallagher JE. Everyday experiences of people living with dementia and their carers relating to oral health and dental care. *Dementia*. 2021;20(6):1925-1939. doi:10.1177/1471301220975942
- 59. Prosser GM, Louca C, Radford DR. Potential educational and workforce strategies to meet the oral health challenges of an increasingly older population: a qualitative study. *BDJ Open.* 2022;8(6). doi:10.1038/s41405-022-00098-5
- 60. Bradshaw J. Taxonomy of social need. In: *Problems and Progress in Medical Care*. 7th. Oxford University Press; 1972:71-82. https://eprints.whiterose.ac.uk/118357/1/bradshaw_taxonomy.pdf
- 61. Dutta SJ, Knafo S, Lovering IA. Neoliberal failures and the managerial takeover of governance. *Rev Int Stud.* 2022;48(3):484-502. doi:10.1017/S0260210521000619
- 62. Toon M, Collin V, Whitehead P, Reynolds L. An analysis of stress and burnout in UK general dental practitioners: subdimensions and causes. *Br Dent J.* 2019;226(2):125-130. doi:10.1038/sj.bdj.2019.46
- 63. Government Equalities Office. EQUALITY ACT 2010: What do I need to know? Published online 2010. https://assets.publishing.service.gov.uk/media/5a79c79940f0b66d161ae174/disability.pdf
- 64. Public Health England. Commissioning better oral health for vulnerable older people. Published online 2018. Accessed March 13, 2023. https://www.gov.uk/government/publications/commissioning-better-oral-health-for-vulnerable-older-people

- 65. National Institute for Clinical Excellence. Overview | Oral health for adults in care homes | Guidance | NICE. Published July 5, 2016. Accessed July 21, 2023. https://www.nice.org.uk/guidance/ng48
- 66. Office for Health Improvement & Disparities. Oral health toolkit for adults in care homes. GOV.UK. Published 2020. Accessed July 21, 2023. https://www.gov.uk/government/publications/adult-oral-health-in-care-homes-toolkit/oral-health-toolkit-for-adults-in-care-homes
- 67. General Dental Council. 'Standards for Education' [Internet]. 2015 [cited 2023 Jul 21]. Available at: https://www.gdc-uk.org/docs/default-source/quality-assurance/standards-for-education-%28revised-2015%29.pdf (Accessed: 21 July 2023).
- 68. National Institute for Clinical Excellence. Overview | Oral health for adults in care homes | Guidance | NICE. [Internet]. 2016 [cited 2023 Jul 21]. Available at: https://www.nice.org.uk/guidance/ng48

Tables

Table 1: Barriers to accessing oral healthcare for older adults

Barrier		
Individual	Organisational	Policy-level
Cost 30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46	Low availability of services, especially domiciliary and community ^{39,41,46,51,52}	Regulations for patients regarding co- payments ^{40,41,46}
Anxiety ^{38,45,47}	Organisation of services not accessible or advertised 31,41,43,46,51,53	Regulations for dentists regarding remuneration ^{44,51}
Lack of social support ^{34,35,36,41,43,44,48,49,50}	Dental workforce attitude and confidence with older people ^{41,50}	Service and workforce planning – availability of services 36,38,39,46,48,52,56
Communication difficulties 38,39,44	Social care workforce lack of knowledge of oral healthcare ^{31,35,36,43,46,49,54,55}	
Mobility issues and frailty ^{30,31,32,34,35,36,38,41,45,48,50}		
Transport difficulties ^{33,33,35,37,39,41,48}		
Negative beliefs around dentistry and dental services ^{33,35,41,47}		
Cultural and generational attitudes 30,31,32,33,36,37,38,40,41,42,43,44,48		

Table 2: Facilitators to accessing oral healthcare for older adults

Facilitator		
Individual	Organisational	Policy-level
Positive experiences of and attitudes towards dentistry ^{32,41,42}	Designated care home oral healthcare policies and referral pathways ^{35,39,43,51,52,54,55}	Commissioning more services for older people ^{30,31,39,40,41,47,49,52}
Motivation to seek care ⁴¹	Carer awareness and training for oral healthcare ^{30,31,35,43,51,54}	Planning services to meet older peoples' needs ^{30,31,38,39,40,41,47,49,54}
Willingness to pay for care ⁴¹	Accessible dental practices ^{31,34,38,46}	Dental contract reform ⁴¹
Regular dental attendance ^{30,32,42}	Culturally competent dental practices 33,37,47	Upskilling the dental workforce ^{33,39,41,48}
	Dentists understanding of older peoples' needs ^{41,53,54}	Upskilling the social care workforce ^{39,41,46}
	Clear information on costs ^{31,36,36,41,42}	
	Increased availability of domiciliary care ^{30,32,40}	
	Greater liaison between all health and social care practitioners ^{39,41,46,49,56}	

Figures

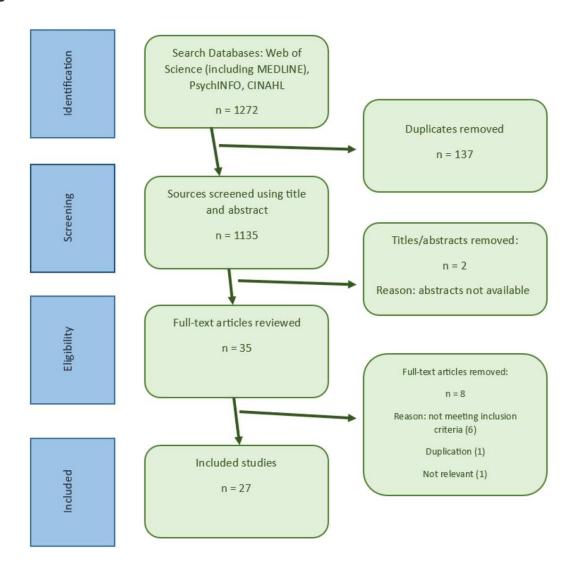


Figure 1

PRISMA flowchart.

- Remove dental charges for older people or increase the scope of eligible exemptions
- Eliminate penalties for exemption charges for older people
- Commission a greater number of dental services for older people
- Commission oral health educators and other dental care professionals to provide oral healthcare for older adults
- Reform the NHS dental contract to incentivise dentists to provide care for older people and an increased number of domiciliary services
- Introduce flexible commissioning to include access sessions for older people
- Establish gerodontology as a dental specialty
- Implement oral healthcare into the curriculum for the social care workforce
- Standardise gerodontology as part of the undergraduate dental curriculum in the General Dental Council's Standards for Education⁶⁷
- Develop straightforward referral pathways for those in health and social care to refer to dental services
- Enforce existing of NICE requirements for oral healthcare to be carried out in care homes by the CQC⁶⁸
- Consider patient and public involvement in designing of new dental services for older people
- Expand the range of community dental services available in health centres
- Provide funding to older people or dental practices to claim expenses for costs associated with attending appointments
- Provide grants to encourage dental practice relocation to more accessible premises and/or to adapt practices to become more accessible
- Provide free equality, diversity and inclusion training for dental teams
- Commission more outreach services to deprived communities
- Commission care pathways which can combine domiciliary assessments with in-surgery care

Figure 2

Policy Recommendations

- Studies on barriers and facilitators to accessing oral healthcare for people living in the community
- Studies on older people in the 85+ age group
- Studies assessing access to oral healthcare for family members, informal carers and health and social care professionals
- Studies assessing particular barriers and facilitators to accessing oral healthcare in particular communities such as ethnic minorities outside of London and women
- Studies in the devolved nations, particularly Northern Ireland
- Studies exploring the role of the media on access to care for older people
- Studies exploring the role of culturally competent dental services in access to care for minority groups
- Studies exploring attitudes of dentists towards ageing and older people
- Studies exploring the impact of the current NHS access crisis on older people
- Studies exploring the role of dental tourism in the UK and private cosmetic dentistry on availability of services
- Studies exploring the potential for skill mix to be a facilitator for improving access to dental care

Figure 3

Research Gaps