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ORIGINAL ARTICLE

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Let us talk about it: An exploratory qualitative study of older adults' priorities for oral health in North West England

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Objectives: The aim of this study was to explore oral health experiences and priorities in a diverse group of adults aged over 60 in North West England, an area with high oral health inequality.

Methods: Participants were selected using purposive sample from multiple settings across the North West: community, primary dental care and residential care home. Data were collected between October 2018 and March 2019 and involved eight focus groups and three individual interviews with a total of 47 participants. The data were analysed using thematic analysis.

Results: Four key themes were identified. The first was issues important to people over 60, which included the appearance of one's teeth, communication, continuity of care and the treatment experience. These were informed by two further themes, past experiences of treatment, which were not always favourable, and perceived barriers, such as accessing NHS dentistry, cost, physical access and oral care in institutional settings. The fourth, connected theme focussed on how oral healthcare messages for different audiences should be disseminated.

Conclusions: There are shortfalls in the provision of oral healthcare to older adults in the UK. Communication and continuity of care with a trusted oral healthcare provider are key priorities for this population. However, our participants felt that current public provision of dental services is not meeting their needs.

KEYWORDS
oral health, gerodontology, qualitative research

1 | INTRODUCTION

Oral health is important to general health and wellbeing, as it is integral to physical and social functioning.[1,2] There are significant generational differences in oral health disease distribution in the UK and older people may have unmet oral health need different from other age groups. In the UK, edentulism, active root decay and periodontal attachment loss are most prevalent among adults aged 60 and over, who are also at the highest risk of having complex dental health needs and urgent dental conditions.[3–7] The populations of most countries, including the UK, are rapidly ageing.[8] The trend is for greater numbers of this population to retain more of their teeth while continuing to have a "substantial burden" of oral health issues.[9] In the context of a growing burden of oral disease, this presents new challenges in delivering oral healthcare for a diverse group of "older adults," who have varying levels of physical and mental fitness and independence which may affect their ability for self-care and to attend the dentist.[10] For example, those with more dependent living

arrangements may have poorer oral health and access to dental care than those living more independently.[11] Due to this diversity and to differences in oral health and oral healthcare experiences, these individuals are likely to have very different expectations of, and approaches towards, oral healthcare, which may also differ from the expectations of dental and health professionals.[2,12–14] Dentistry, and the provision of oral healthcare, continues to evolve and change, and elderly patients may have challenges in adapting to those changes. For example, the development of teledentistry might present a disproportionate challenge for older patients accessing care or information.[15]

The acknowledgment of patients' values is recognised as being critical to effective healthcare, and an essential component of patient-centred care and shared decision-making.[16,17] Hearing the patient's voice is a professional expectation, and more broadly it is a requirement in the development of trust among the general public in the dental profession.[18] It can be challenging to establish patient values and priorities, and to integrate them into policies and practice, particularly in certain population groups, such as the elderly.[19] The scope of older people's oral health problems and needs as well as their priorities, is not well understood in the North West of England.[7,20] Empirical research at a community level is needed to be able to align the evidence to future research, policy and recommendations to ensure acceptability, relevance, patient empowerment, shared clinical decision-making and, ultimately, the best health outcomes possible.[20]

The existence of geographical pockets of higher dental need emphasises the importance of identifying local priorities directly related to older people in those areas.[21,22] Although the North West is not unique in the UK for higher rates of edentulism or other markers of poor oral health in adults it is one of the regions markedly worse-off than the South East. Income and education are important factors, but area of residence is similarly contributory to inequalities in clinical oral health; for example, the North West is below the England average in patient success at accessing NHS dental treatment.[23]

The aim of this study was to explore oral health experiences and priorities as identified by adults aged over 60 in an area with high oral health need.

2 | METHODS

This study used a qualitative approach to explore the oral health problems and needs of a diverse range of older people and their family members and/or carers in North West England. A purposeful sampling approach, maximum variation, was adopted to ensure diverse cases are included to enable in-depth understanding and richness of conceptualisation necessary to explore the complexity of the study topic.[24,25] Our participants were selected from diverse groups of older adults with a range of dental care needs, across the North West. The research approach was informed by a social constructivist theoretical framework, with findings based on the "perspectival realities" of the participants.[26,27] The recruitment was

carried out in three settings: in the community with the help of the University of Central Lancashire (UCLan) Community Engagement and Service User Support group (COMENSUS), in two General Dental Practices (GDP) and in a residential care home. GDPs were selected among those that served diverse local communities. Flyers were placed in one of the GDPs along with researcher contact details so that potentially interested participants could make contact and request further information. Researchers visited the other GDP to distribute information sheets to potential participants and answer questions before offering an appointment to take part. COMENSUS recruited participants through their own Patient and Public Involvement (PPI) networks. The researchers worked with the residential care home to inform residents about the research and organise a visit at which point interested parties signed a consent form and data collection was undertaken. Participants selected from GDPs and a residential care home were new to research; participants selected with the help of COMENSUS were involved in patient and public involvement activities unrelated to dental and oral health. Inclusion criteria were that the individual was aged over 60 and able to take part in an English-language focus group or interview. We aimed to gather views from a wide range of respondents; given the demographic being targeted it was possible that individuals who wished to take part may have a learning disability, dementia or other condition. We wanted to include these individuals as far as practicable. Our only exclusion criteria were unconscious patients and those detained under the Mental Health Act, unless we were advised against the suitability of a potential participant by a caregiver.

The focus groups and interviews were carried out by a multidisciplinary team of researchers trained and experienced in interviewing (NC, AK, NT; see online supplement for more information about the researchers). Focus groups were attended by at least two researchers allowing for a consensus approach to data collection and management of group dynamics to ensure that all voices were heard. To mitigate any potential drawbacks of this approach, individual interviews were offered to allow participants to express their views more privately. The COMENSUS facilitator was involved in the focus groups with people identified in the local community. Meetings were held at the University's campus, in the GDPs, and in the residential home after written informed consent had been obtained and began with an explanation about the goals of the project. In accordance with the INVOLVE guidance, participants' travel costs were reimbursed and they were also offered financial compensation for their time.[20]

The topic guide (Table 1) used in the focus group discussions/interviews was developed through consultation with stakeholders, including public and service users, dental public health experts, local researchers, and the Dentistry and Ageing Specialties Research Groups (SRG) NIHR Clinical Research Network (CRN) North-West Coast, and a literature search. The guide was semi-structured to allow participants to introduce new topics as they felt relevant. The question about how dentistry had changed in the participants' lifetime was added after analysis of the first focus group.

TABLE 1 Semi-structured interview schedule.

Past experiences of the dentist
• How has dentistry changed in your lifetime?
• Describe how regularly you have attended the dentist throughout your life so far.
• What are your experiences of the dentist and the health of your teeth and mouth? Has this affected your attendance at the dentist?
• Has anything made it difficult to go to the dentist?
• Has your attendance at the dentist changed? What are the reasons for this change and how might this change be overcome?
Current experiences of the dentist
• What are your main reasons for attending/ not attending the dentist?
• How important is it to visit the dentist? Why?
• How often do you currently visit the dentist?
Daily routine
• Describe your daily routine to keep your teeth and mouth healthy.
• How important is it to look after your teeth and mouth? Why?
• Do you experience any difficulties in looking after your teeth and mouth?
• Do you receive any help looking after your teeth and mouth?
Oral health problems
• What are the main oral health problems for people aged 60+?
• What dental treatment have you received for these problems?
• Any current problems with your teeth and mouth.
• Is this affecting your quality of life, and in what ways? (Problems eating, drinking, pain, self-esteem/confidence, etc).
Oral health/general health links
• How do you think the condition of your teeth and mouth can affect your general health and wellbeing?
Is there anything that you would like to add that has not yet been addressed?

Note that "you" is also taken to mean your peers, friends, family or anyone you may have caring responsibilities for.

The audio recordings of the interviews were transcribed by one researcher (NC) and independently verified (AK). The analysis was carried out by two researchers who brought different perspectives to the data interpretation with one coming from a clinical dentistry background and the other with non-clinical public health background. Both researchers were engaged with participants during the recruitment and interviewing stages. Transcripts were not returned to participants for correction. We aimed to assess data saturation by considering when no new themes were generated from the data as well as through an approach informed by information power.[28]

The data were analysed using thematic analysis in NVivo 12 following the approach of Braun and Clarke.[29] This involved an iterative process of initial line by line coding, consolidation of codes and generation of themes. The coding framework and final set of themes were proposed by one researcher (NC) and confirmed by a second

(AK). Information which could potentially identify individual participants was removed from the transcription.

3 | RESULTS

Eight focus group meetings and three individual interviews were carried out between October 2018 and March 2019. The focus groups lasted between 27 and 90 min, while individual interviews lasted between 17 and 43 min. The overall duration was 8 ¾ hours; 47 people participated in total with no drop-outs. The average age was 74.3 (IQR 70–79) years (see Table 2). The included participants resided in different areas in the North West. The sample comprised employed, self-employed, retired and homemakers, with their past and current occupations (see footnote Table 2) covering Standard Occupational Classification 2020 categories 1–7 and 9.[30] No participants were accompanied by a carer although some participants had caring responsibilities for others. Only five participants used private dental services; the remaining 42 used NHS dental services.

Thematic analysis of the data identified four main themes. The themes and a proposed inter-relationship between the themes are represented in Figure 1. The principal thematic output of the analysis was *Issues important to people over 60*. Two further themes fed into this principal theme: *Previous experiences of oral healthcare* and *Perceived barriers to good oral healthcare*. These two themes appeared to represent the sources of the participants' priorities. A fourth, connected theme was *Dissemination of oral health messages*, which addressed sources of information deemed appropriate for different audiences. Each main theme derived from a number of subthemes (detailed in Figure 2), in turn derived from the analysis of the data (combined with illustrative quotes in Figure 3). Participant numbers and interview/focus group identifiers are provided in parentheses after the quote.

3.1 | Issues important to people over 60

The first key theme identified was issues important to people over 60, and this comprised four subthemes: oral health-related quality of life, communication, continuity of care and treatment experience.

The appearance of one's teeth, whether natural or prosthetic, was identified as a contributor to personal happiness and confidence.

> I had two very prominent teeth here, rabbit teeth, and I hated them so of course you...that's why it's so important your teeth, for your own self-image, your teeth are so important [...] to me, they were ugly...
>
> (Pp7, FG4).

TABLE 2 Participant characteristics.

Settings	Location	Meeting	Participants n	Participants age mean (range), years	Records
Community based	UCLan	1	6	65* (est.)	Written notes
	UCLan	2	5	69.6. (65–84)	Audio recording
	UCLan	6	6	76 (71–79)	Audio and written notes
Dental Practice 1, Merseyside	GDP	3	7	71 (60–84)	Audio and written notes
Dental Practice 2, Lancashire	GDP	4	1	63	Audio and written notes
	GDP	5	1	78	Audio and written notes
	GDP	7	8	79.5 (72–91)	Audio and written notes
	GDP	8	2	72 (72)	Audio and written notes
	GDP	9	3	75 (57–99)	Audio and written notes
	GDP	10	1	79	Audio and written notes
Residential home (RH), Lancashire	RH	11	7	80–90	Audio and written notes

Note: Reported occupations included Hairdressing, Social Service management, Farming, Teaching, Retail, Carer for Adults with learning difficulties, Banker, RAF, Survival Instructor, Charity Representative, Motor Mechanic, Secretary, Residential Care Home Worker and Manager, Laboratory worker, Recruitment consultant, Council worker, Lawyer, Gardener, Doctor, Housewife.

Regarding prosthetic teeth in particular, a poor fit can be an added source of feeling "self-conscious" or "embarrassed" (Pp, I3), while other participants described instances in which their dentures fell out during social interactions which were described as "devastating" or "embarrassing (Pp7, FG4)".

> You can imagine the embarrassment as a teenager with a tooth that kept falling off, really awful.
> (Pp2, FG1).

The impact of the fit of prosthetic teeth was not limited to emotional effects but also physical ones, in particular with regard to eating and the effects of fixative, and the ability to speak.

> If I move my mouth, they just come out, can't eat with them, so I don't have any dentures at the bottom at all and over the last nine months, I've lost over a stone in weight because I can't eat any proper food.
> (Pp1, FG5).

The second subtheme was communication; participants perceived the dental team as good communicators when they were approachable, able to put the patient at ease, put the patient in control and explained the procedure in sufficient detail:

> They'll discuss options [...] also, giving the control back to you [...] they'll say "anything uncomfortable? If you want me to stop just put your hand up" [...] that never happened in the past.
> (Pp2, FG2).

Current experiences of communication with dentists were generally favourable but some reported issues with receptionists which,

in some cases, had resulted in patients being put off from attending in the future, and difficulties in inter-generational communication.

> ...she found the receptionist to be so incredibly rude to her, really said some really quite nasty things so much so that I felt I had to complain and my mother never visited the dentist again [...] the dental practice really made indications that they really didn't want to see her again.
> (Pp5, FG4)

Proactive communication from the practice, such as sending reminders about appointments was seen as important, particularly owing to the issue of older people whose memory may not be as good as it once was.

> They ring you to remind you to attend.
> (Pp4, FG6)

The third subtheme was continuity of care; seeing the same dentist led to increased trust and confidence. Discussions on continuity of care also incorporated holistic approaches to care with some participants (but not all) describing a preference for a single health centre where they could attend for medical and dental health reasons. Objections to this idea centred on the risk of losing continuity of care and becoming "like numbers in the machine" (Pp6, FG2)

> If our doctor's surgeries had a dentist involved with them, it would be easier for the people that are already going to get seen to a bit better.
> (Pp1, FG2)

The final subtheme relating to issues important to people over 60 was the treatment experience. Specifically, a recurring issue

was pain, with participants agreeing that the modern treatment experience is much less painful than it used to be. Other features of modern treatment were viewed less positively, namely waiting times both in the waiting room and in terms of getting an appointment in the first place. Rarely, participants reported feeling that modern dental treatment was rushed, while some distrust in the dentist remained in terms of whether treatment was necessary, or if they had heard negative stories about clinicians through other sources.

> Well I say, they done the work that they thought needed to be done on my teeth but without a lot of pain [...] what concerned me was the fact that somebody would just make up what's wrong with you just to get money off you
>
> (PP1, FG3)

The reasons for the above issues relating to retaining teeth, communication, trust and the treatment experience being so important to the participants can be understood when considering their previous experiences of oral healthcare and the perceived facilitators and barriers to dental treatment, which will now be considered in turn.

3.2 | Previous experiences of oral healthcare

Two subthemes were identified in this theme, which were improvements in care and a different attitude towards dentistry in younger people. Participants often (although not always) recounted negative childhood experiences of dentistry that frequently induced fear and/or mistrust of the dentist, using adjectives such as "barbaric," "butchers," "dreadful" and "nightmare." Trust was also sometimes affected by patients reporting being switched from NHS to private treatment without their knowledge.

> They tied our [redacted] down and that put them off for life...
>
> (Pp3, FG 5)

> So when I went back to the dentist again, I said am I on NHS or private? And the answer to that was well, private, but I've been on both.
>
> (Pp6, FG4)

For the most part, participants felt that dental treatment had improved immeasurably since childhood in terms of communication and the treatment experience and were happy to see that young relatives displayed no fear of the dentist, which represented the second subtheme:

> Well my grandson, 18, said...I play golf...said I can't go, I'm going to dentist. And he'd no problem. You
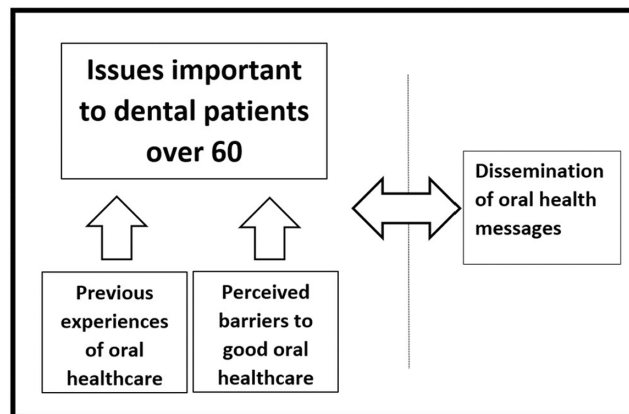

FIGURE 1 The four main themes. We identified issues that were important to patients over 60. These were influenced by participants' previous experiences of, and perceived barriers to, oral healthcare. These three themes combined also influenced participant perceptions of how oral health messages should be disseminated. This relationship was bi-directional, as message dissemination was felt to be another contributory factor to some of the issues highlighted in the first three themes.

> know, just as a matter of fact. I'm going to the dentist
>
> (Pp1, FG2)

However, for some participants, their own fear of the dentist persisted.

> And of course when I've gone in for the fillings and extractions, I mean at one time when you had an injection, boy did you feel it! But now, you just feel the tip and then you don't feel anything. Honestly, it's wonderful now, but I used to be terrified because I'd go so many times.
>
> (Pp, I5)

3.3 | Perceived barriers to good oral healthcare

There were four subthemes related to perceived barriers to good oral healthcare: accessing NHS dentistry, cost, physical access and oral care in institutional settings.

Experiences accessing a good, NHS dentist were decidedly mixed, with some reporting no problems while others found it very difficult.

> ***Interviewer: Any difficulty accessing dental care?:*** Participant: I know some people have but I've been lucky in that way. No, I haven't.

The importance of the NHS dentist was demonstrated when discussions moved to the cost of healthcare, which was the second subtheme. Some felt that dentistry should be free or available from a
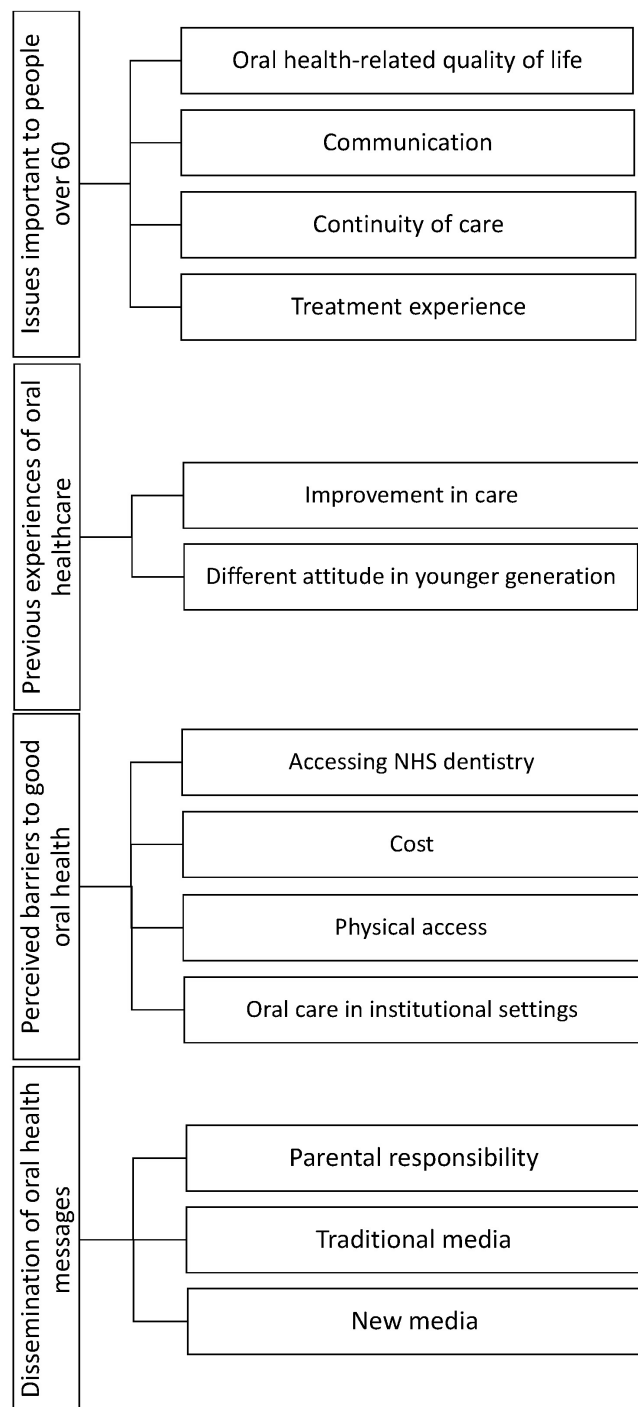
you don't get free dentistry, so why is it different? Why is it treated differently?

> (Pp2, FG2)

Related to this was the third subtheme of access. For some the location of a preferred dentist was an issue. While many participants could currently travel to their dentist either themselves or with the aid of public transport, a number did worry that they would not be able to drive forever and that this would be problematic for them in accessing dental care, or at least enjoying continuity of care at their preferred practice. Participants in wheelchairs or with mobility issues also commented on the lack of lifts in dental practices and some reported having to travel further to attend a more accessible practice. Existing health conditions also affected the ability of some participants to maintain good oral hygiene.

> My dentist is upstairs. And they're pretty steep steps so I don't know how long I'll manage it.
>
> (Pp3, FG4)

> First one I couldn't take my wheelchair and that's when I ended up going to [redacted]
>
> (Pp1, FG6)

These existing health issues were also discussed in terms of how oral health may be negatively affected by stays in hospital or care homes, which was the fourth subtheme. A number of participants reported they had seen cases where the oral healthcare of family members was neglected during such stays. Participants living in a care home environment confirmed that a dentist was not brought into the practice and they had to make their own plans for dental care.

> I said to him dad has anyone ever taken your denture out and cleaned it? And he said not since I've been here. So I actually took his denture out and went and cleaned it for him.
>
> (I3)

3.4 | Dissemination of oral health messages

There were three subthemes identified as part of the dissemination of oral health messages theme, which were parental responsibility, traditional media and new media.

There was a disparity in the relative importance of oral healthcare in this population. While some were determined not to lose any more teeth and described in-depth oral hygiene practices, others stated that they did not brush their teeth and did not see the importance as it was seen to be "too late."

> I've had all sorts of trouble with my teeth, so I don't want to lose any more
>
> (Pp6, FG3)

FIGURE 2 The four main themes are presented in the vertical boxes on the left; the horizontal boxes on the right are the subthemes that make up each theme.

reduced rate for older people, in line with other areas of the healthcare system; participants frequently made reference to their pensions and whether they felt dentistry was affordable.

> Cost could be a factor (Pp1: I was just going to say, yeah) because over 60 on the National Health, you get free eye tests and you get free prescriptions but

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Issues important to dental patients over 60:

Oral Health-related Quality of Life: "That's affected me in my own confidence in that respect […] It really has held me back over the years, you know. I don't smile as often" (Pp5, FG1); "when I come to clean my teeth, this wretched fixative, it's like having chewing gum that won't come out of your mouth. It's dreadful" (Pp, I2)

Communication: "They put you at ease, tells you what they're doing. Yeah, I'm comfortable with them. (Pp4, FG2); "The young ones don't seem to understand the older people […] They've not got the experience or the knowledge of elderly people and that's where it gets hard." (Pp1, FG2)

Continuity of Care: "I'm sure that everybody would agree that it's much more comforting to see the same person than it is to see somebody different every time." (Pp5, FG4)

Treatment experience: "…the dental services now I think are wonderful, you know, you get an injection, you don't feel a thing." (Pp6, FG1); "I think it's gone from being caring and taking time and attention to the patient to one of rush, rush, rush and, particularly the dentist that I use, you ring up for an appointment and it can take anything up to two or three weeks." (Pp1, FG5)

Previous experiences of oral healthcare:

Improvement in care: "They're more understanding nowadays than they was. It was a case of 'come in, sit down', yank 'oh!' That were it. 'Spit in here and gone'. But now they do, they talk to you and they make…there's no pain I don't think." (Pp3, FG4)

Different attitude in younger generation: "I've not had a bad experience at the dentist for a long time now, I've got this good dentist now, but that fear's still there. So it's irrational but…" (Pp2, FG2)

Perceived barriers to good oral health:

Accessing NHS Dentistry: "Pp6: So how do you find a dentist? This is the thing. Pp2: Well, just word of mouth. We found out one" (FG 3)

Cost: "And I think it's cost really, with a lot of older people, because genuinely, a lot of older people haven't got a lot of money." (Pp, I5)

Physical access: "And I think also mobility issues. I know a lot of people who…there are specialist toothbrushes that people with arthritis can hold, but they're few and far between unless you know where you go." (Pp4, FG1)

Oral care in institutional settings: "And I said to him dad has anyone ever taken your denture out and cleaned it? And he said not since I've been here. So I actually took his denture out and went and cleaned it for him." (I3)

Dissemination of oral health messages:

Parental responsibility: "I still think that that's neglected because you see so many young mothers with children with sugary, fizzy drinks and sweets and of course, by the time they get to school their first teeth are ruined… you've got to start off young." (Pp6, FG2)

Traditional media: Pp4: Could they put…on dental surgeries, on the screen, where you have instructions coming across, could have a short cart… like a video CD, whatever they call them these days, a small one, and show it to them in the waiting rooms at the dentist when you're sat for your twenty minutes waiting" (FG2)

New media: "Pp3: I don't know if it sounds a bit gimmicky, but one of our friends has a young lad and he has a toothbrush, an electric toothbrush, that actually has a game on it. It tells him how many times he's gone up and down and things like that it and it doesn't beep until he's brushed for long enough…" (FG1)

FIGURE 3 Additional illustrative quotes are presented for each of the subthemes.

Interestingly, despite the diverging viewpoints on the importance of oral health in the older population, the oral health of children and discussions on the responsibilities of today's parents was frequently highlighted as being important as a means of "starting young" and ensuring better oral health in later years because "the children are ultimately going to be us in sixty years" time' (Pp5, FG2). Participants felt that parents were a key source of information; they recalled learning from their own parents and felt that there was a great deal of parental responsibility to reinforce what children are taught in school.

"Pp3: There's more schooling. There's more stuff in school to talk about this sort of thing for the kids. (Pp6: More information) (Pp5: But they need to carry it through in the home) But, yes, I think you're right, it does need parental responsibility as well."

(FG1)

Aside from this, educational approaches that participants thought would be useful for younger people included new media, such as social media and gamification.

And teenagers, because of Instagram and Snapchat, even if it was on there

(Pp6, FG3)

For their own education, however, they believed that more traditional media, such as television, leaflets or the dentist, would be a better source of information. In addition, it was noted that these participants educated each other and shared their experiences and knowledge in the focus groups, suggesting that peer-to-peer information may be key for this group of patients.

I should think it boils down to education and I don't recollect seeing any pamphlets or anything that they hand out to older people at the dentists, it doesn't seem to happen.

(Pp5, FG6)

4 | DISCUSSION

We identified issues of importance to a diverse population of people over the age of 60 in the North West of England, which is an area with a high concentration of socio-economic deprivation and dental health need.[21,31] These issues were outlined in discussions about past and present dental experiences, and the participants' concerns about the oral health of friends and relatives. There is limited existing evidence documenting the perceptions of oral health priorities in older dental patients in the UK. Where similar groups have been observed (e.g. people living with dementia and their carers) similar priorities have emerged: the perceived importance of continuity of care, the potential changes in access to care due to physical or institutional constraints, and the need to integrate oral healthcare more effectively into care plans.[32] It is of note that these priorities align with the factors thought critical to the patient experience in the UK back in 2011, but of concern that issues persist over a decade later.[33]

NHS Dental Contract reform promises to address some of these chronic issues, including access to care and minimising inequalities, but difficulties in registering with an NHS dentist remain acute in areas with the greatest dental need such as the North West of England.[34,35] These difficulties relate to availability but are also systemic—it is acknowledged that the NHS Directory of Services is "frequently out of date."[34] Ongoing criticism of the structure of dental service provision, as well as the extent of proposed changes, is particularly pertinent for older dental patients who often have more complex care needs.[9,36–38]

As a whole, the findings suggest that NHS dentistry in its current form is not perceived by older people as meeting their basic oral health needs, with over-arching concerns about access to care, communication issues and institutional care (Figure 1). We identified novel insights into the importance attributed to clear and respectful communication with adults over 60 including timely reminders for future appointments, older peoples' belief that priorities should not only focus on them but also younger generations, as well as their preference for traditional approaches to receiving oral health-related information. This included the acknowledgement that a GP surgery could be seen as a community hub, but that it was not necessarily seen as the place to obtain dentally-related information.

Problems accessing NHS dental care are persistently reported, even though only 15% of the most deprived older adults live further than 2.5 km from a dental service.[39,40] Our results demonstrated that, for some participants, this was an ongoing problem. Issues with access are acknowledged by the UK Health Security Agency (UKHSA) (formerly Public Health England), but attempts to redress access inequalities are still inadequate with the British Dental Association (BDA) lobbying for improved access, particularly for the most vulnerable.[41–43]

Concerns about the oral health of vulnerable older adults have been raised elsewhere; our findings are in line with concerns raised by the Quality Care Commission (CQC) in 2019 that there were deficiencies in the maintenance and promotion of oral health in institutional settings, resulting in recommendations for implementation and/or reiteration of current NICE guidance in care homes along with appropriate staff training and appropriate commissioning; these were supported by the BDA.[44–46]

All participants emphasised that their oral health status significantly impacted their quality of life and general health. This is a consistent finding across multiple demographic groups with a meta-synthesis by Nordenram et al showing that participants' good oral health was associated with physical and psychological implications, and this is linked to a positive self-perception and identity.[47] Aesthetic considerations, as well more pragmatic concerns such as stable and retentive dentures or implants, appear to be a persistent issue for the older people interviewed. Participants described the impact of tooth loss and oral problems on self-image and wellbeing.[48]

Communication issues were a common feature of the focus groups. Participants identified concerns at different levels covering personal, interpersonal/social and public health messaging. Individuals raised concerns about how to access information on oral health for themselves as well as how to share oral health promotion messages with friends and relatives (particularly younger generations). Participants mainly acquired information by traditional means via their GDP/GP practices, newspapers, in-person health forums and television advertisements with very few engaging with digital platforms. Muirhead et al directly link good communication, information sharing and shared decision-making with improved oral health-related quality of life in older people.[16] However, participants also commented on the general lack of dental information available, another issue echoed by the former BDA scientific advisor, Damien Walmsley, who highlighted the need for strong dental public health messaging.[49] The participants in our study were motivated to access such information but were apprehensive about misinformation and choosing trusted/accurate sources. Given that information "vacuums" can facilitate the spread of misinformation,

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and, in turn, lead to reduced health literacy, poor health decisions being made by individuals, and, ultimately, poorer health, it is positive that participants are cautious about sources.[50] However, the increasing use of digital media and telemedicine inevitably leaves behind some older people (but not all), including many of those in our sample.[51,52] This potential "digital exclusion" might include multiple stages of the treatment journey, including accessing NHS care in the first instance.[15,53] Future work could look at interventions to assist older people in navigating and identifying appropriate online health resources, which may in turn increase their trust in such resources and reduce potential inequalities through approaches to information sharing.[54,55]

Participants also spoke with a range of positive and negative emotions about interpersonal communication with their dentists. The consensus was that more recent dental experiences were significantly more pleasant than earlier ones when dentistry was something to be endured. They welcomed the improvements in communication, equipment and the experience of dentistry in more recent times. The new, more empowering dental experience was acknowledged as being partly due to the emergence of Patient Centred Care and Shared Decision Making.[16,17] These foster trust between clinician and patient, something valued by participants and is a crucial factor in effective oral healthcare.[18] Continuity of care also affects dentist-patient communication, which in turn can impact on patient empowerment, levels of confidence and ultimately, trust.[16]

Limitation of resources similarly leads to problems with provision of oral healthcare in institutional settings. Globally, older people in institutional settings have been reported to have poor oral health.[56] Programmes of education in delivering oral care for non-dental practitioners have previously existed in the UK and these schemes have helped to maintain standards of oral care in institutional settings (e.g. Mouth Care Matters).[57] The need for similar schemes has been recently recognised with the launch of a pilot oral health project in Lancashire and South Cumbria under the "NHS Enhanced Health in Care Homes" scheme.[58] The participants described difficulties in achieving satisfactory oral healthcare in institutional settings (e.g. "Dad has anyone ever taken your denture out and cleaned it?", I3), and others expressed concerns about being able to continue accessing routine dental care from that setting. These participants were essentially calling for the integration of oral care into the wider world of health and social care (as has been argued elsewhere), so that all of the patient's care needs can be predictably met. This integrative approach of "putting the mouth back into the body" is "values-based care" and aligns with the participants' descriptions of patient-centred care mentioned previously.[59–61] The notion of dentistry as existing in a "silo," separate from the multidisciplinary team (MDT) was not lost on the participants, who noted that the care home might have a hairdresser periodically on-site but made no provision for dental care.[59] Encouragingly, there has been a move towards more integrated care systems in the UK since summer 2022 to try to improving outcomes, reduce inequalities in outcomes, experience and access and improve

productivity; however, it is notable that these do not address all concerns raised by participants nor reflect the key elements of the patient experience framework.[62]

4.1 | Strengths and limitations

While we tried to reach a broad range of participants, and recruited from three different settings (community, GDP and care home), we were only able to secure the involvement of one care home. While comments about institutional oral health appeared throughout the data owing to participants' experience of care homes via friends and relatives, it is possible that a greater number of care home residents in the sample may have highlighted some additional issues.

The transferability of some of our findings to other populations may be limited. Accessing those with greatest oral health need is inherently difficult. Furthermore, our sample did not comprise many participants from ethnic minority groups, meaning that there may be additional unidentified issues. However, the findings may be transferable to other UK populations, and there have been similar findings in research in Europe and globally.[63,64] The difficulty with transferring the findings relate to both an inconsistent global dataset, and a wide diversity of the context, health systems organisations, policies and availability of care.[65,66]

The main strength of this study was its representation of diverse groups of older people. The participants found a collective voice and presented themselves as a "community of practice," as they shared experiences and information on oral healthcare with researchers and with their peers.[67] This resulted in quality dialogue involving 47 participants over nearly 9 h. This, along with no new themes being discovered in the data, led to the consensus that data saturation had been achieved and the study had acceptable information power.[28]

5 | CONCLUSIONS

The results of this study have implications for policy makers, particularly regarding implementation of public health intervention strategies for governmental bodies regarding additional funding allocations to be driven by analyses of public needs as well as for research-funding agencies which largely rely on public funds.[68] There are shortfalls in the provision of oral healthcare to older adults in the UK, particularly in relation to accessing information and treatment in primary care and institutional settings. This appears to be the consequence of wider structural issues that need further improvement in the ongoing process of dental service reform.[37] For older people in North West England, the perception is that current provision is not strategically aligned with their oral healthcare priorities, particularly timely dental care and effective and respectful communication.[69] That our participants highlighted issues that have repeatedly been the focus of calls for change over

the years raises questions about how equity can be better addressed for an ageing and socioeconomically disadvantaged population.[33,36–39,41–46,49]

AUTHOR CONTRIBUTIONS

NT and SK designed the study; NC, AK and NT collected the data; NC and AK analysed the data; all authors were involved in the write-up of the paper.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictions.

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REFERENCES

1. Exley C. Bridging a gap: the (lack of a) sociology of oral health and healthcare. *Sociol Health Illn.* 2009;31(7):1093-1108.
2. NICE. Oral health promotion: general dental practice. 2018; Available from: https://www.nice.org.uk/guidance/ng30. Accessed 13/01/23.
3. The Health and Social Care Information Centre. Adult Dental Health Survey – England, Wales, Northern Ireland, 2009, Theme 2: Disease-Related Disorders. 2011. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/adult-dental-health-survey/adult-dental-health-survey-2009-summary-report-and-thematic-series. Accessed 13/01/23.
4. The Health and Social Care Information Centre. Adult Dental Health Survey – England, Wales, Northern Ireland, 2009, Theme 1: Oral Health and Function. 2011. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/adult-dental-health-survey/adult-dental-health-survey-2009-summary-report-and-thematic-series. Accessed 13/01/23.
5. The Health and Social Care Information Centre. Adult Dental Health Survey – England, Wales, Northern Ireland, 2009, Theme 4: Complexity Maintenance. 2011. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/adult-dental-health-survey/adult-dental-health-survey-2009-summary-report-and-thematic-series. Accessed 13/01/23.
6. The Health and Social Care Information Centre. Adult Dental Health Survey – England, Wales, Northern Ireland, 2009, Theme 3: Urgent Conditions. 2011. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/adult-dental-health-survey/adult-dental-health-survey-2009-summary-report-and-thematic-series. Accessed 13/01/23.
7. Royal College of Surgeons. Improving older people's oral health. 2017.
8. Petersen PE, Kandelman D, Arpin S, Ogawa H. Global oral health of older people--call for public health action. *Community Dent Health.* 2010;27(4 Suppl 2):257-267.
9. López R, Smith PC, Göstemeyer G, Schwendicke F. Ageing, dental caries and periodontal diseases. *J Clin Periodontol.* 2017;44(Suppl 8):S145-S152.
10. Harford J. Population ageing and dental care. *Community Dent Oral Epidemiol.* 2009;37(2):97-103.
11. De Visschere L, Janssens B, De Reu G, Duyck J, Vanobbergen J. An oral health survey of vulnerable older people in Belgium. *Clin Oral Investig.* 2016;20(8):1903-1912.
12. British Dental Association. Oral healthcare for older people 2020 Vision. Check-up January 2012. Available from: https://bda.org/about-the-bda/campaigns/Documents/older_adults_2012_checkup.pdf. Accessed 13/01/23.
13. Public Health England. Delivering better oral health: an evidence-based toolkit for prevention. 2021; Available from: https://www.gov.uk/government/publications/delivering-better-oral-health-an-evidence-based-toolkit-for-prevention. Accessed 13/01/23.
14. American Dental Association. Aging and Dental Health. 2021; Available from: https://www.ada.org/en/member-center/oral-health-topics/aging-and-dental-health. Accessed 13/01/23.
15. Aquilanti L, Santarelli A, Mascitti M, Procaccini M, Rappelli G. Dental care access and the elderly: what is the role of Teledentistry? A systematic review. *Int J Environ Res Public Health.* 2020;17(23):9053.
16. Muirhead VE, Marcenes W, Wright D. Do health provider-patient relationships matter? Exploring dentist-patient relationships and oral health-related quality of life in older people. *Age Ageing.* 2014;43(3):399-405.
17. Mills I, Frost J, Kay E, Moles DR. Person-centred care in dentistry– the patients' perspective. *Br Dent J.* 2015;218(7):407-412. discussion 413.
18. Association for Dental Education in Europe, (ADEE). Professionalism: A Mixed-Methods Research Study Commissioned by the General Dental Council (GDC). 2020. Available from: https://www.gdc-uk.org/docs/default-source/research/professionalism---a-mixed-methods-research-study.pdf?sfvrsn=3327e7e2_1 Accessed 13/01/23.
19. Brocklehurst PR, McKenna G, Schimmel M, et al. How do we incorporate patient views into the design of healthcare services for older people: a discussion paper. *BMC Oral Health.* 2018;18:61.
20. National Institute of Health Research. Briefing notes for researchers: public involvement in NHS, public health and social care research. 2021; Available from: https://www.nihr.ac.uk/documents/briefing-notes-for-researchers-public-involvement-in-nhs-health-and-social-care-research/27371. Accessed 13/01/23.
21. NHS Digital. Adult Dental Health Survey 2009 – Summary report and thematic series. 2011; Available from: https://digital.nhs.uk/data-and-information/publications/statistical/adult-dental-health-survey/adult-dental-health-survey-2009-summary-report-and-thematic-series. Accessed 13/01/23.
22. Magee AP. View from the north end: a model for future dental schools? *Dent Update.* 2015;42(8):701-703.
23. NHS England. Summary of the dental results from the GP Patient Survey – January to March 2022. Available from: https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2022/07/GP-Survey-Dental-Results-Summary-January-to-March-2022-PDF-406KB-1.pdf Accessed 13/01/23.
24. Patton MQ. *Qualitative Evaluation and Research Methods: Integrating Theory and Practice.* 3rd ed. Sage; 2002.
25. Ames H, Glenton C, Lewin S. Purposive sampling in a qualitative evidence synthesis: a worked example from a synthesis on parental perceptions of vaccination communication. *BMC Med Res Methodol.* 2019;19(26):26.
26. Madill A, Jordan A, Shirley C. Objectivity and reliability in qualitative analysis: realist, contextualist and radical constructionist epistemologies. *Br J Psychol.* 2000;91(1):1-20.

27. Braun V, Clarke V. *Thematic Analysis: a Practical Guide.* Sage; 2022.

28. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. *Qual Health Res.* 2016;26(13):1753-1760.

29. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77-101.

30. Office for National Statistics. SOC 2020 Volume 2: the coding index and coding rules and conventions. 2020. Available from: https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2020/soc2020volume2codingrulesandconventions. Accessed 13/01/23.

31. Ministry of Housing, Communities and Local Government. The English Indices of Deprivation 2019 - Statistical Release. 2019. Available from: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019. Accessed 13/01/23.

32. 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 (London).* 2021;20(6):1925-1939.

33. NHS Patient Experience Framework 2012. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/215159/dh_132788.pdf. Accessed 13/01/23.

34. NHS England. Outcome of 2022/23 Dental Contract Negotiations. 2022 July. Available from: https://www.england.nhs.uk/wp-content/uploads/2022/07/B1802_First-stage-of-dental-reform-letter_190722.pdf. Accessed 13/01/23.

35. Green R, Agerholme H, Rogers L. Full extent of NHS dentistry shortage revealed by far-reaching BBC research. 2022; Available from: https://www.bbc.co.uk/news/health-62253893 Accessed 13/01/23.

36. Charlwood S. NHS dentistry: Winning the argument for reform. 2022; Available from: https://www.bda.org/news-centre/blog/Pages/NHS-dentistry-winning-the-argument-for-reform.aspx. Accessed 13/01/23.

37. Yeung A. NHS dentistry is at breaking point. *Br Med J.* 2022;378:o2135.

38. British Dental Association Annual General Meeting. 'Perversity will remain baked' into NHS dentistry. *Br Dent J.* 2022;233(12):991.

39. McGrath C, Bedi R, Dhawan N. Who has difficulty in registering with an NHS dentist? – a national survey. *Br Dent J.* 2001;191(12):682-685.

40. Jo O, Kruger E, Tennant M. Disparities in the geographic distribution of NHS general dental care services in England. *Br Dent J.* 2021 doi: 10.1038/s4141502130050. Online ahead of print.

41. King T. Improving NHS dentistry: giving dental patients better access and outcomes. 2018; Available from: https://bda.org/news-centre/blog/improving-nhs-dentistry-giving-dental-patients-better-access-and-outcomes. Accessed 13/01/23.

42. Public Health England. Commissioning better oral health for vulnerable older people An evidence-informed toolkit for local authorities. 2018. Available from: https://www.gov.uk/government/publications/commissioning-better-oral-health-for-vulnerable-older-people%20. Accessed 13/01/23.

43. British Dental Association. England: Momentum for change in Parliament. Available from: https://bda.org/news-centre/latest-news-articles/Pages/England-Momentum-for-change-in-Parliament.aspx. Accessed 13/01/23.

44. British Dental Association. Oral healthcare for older people. Available from: https://bda.org/about-the-bda/campaigns/oralhealth/Pages/oral-healthcare-older.aspx. Accessed 13/01/23.

45. Quality Care Commission. Smiling matters: oral health care in care homes. 2019. Available from: https://www.cqc.org.uk/publications/major-report/smiling-matters-oral-health-care-care-homes Accessed 13/01/23.

46. Tomson M, Watson F, Taylor-Weetman K, Morris AJ, Wilson KI. West midlands care home dental survey 2011: part 2. Results of clinical survey of care home residents. *Br Dent J.* 2015;219(7):349-353.

47. Nordenram G, Davidson T, Gynther G, et al. Qualitative studies of patients' perceptions of loss of teeth, the edentulous state and prosthetic rehabilitation: a systematic review with meta-synthesis. *Acta Odontol Scand.* 2013;71(3–4):937-951.

48. Tham R, Hardy S. Oral healthcare issues in rural residential aged care services in Victoria. *Aust Gerodontol.* 2013;30(2):126-132.

49. Walmsley D. Why we need strong dental public health messages. 2020; Available from: https://bda.org/news-centre/blog/why-we-need-strong-dental-public-health-messages. Accessed 13/01/23.

50. Krishna A, Thompson TL. Misinformation about health: a review of health communication and misinformation scholarship. *Am Behav Sci.* 2021;65(2):316-332.

51. Lam K, Lu AD, Shi Y, Covinsky KE. Assessing telemedicine Unreadiness among older adults in the United States during the COVID-19 pandemic. *JAMA Intern Med.* 2020;180(10):1389-1391.

52. Quan-Haase A, Williams C, Kicevski M, Elueze I, Wellman B. Dividing the Grey divide: deconstructing myths about older Adults' online activities, skills, and attitudes. *Am Behav Sci.* 2018;62(9):1207-1228.

53. Centre for Ageing Better. Digital Inclusion. 2023; Available at: https://ageing-better.org.uk/digital-inclusion. Accessed 13/01/23.

54. Chaudhuri S, Le T, White C, Thompson H, Demiris G. Examining health information–seeking behaviors of older adults. *Comput Inform Nurs.* 2013;31(11):547-553.

55. Rich E, Miah A, Lewis S. Is digital health care more equitable? The framing of health inequalities within England's digital health policy 2010–2017. *Sociol Health Illn.* 2019;41:31-49.

56. Wong FMF, Ng YTY, Leung WK. Oral health and its associated factors among older institutionalized residents-a systematic review. *Int J Environ Res Public Health.* 2019;16(21):4132.

57. Mouth Care Matters. Betty's Story: A Reflection on the Importance of Oral Health. 2019 Available from: https://mouthcarematters.hee.nhs.uk/2019/06/07/bettys-story-mouth-care-matters/ Accessed 13/01/23.

58. National Health Service. Enhanced Health in Care Homes. 2021; Available from: https://www.england.nhs.uk/community-health-services/ehch/. Accessed 13/01/23.

59. McDonald JC, Pedersen D. Integration is opening the door to a new journey toward oral health value-based care. *J Public Health Dent.* 2020;80(Suppl 2):S89-S91.

60. Doshi M, Patel J. Putting the mouth back into the body. *Br J Hosp Med (Lond).* 2017;78(5):244-245.

61. The Lancet Healthy Longevity. putting the mouth back into the (older) body. *Lancet Healthy Longevity.* 2021;2(8):E444.

62. Charles A. Integrated care systems explained: making sense of systems, places and neighbourhoods. 2022; Available at https://www.kingsfund.org.uk/publications/integrated-care-systems-explained Accessed 13/01/23.

63. Halpern LR. The geriatric syndrome and Oral health: navigating Oral disease treatment strategies in the elderly. *Dent Clin N Am.* 2020;64(1):209-228.

64. Nitschke I, Hahnel S. Zahnmedizinische Versorgung älterer Menschen: Chancen und Herausforderungen [Dental care for older people: opportunities and challenges]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz.* 2021;64:802-881.

65. Sinclair E, Eaton KA, Widström E. The healthcare systems and provision of oral healthcare in European Union member states. Part 10: comparison of systems and with the United Kingdom. *Br Dent J.* 2019;227(4):305-310.

66. León S, De Marchi RJ, Tôrres LH, Hugo FN, Espinoza I, Giacaman RA. Oral health of the Latin American elders: what we know and what we should do – position paper of the Latin American Oral

geriatric Group of the International Association for dental research. *Gerodontology.* 2018;35(2):71-77.

67. Nave J, Wenger E. *Situated Learning: Legitimate Peripheral Participation.* 1st ed. Cambridge University Press; 1991.

68. Help the Aged. Extracting the Evidence. The oral health and dental care needs of older people. Policy Statement. 2008.

69. British Dental Association. Budget leaves NHS dentistry in last chance saloon. 2021; Available from: https://bda.org/news-centre/press-releases/Pages/Budget-leaves-NHS-dentistry-in-last-chance-saloon.aspx. Accessed 13/01/23.