NICE National Institute for Health and Care Excellence

Appendix A: Summary of evidence from surveillance

2018 surveillance of Oral health for adults in care homes (2016) NICE guideline NG48

Summary of evidence from surveillance

Studies identified in searches are summarised from the information presented in their abstracts.

Feedback from topic experts who advised us on the approach to this surveillance review, and from stakeholders if public consultation was conducted, was considered alongside the evidence to reach a final decision on the need to update each section of the guideline.

Summary of new evidence from 2018 surveillance	Intelligence gathering	Impact
Section 1.1: Care home policies on oral health and providing residents with support to access dental services		
None	The PHE report Oral health of older people in England and Wales (March 2016) gives information collected from surveys of older people living in England and Wales, the majority of which is collected from care homes. It describes the oral status of this population and mentions that care home managers have more difficulty accessing general dental care including emergency dental treatment for their residents than those in the community.	No new evidence was identified that would affect the recommendation. The PHE report identified may provide useful background information for commissioners and care home managers which is consistent with the advice given in section 1.1. Recommendation 1.1.1 mentions the NHS choices website as a potential source of information for NHS dental services. This is not providing information on effective interventions and will be removed.

Summary of new evidence from 2018 surveillance	Intelligence gathering	Impact
	The NICE field team provided information from visit reports to councils, commissioning groups, care home vanguards, care associations & managers and oral health public health teams. They reported that most were aware of NG48, with approximately a third finding the quick guide particularly useful for staff as it was more easily accessible than the full guideline. One manger provided printed copies of the quick guide for all staff and discussed their findings, and one hygienist reported using the quick guide for staff training. They also reported that NG48 was implemented in several cases including using the baseline assessment tool, mapping NG48 to their current oral health policies and generally using oral health guidelines.	Recommendation 1.1.4 contains a hyperlink to the General Dental Council website, however the page may have been moved as a 'page not found' message is received. This hyperlink will be amended.
Section 1.2: Oral health assessment and mouth care plans		
A before-and-after study(1) assessed the effect of introducing a dental hygienist in 5 Australian care facilities over 24 weeks on residents' oral health outcomes. The hygienist provided oral health risk assessments, oral healthcare plans and referrals for treatment. Results indicated a significant reduction in dental plaque scores in residents following this intervention.	None	One study suggests that a dental hygienist on site may reduce plaque scores. A second study suggests that weekly dental care can reduce the amount of visible plaque. This supports the information in recommendation 1.2 regarding accessing dental treatment. There is currently insufficient evidence to recommend changing this aspect of the guideline at this time, as such it will

Summary of new evidence from 2018 surveillance	Intelligence gathering	Impact
A prospective study(2) assessed the effect of weekly professional care on the proportion of oral micro-organisms, caries, periodontal and soft tissue diseases in oral biofilms for dentate residents (n=68). At 12 months, the intervention group (n=33) had improved from 50% visible thick plaque at baseline to 92% no visible or thin visible plaque. The results indicate the number of bacteria associated with good oral health decreased over time and those associated with caries or soft tissue infection were unaffected.		be considered again at the next surveillance review.
Section 1.3: Daily mouth care		
An RCT(3) evaluated the effect of electric toothbrushes (ET) compared to manual toothbrushes (MT) on oral hygiene for residents in nursing homes(n=180). The Oral Hygiene Index-Simplified (OHI-S) was used to measure dental hygiene at baseline and after 2 months. Improvements in dental hygiene were seen in both groups from baseline although there was no difference at 2 months between ET and MT. However caregivers reported that ET were less time consuming. A follow up study(4) of the above RCT examined dental plaque 1 year post intervention to determine	None	One RCT suggested that there was no difference in oral health outcomes when using manual or electric toothbrush for care home residents, but that caregivers stated electric was less time consuming. A follow up study for this RCT suggests these effects can be maintained long term. The evidence supports recommendation 1.3.1, that manual or electric/battery powered toothbrushes should be available to residents. Evidence from a controlled trial also indicated that oral health education including ultrasonic cleaning can improve denture hygiene and plaque control

Summary of new evidence from 2018 surveillance	Intelligence gathering	Impact
if the effects were sustained over a longer period. One hundred participants were re-examined using the OHI-S and significant plaque reduction was seen in both ET and MT groups. There was no significant difference between groups. A controlled clinical trial(5) investigated the effect of oral health education in residents with cognitive impairment or who were care dependant. Residents (n=269) from 14 nursing homes were allocated to normal care (control) or an oral health education group which included ultrasonic cleaning of prostheses (intervention group). The results indicate a significant difference in the intervention group at 6 and 12 months in Plaque Control Record (PCR) and Denture Hygiene Index (DHI) compared to baseline, but not in Gingival Bleeding Index (GBI) or Community Periodontal Index of Treatment Needs (CPITN). No significant differences were seen in the control group at any time point. There were also significant improvements at 6 and 12 months in PCR and DHI in favour of the intervention when compared to the control.		which is consistent with the recommendation to provide daily oral care for dentures.
Section 1.4: Care staff knowledge and skills		

Knowledge and attitude A cluster RCT(6) investigated the impact of an oral health protocol and education on staff attitude and knowledge to oral health care (care facilities included 120-150 residents). Three different educational stages in combination with an oral health protocol were introduced and compared to a no intervention control. Staff attitude and knowledge was assessed via questionnaire at baseline and 6 months post intervention. At baseline there was no difference in staff knowledge or attitude between the control and intervention groups. The results indicate a significant improvement in staff knowledge at 6 months in the intervention group compared to the control group, however no significant difference between the groups was seen at 6 months for staff attitude. An observational study(7) using waitlist controls evaluated care home staff (n=546 from 36 care homes) knowledge and attitude before and after an oral health programme involving a mobile dental clinic. The results indicate staff knowledge improved significantly in both groups after the intervention period (period not specified), with only staff attitude showing a significant increase in the intervention group. A cost effective analysis(8) indicated that an oral health programme for training of care home staff may be a low cost option for improving staff	None.	New evidence indicates that oral health education improves staff knowledge of oral health care for nursing home residents. Some studies reported improvements in oral health outcomes, such as plaque levels, following an educational intervention although this was not observed in every study. Overall, the new evidence is supportive of recommendations which state that staff education is important in promoting good oral care for residents.

Summary of new evidence from 2018 surveillance	Intelligence gathering	Impact
knowledge, self-efficacy and attitude, compared to no training. Oral health outcomes A Cochrane systematic review(9) (n=3252 residents; 9 RCTs) evaluated the effect of oral health education on resident's oral health. All 9 studies evaluated oral health education for care home staff, whilst 4 also evaluated education for residents. One study compared education and information (intervention group) to usual care (control group), while 8 also included a practical component in the intervention group. No significant difference was seen between the intervention and control groups for dental or denture plaque outcomes during the analyses. A systematic review(10) included 5 studies which evaluated the oral health status of residents (n=602) following an educational programme for care staff. A significant increase in patients with a normal oral mucosa, no visible plaque and no denture stomatitis was seen when the residents were treated by staff who had recent oral health education. A controlled trial(11) investigated whether carer oral health education would improve the oral health of		

Summary of new evidence from 2018 surveillance	Intelligence gathering	Impact
residents (n=219) across 14 care homes in Germany. Intervention homes also implemented ultrasound water baths for denture cleaning. The following measures of oral health were assessed at baseline and 6 months post intervention: Plaque Control Record (PCR), Gingival Bleeding Index (GBI), Community Periodontal Index of Treatment Needs (CPITN) and Denture Hygiene Index (DHI). The intervention group (n=144) saw a significant improvement in PCR and DHI during the intervention period, whereas no significant improvements were seen in the control group (n=75). A before-and-after study(12) assessed the impact of a nutrition and oral care training programme on nursing home residents. Training sessions were provided for a range of staff positions in 138 nursing homes. The results indicate oral examinations increased from 38.5% to 48.5%). A before-and-after study (13) evaluated an oral health care programme for older people in 10 residential facilities (n=607). Annual oral health education was provided to staff, along with annual oral health assessments and onsite dental care for residents over a 3 year period. The results indicate the proportion of residents experiencing pain and requiring additional care decreased significantly		

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over the intervention period however this was not seen in dental caries levels or periodontal conditions (no data provided in the abstract).		
Section 1.5: Availability of local oral health services		
None	One topic expert suggested that recommendation 1.5.2 is not always practical. However, no specific barriers to communicating or reporting issues to local healthwatch or public health teams were raised.	No new evidence has been identified that is relevant to this section. One topic expert suggested that recommendation 1.5.2 is not always practical however, no evidence was identified to support this view.
Section 1.6: Oral health promotion services		
None	None	None
Section 1.7: General dental practices and community dental services		
None	None	None
Research recommendation 1: Access to dental services in England for adults in care homes		
New evidence was identified focusing on barriers to care experienced by dentists and barriers	None	No impact is expected. This new evidence does not fully address research recommendation 1 however it provides some information on access to dental services.

Summary of new evidence from 2018 surveillance	Intelligence gathering	Impact
experienced by care home staff in providing oral health care(14).		
Research recommendation 2: Effectiveness and costs of oral health interventions for care home residents		
New evidence was identified on educational information for care home staff and residents, and a cost effective analysis of oral health training for care home staff caring for residents with intellectual disabilities(8).	None	This new evidence is supportive of research recommendation 2 and shows that this is an area that is undergoing new research, however it is unlikely to have an impact on the guideline as more evidence would be required to trigger an update.
Research recommendation 3: Measuring improvements in care home residents' oral health		
None	None	None
Research recommendation 4: Daily mouth care for residents		
None	None	None
Research recommendation 5: Reducing demands on health and social care services		
None	None	None
Research recommendation 6: Facilitators and barriers to carrying out daily mouth care and oral health assessments for adults in care homes		

Summary of new evidence from 2018 surveillance	Intelligence gathering	Impact
New evidence was found on barriers experienced by care home staff in providing oral health care(14), barriers experienced by dentists providing treatment in care homes(15) and barriers to implants in care home residents(16).	None	The new research in this area supports the need for research recommendation 6 as it describes that there are still barriers experienced when care home staff try to access dental care for their residents. It is important that new barriers continue to be identified and as such this research recommendation will be retained.

Editorial corrections

During surveillance editorial or factual corrections were identified.

Recommendations:

- recommendation 1.1.1 refers to NHS choices as stated here: (see the NHS Choices information on NHS dental services) this should be removed from this recommendation as it does not give information on effective interventions.
- Recommendation 1.1.4 has a hyperlink to scope of practice for the General Dental Council. This link is broken and should be updated with the correct link. This is the correct link: scope of practice as confirmed by topic experts

Context:

- There is a hyperlink for Low expectations. This link is broken on the Alzheimer's society web page. The correct link is Low expectations as confirmed by topic experts.
- The hyperlink how the guideline was developed gives the 'page cannot be found' on the NICE web page. This is the correct link to be used to update this hyperlink: how we develop NICE guidelines.

Committee's discussion:

- There is a hyperlink to NICE guidance PH55, the name is listed as 'oral health: approaches for local authorities and their partners to improve the oral health of their communities' and should be updated to the updated name for the guideline 'Oral health: local authorities and partners.

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