Surveillance proposal consultation document

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

Surveillance background

This 2018 surveillance review has taken into account 4 NICE guidelines on the theme of oral health:

- Oral health for adults in care homes. NICE guideline NG48 (July 2016)
- Oral health: local authorities and partners. NICE guideline PH55 (October 2014)
- Oral health promotion: general dental practice. NICE guideline NG30 (December 2015)
- Dental checks: intervals between oral health reviews. NICE guideline CG19 (October 2004)

This report details the surveillance proposal for one of these guidelines, NICE guideline PH55. Details of the review proposals of the other three oral health guidelines, NG30, NG48 and CG19 can be found on the respective websites.

Surveillance decision

We propose to not update the guideline on oral health for adults in care homes.

The following table describes an overview of the impact that evidence identified in surveillance has in each area of the guideline, including any new areas proposed for addition to the guideline.

Section of the guideline Recommendation 1.1	New evidence	Impact
Care home policies on oral health and providing residents with support to access dental services	Yes	No
Recommendation 1.2		
Oral health assessment and mouth care plans	Yes	No
Recommendation 1.3		
Daily mouth care	Yes	No
Recommendation 1.4		
Care staff knowledge and skills	Yes	No

Recommendation 1.5		
Availability of local oral health services	No	No
Recommendation 1.6		
Oral health promotion services	No	No
Recommendation 1.7		
General dental practices and community dental services	No	No

During surveillance, editorial or factual corrections were identified. Details are included in <u>appendix A:</u> summary of evidence from surveillance.

Reasons for the decision

No relevant studies were identified from topic experts or other sources that were deemed to impact on the recommendations.

The evidence found was supportive of the current recommendations in this guideline and as such we do not recommend updating the guideline at this time.

Overview of 2018 surveillance methods

NICE's surveillance team checked whether recommendations in Oral health for adults in care homes (NICE guideline NG48) remain up to date.

The surveillance process consisted of:

- Initial feedback from topic experts and voluntary and community sector organisations via a questionnaire.
- Literature searches to identify relevant evidence.
- Assessment of new evidence against current recommendations.
- Deciding whether or not to update sections of the guideline, or the whole guideline.
- Consultation on the decision with stakeholders (this document).

After consultation on the decision we will consider the comments received and make any necessary changes to the decision. We will then publish the final surveillance report containing the decision, the summary of the evidence used to reach the decision, and responses to comments received in consultation.

For further details about the process and the possible update decisions that are available, see <u>ensuring</u> that published guidelines are current and accurate in developing NICE guidelines: the manual.

See <u>appendix A: summary of evidence from surveillance</u> below for details of all evidence considered, with references.

Evidence considered in surveillance

Search and selection strategy

We searched for new evidence related to the whole guideline. No study filters were used. We found 16 relevant studies from a search in Medline and Embase, published between 01 September 2014 and 29 January 2018.

We found evidence on oral health assessments that included a dental professional, electric versus manual toothbrushes, ultrasonic cleaning of prostheses and oral health education for staff and residents.

Selecting relevant studies

Due to anticipated low numbers for this search, we considered more study types than the usual process of only including RCT's and systematic reviews. Following the approach taken in the review protocol for the 2016 guideline, we also included more stringent country criteria for exclusion beyond the usual OECD country list. For applicability we only included studies from the U.K, North America, Australia, New Zealand and Western Europe (Austria, Belgium, France, Germany, Ireland, Luxembourg, the Netherlands and Switzerland).

Ongoing research

We checked for relevant ongoing research but no ongoing studies were identified within the scope of NG48.

Advice considered in surveillance

Views of topic experts

We considered the views of topic experts, including those who helped to develop the guideline.

For this surveillance review, topic experts completed a questionnaire about developments in evidence, policy and services related to the guideline.

Views of voluntary and community sector organisations

We considered the views of voluntary and community sector organisations with an interest in oral health.

For this surveillance review, organisations completed a questionnaire about the use of the guideline in practice, and needs and opinions of people using the services.

Views of stakeholders

We obtain the views of stakeholders on surveillance decisions through consultation.

See <u>ensuring that published guidelines are current and accurate</u> in developing NICE guidelines: the manual for more details on our consultation processes.

Equalities

No equalities issues were identified during the surveillance process.

Appendix A: Summary of evidence from surveillance

2018 Oral health for adults in care homes of (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 was considered alongside the evidence to reach a final decision on the need to update each section of the guideline.

1.1 Care home policies on oral health and providing residents with support to access dental services

These recommendations are for <u>care home</u> managers.

- 1.1.1 Ensure care home policies set out plans and actions to promote and protect residents' oral health. Include information about:
 - local general dental services and emergency or out-of-hours dental treatment
 - community dental services, including special care dentistry teams
 - oral health promotion or similar services, depending on local arrangements (see recommendation 1.7.1)
 - assessment of residents' oral health and referral to dental practitioners (see section 1.3)
 - plans for caring for residents' oral health
 - daily mouth care and use of mouth and denture care products
 - what happens if a resident refuses oral health care (in line with the Mental Capacity Act and local policies about refusal of care)
 - supply of oral hygiene equipment (for example, basic toothbrush or toothpaste).
- 1.1.2 Ensure you set out your <u>duty of care</u> in relation to residents' oral health needs and access to dental treatments.
- 1.1.3 Ensure the oral health policy aligns with advice in the <u>Delivering better oral health</u> toolkit.
- 1.1.4 Ensure the oral health policy makes it clear that only practitioners registered with the <u>General Dental Council</u> and acting within its <u>scope of practice</u> may diagnose and treat dental disease or refer someone for specialist treatment (see NICE's guideline on <u>suspected cancer: recognition and referral</u>).
- 1.1.5 Ensure mouth care is included in existing care home policies covering residents' health and wellbeing and reviewed in line with local practice.
- 1.1.6 Ensure all care staff, new and existing residents and their families or friends (if they are involved in the resident's care) are aware of care home policies to promote health and wellbeing, including mouth care

Surveillance decision

This recommendation should not be updated.

Editorial corrections are required:

- 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: scope of practice.

Policies and dental access

2018 surveillance summary

No new evidence was identified.

Intelligence gathering

No topic expert feedback was relevant to this section.

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.

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 6 finding the quick guide particularly useful for staff as it was more easily accessible than the full guideline. 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 general use of oral health guidelines.

Impact statement

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 recommendation 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 as such should be deleted.

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.

New evidence is unlikely to change guideline recommendations.

1.2 Oral health assessment and mouth care plans

These recommendations are for care staff carrying out admissions or assessments.

- 1.2.1 Assess the <u>mouth care</u> needs of all <u>residents</u> as soon as they start living in a <u>care home</u>, regardless of the length or purpose of their stay. Consider using the <u>Oral health assessment tool</u>. Where family and friends are involved in ongoing care, consider involving them in the initial assessment, with the residents' permission, if it will help staff understand the resident's usual oral hygiene routine. Ask:
 - How the resident usually manages their daily mouth care (for example, toothbrushing and type
 of toothbrush, removing and caring for dentures including partial dentures). Check whether
 they need support.
 - If they have dentures, including partial dentures, whether they are marked or unmarked. If unmarked, ask whether they would like to arrange for marking and offer to help.
 - The name and address of their dentist or any dental service they have had contact with, and where and how long ago they saw a dentist or received dental treatment. Record if there has been no contact or they do not have a dentist, and help them find one.
- 1.2.2 Make an appointment for the resident to see a dental practitioner, if necessary.
- 1.2.3 Record the results of the assessment and the appointment in the resident's personal care plan.
- 1.2.4 Review and update residents' mouth care needs in their personal care plans as their mouth care needs change (see recommendation 1.3.3).

Surveillance decision

This recommendation should not be updated.

Oral health assessments

2018 surveillance summary

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.

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.

Intelligence gathering

No topic expert feedback or additional information was relevant to this section.

Impact statement

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 however further evidence of effectiveness, costs and long term outcomes would be needed before recommending these additional dental interventions.

New evidence is unlikely to change guideline recommendations

1.3 Daily mouth care

These recommendations are for managers of care staff who support daily personal care.

- 1.3.1 Ensure care staff provide <u>residents</u> with daily support to meet their <u>mouth care</u> needs and preferences, as set out in their personal care plan after their assessment. This should be aligned with the advice in the Delivering better oral health toolkit, including:
 - brushing natural teeth at least twice a day with fluoride toothpaste
 - providing daily oral care for full or partial dentures (such as brushing, removing food debris and removing dentures overnight)
 - using their choice of cleaning products for dentures if possible
 - using their choice of toothbrush, either manual or electric/battery powered
 - daily use of mouth care products prescribed by dental clinicians (for example, this may include a high fluoride toothpaste or a prescribed mouth rinse, see NICE's guideline on <u>managing</u> medicines in care homes)
 - daily use of any over-the-counter products preferred by residents if possible, such as particular mouth rinses or toothpastes; if the resident uses sugar-free gum, consider gum containing xylitol.
- 1.3.2 Ensure care staff know which member of staff they can ask for advice about getting prescribed mouth care products, or helping someone to use them.
- 1.3.3 Ensure care staff know how to recognise and respond to changes in a resident's mouth care needs.
- 1.3.4 Ensure care staff know how to respond if a resident does not want daily mouth care or to have their dentures removed (see NICE's website page on <u>your care</u>).

Surveillance decision

This recommendation should not be updated.

Mouth care

2018 surveillance summary

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 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 Plague 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.

Intelligence gathering

No topic expert feedback or additional information was relevant to this section.

Impact statement

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 this recommendation, 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 which is consistent with the recommendation to provide daily oral care for dentures.

New evidence is unlikely to change guideline recommendations

1.4 Care staff knowledge and skills

These recommendations are for <u>care home</u> managers.

1.4.1 Ensure care staff who provide daily personal care to <u>residents</u>:

- Understand the importance of residents' oral health and the potential effect on their general health, wellbeing and dignity.
- Understand the potential impact of untreated dental pain or mouth infection on the behaviour, and general health and wellbeing of people who cannot articulate their pain or distress or ask for help. (This includes, for example, residents with dementia or communication difficulties.)
- Know how and when to reassess residents' oral health (see <u>recommendation 1.2.1</u>).
- Know how to deliver daily mouth care (see recommendations 1.3.1-1.3.4).
- Know how and when to report any oral health concerns for residents, and how to respond to a resident's changing needs and circumstances. (For example, some residents may lose their manual dexterity over time.)
- Understand the importance of denture marking and how to arrange this for residents, with their permission.

Surveillance decision

This recommendation should not be updated.

Staff knowledge and skills

2018 surveillance summary

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 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 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: Plague 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 over the intervention period however this was not seen in dental caries levels or periodontal conditions (no data provided in the abstract).

Intelligence gathering

No topic expert feedback or additional information was relevant to this section.

Impact statement

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.

New evidence is unlikely to change guideline recommendations

1.5 Availability of local oral health services

This recommendation is for health and wellbeing boards.

- 1.5.1 Ensure local oral health services address the identified needs of people in <u>care homes</u>, including their need for treatment. Identify gaps in provision. (See recommendation 1 in NICE's guideline on <u>oral health: approaches for local authorities and their partners to improve the oral health of their communities.</u>) This includes:
 - general dental practices
 - community dental services, including special care dentistry (for more information see <u>NHS</u>
 England)
 - oral health promotion or similar services, in line with existing local arrangements
 - emergency and urgent out-of-hours dental treatment.

This recommendation is for care home managers.

1.5.2 Tell local healthwatch and public health teams about any concerns you have about the availability of local dental and oral health promotion services.

Surveillance decision

This recommendation should not be updated.

Availability of local oral health services

2018 surveillance summary

No new evidence was identified for this section.

Intelligence gathering

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.

Impact statement

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.

No new evidence was identified.

1.6 Oral health promotion services

These recommendations are for oral health promotion teams or similar services, in line with existing local arrangements.

- 1.6.1 Develop and provide <u>care homes</u> with oral health educational materials, support and training to meet the oral health needs of all <u>residents</u>, especially those with <u>complex needs</u>.
 Also explain the role of diet, alcohol and tobacco in promoting good oral health, in line with advice in the <u>Delivering better oral health</u> toolkit and NICE's guideline <u>oral health promotion:</u> general dental practice.
- 1.6.2 Help care home managers find out about local oral health services and create local partnerships or links with general dental practice and community dental services including special care dentistry.
- 1.6.3 Tell local authority public health teams and dental public health leads about gaps in the services, so they can advocate for accessible oral and dental health services on behalf of residents of care homes.

Surveillance decision

No new information was identified during the surveillance review.

This recommendation should not be updated.

1.7 General dental practices and community dental services

These recommendations are for dental practitioners.

1.7.1 Provide <u>residents</u> in <u>care homes</u> with routine or specialist preventive care and treatment
as necessary, in line with local arrangements (see NICE's guidelines on <u>dental checks: intervals</u>
between oral health reviews, <u>oral health: approaches for local authorities and their partners to</u>
improve the oral health of their communities and <u>oral health promotion: general dental</u>
<u>practice).</u>

 1.7.2 Ensure dentures made for individual residents are appropriately marked by the lab during manufacture.

Surveillance decision

No new information was identified during the surveillance review.

This recommendation should not be updated.

Editorial and factual corrections identified during surveillance

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: scope of practice.

Context:

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

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.

Research recommendations

Research recommendations considered in surveillance

RR - 01 What effect does improving and maintaining access to dental services for adults in care homes have on their oral health and general wellbeing?

Summary of findings

New evidence was identified focusing on <u>barriers to care experienced by dentists</u> and barriers experienced by care home staff in providing oral health care(14). This does not fully address the research recommendation above however it provides some information on access to dental services.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 02 How effective and cost effective are oral health interventions in care homes including suitable person-centred outcome measures?

Summary of findings

New evidence was identified on educational information for <u>care home staff and residents</u>, and a cost effective analysis of oral health training for care home staff caring for residents with intellectual disabilities(8). This new evidence is supportive of this research recommendation 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 confirm the results.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 03 How can interventions to improve and maintain oral health and wellbeing, or to prevent dental disease, be measured using a patient-centred approach that can also be used to judge cost effectiveness?

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 04 Does the delivery of a daily mouth care regimen in care homes maintain or improve adult residents' oral health-related quality of life?

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 05 Do preventive oral health interventions in residential and nursing care homes reduce demands on other health and social care services?

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 06 What are the facilitators and barriers to delivering daily oral care and conducting oral health assessments in residential and nursing care homes?

Summary of findings

The new evidence includes 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). The new research in this area supports the need for this research recommendation as it describes that there are still barriers experienced when care home staff try to access dental care for their residents.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

References

- 1. Wallace JP, Mohammadi J, Wallace LG, Taylor JA (2016) Senior Smiles: preliminary results for a new model of oral health care utilizing the dental hygienist in residential aged care facilities. International Journal of Dental Hygiene 14(4):284–8
- 2. Maude W, L KK, Annica A, Erika P, Peter L, Inger W (2017) Effect of 12-month weekly professional oral hygiene care on the composition of the oral flora in dentate, dependent elderly residents: A prospective study. Gerodontology 34(2):240–8
- 3. Fjeld KG, Mowe M, Eide H, Willumsen T (2014) Effect of electric toothbrush on residents' oral hygiene: a randomized clinical trial in nursing homes. European Journal of Oral Sciences 122(2):142–8
- 4. Gahre FK, Hilde E, Morten M, Leiv S, Tiril W (2017) A 1-year follow-up of a randomized clinical trial with focus on manual and electric toothbrushes' effect on dental hygiene in nursing homes. Acta Odontologica Scandinavica:1–5
- 5. Sebastian SF, Johannes K, J HA, Peter R, Andreas Z (2017) Long-term success of oral health intervention among care-dependent institutionalized seniors: Findings from a controlled clinical trial. Community Dentistry & Oral Epidemiology 20:20
- 6. Janssens B, Visschere D, L, Putten van der, J G, Lugt-Lustig de, et al. (2016) Effect of an oral healthcare protocol in nursing homes on care staffs' knowledge and attitude towards oral health care: a cluster-randomised controlled trial. Gerodontology 33(2):275–86
- 7. Janssens B, Vanobbergen J, Lambert M, A SJMG, Visschere D, L (2018) Effect of an oral healthcare programme on care staff knowledge and attitude regarding oral health: a non-randomised intervention trial. Clinical Oral Investigations 22(1):281–92
- 8. Phadraig MG, C, Nunn J, Guerin S, Normand C (2016) Should we provide oral health training for staff caring for people with intellectual disabilities in community based residential care? A cost-effectiveness analysis. Evaluation & Program Planning 55:46–54
- 9. Martina A, Ramona K, R RD, Ingrid M, Sascha K (2016) Oral health educational interventions for nursing home staff and residents. Cochrane Database of Systematic Reviews 9:CD010535
- 10. Wang TF, Huang CM, Chou C, Yu S (2015) Effect of oral health education programs for caregivers on oral hygiene of the elderly: A systemic review and meta-analysis. International Journal of Nursing Studies 52(6):1090–6
- 11. Zenthofer A, Meyer-Kuhling I, Hufeland AL, Schroder J, Cabrera T, Baumgart D, et al. (2016) Carers' education improves oral health of older people suffering from dementia results of an intervention study. Clinical Interventions In Aging 11:1755–62
- 12. Poisson P, Barberger-Gateau P, Tulon A, Campos S, Dupuis V, Bourdel-Marchasson I (2014) Efficiency at the resident's level of the NABUCCOD nutrition and oral health care training program in nursing homes. Journal of the American Medical Directors Association 15(4):290–5
- 13. Clive WFA, Garry L, Y CSK, S CJ, Couteur L, David G (2017) Residential age care and domiciliary oral health services: Reach-OHT-The development of a metropolitan oral health programme in Sydney, Australia. Gerodontology 34(4):420–6
- 14. Matthias H, Alix C, Tu HK, Nadia K, Angelle K, Huimin H, et al. (2017) Barriers and facilitators in providing oral care to nursing home residents, from the perspective of care aides: A systematic review and meta-analysis. International Journal of Nursing Studies 73:34–51
- 15. Bots-VantSpijker PC, Vanobbergen JN, Schols JM, Schaub RM, Bots CP, Baat de, et al. (2014) Barriers of delivering oral health care to older people experienced by dentists: a systematic literature review. Community Dentistry & Oral Epidemiology 42(2):113–21
- 16. A MM, Hendrik T, G HC, A SA, Andreas S, R SA (2017) Facilitators and barriers influencing the readiness to receive dental implants in a geriatric institutionalised population-A randomized non-invasive interventional study. Gerodontology 34(3):306–12

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