AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

KEY ACTIONS for health service organisations

Oral health care for adult inpatients

Introduction

The National Safety and Quality Health Service (NSQHS) **Comprehensive Care Standard** sets out the requirements for health service organisations to ensure every patient receives coordinated, comprehensive care, aligned with their needs and goals. Screening actions support the identification and management of risks of harm.

Oral conditions and diseases are amongst the costliest health problems experienced by Australians and are a common cause of potentially preventable hospitalisations.[1,2]

Poor oral health is associated with adverse health outcomes. In adults these problems arise most commonly from tooth decay, gum disease and oral cancers.[1] Certain medicines and poly-pharmacy can contribute to conditions such as dry mouth that can lead to oral infections and disease.

Oral health care is one of the most missed aspects of care reported by patients during their hospital stay (**Box 1**).[3-5]

What does this mean for health service organisations?

A growing body of research indicates that many people experience increased oral health risk during their hospital stay (**Box 1**).[6]

Patients with pre-existing poor oral health are at much greater risk. People who face barriers to accessing healthcare including Aboriginal and Torres Strait Islander peoples, older people, people with physical and intellectual disabilities, people with mental health conditions, people from socially disadvantaged backgrounds and culturally and linguistically diverse peoples are also at increased risk.[1,6]

Adverse oral health outcomes include:

- Increased risk of hospital acquired pneumonia for non-ventilated and ventilated patients
- Localised oral infections
- Orally derived systemic infections
- Systemic inflammatory responses, exacerbating cardiovascular disease
- Compromised immune system
- Reduced diabetes management
- Dehydration
- Risk of delirium with mouth pain
- Malnutrition, particularly in cases of chronic dental pain
- For pregnant women, increased risk of premature labour.[6,7,8]

Collectively these contribute to:

- Increased patient morbidity and mortality
- Prolonged hospitalisation
- Increased healthcare costs.
- Unsatisfactory patient healthcare experience.[6-9]

Box 1: Factors that increase oral health risk

Missed oral health care includes:

- Oral health assessment
- Daily oral care to keep the mouth clean
- Therapeutic treatment of oral conditions
- Prophylactic care to reduce oral health risk.

06/2023

Requirements for health service organisations

The requirements of the Comprehensive Care Standard listed below can in part reduce risks and support patients oral health needs. Relevant actions include:

- 5.04 Design systems to enable and support the delivery of comprehensive care to patients that include requirements for routine oral health care
- 5.07 Implement processes for integrated and timely screening, assessment, and identification of oral health risk factors
- 5.13 Use shared decision-making processes to develop person-centered, goal-oriented comprehensive care plans that meet identified oral health needs
- 5.14 Use the comprehensive care plan to deliver safe and effective oral health care that aligns with the patient's needs and preferences.

Conducting oral health screening

An initial base-line assessment of the mouth should take place during a patient's initial admission assessments and within 24 hours of admission.[6,10]

For planned admissions, an oral health assessment should be included in general pre-admission assessments.

An example of a recommended evidence-based clinical tool designed for use by non-dental healthcare professionals is the Oral Health Assessment Tool (OHAT)[10-12] The tool applies three criteria when assessing eight categories of oral health. An unhealthy assessment indicates the need for a dental referral (**Box 2**).

Box 2: Oral Health Assessment Tool (OHAT)

The OHAT consists of a **visual clinical inspection** of **eight** categories of oral health:

1. Lips
2. Tongue
3. Gums and soft tissues
4. Saliva
5. Natural teeth
6. Dentures
7. Oral cleanliness
8. Dental pain.

Infection control

Keeping the mouth clean plays a significant infection control role in preventing orally derived localised and systemic infections. Strategies to minimise infections include:

- Choosing personal protective equipment appropriate to the saliva exposure risk
- Reducing cross-infection by cleaning and drying toothbrushes, denture brushes and/or denture containers after use
- Replacing toothbrushes when bristles are frayed and/or following an infection such as a cold or thrush.

Care of natural teeth

Encourage and support patients to brush their teeth, gums and tongue with a pea-sized amount of fluoride toothpaste twice daily, and to spit not rinse after brushing. Document in the patient's comprehensive care plan who is conducting oral hygiene, if the patient is unable to do this for themselves.

Care for dentures

Encourage and support patients to brush dentures twice a day, using mild liquid soap and water, and a soft bristled toothbrush moistened with water to clean gums, tongue and/or implant studs, and remove dentures overnight. Ensure dentures are rinsed following eating to reduce risk of retained debris.

Relief of dry mouth

For patients with dry mouth, consider the need for a medications review. Encourage and support patients to keep their mouth moist with frequent rinsing and sipping of water, use of lip balm, dry mouth relief products and non-foaming fluoride toothpaste.

Management of mouth ulcers, sore spots, mucositis

Treat ulcers and sore spots three to four times a day with warm normal saline mouth washes and/or mouth swabs and ensure adequate pain relief until healed.

Follow treatment protocols for mucositis.

Non-painful and non-healing ulcers (lasting more than seven days) **must be followed up** as soon as possible with a medical review and urgent dental referral.

Treatment of fungal infections

Strategies to treat oral fungal infections include maintaining a clean mouth and applying antifungal medication as prescribed. Replace toothbrushes before and after treatment. Disinfect dentures and denture containers in accordance with best practice methods until treatment is completed.

Managing oral hygiene with resistant patients

A number of health conditions can affect the ability to perform oral health care. Effective communication based on trust, understanding, empathy and cooperation is one of the most important contributors to consumer engagement, participation, and adherence to healthcare plans. If the patient refuses to have their teeth brushed, a short-term alternative is to apply oral care products including wiping fluoride toothpaste or chlorhexidine with a mouth swab or gloved finger.

End-of-life care

Discomfort from dry mouth is common at the end stage of life. End-of-life care protocols should identify strategies to maintain oral comfort and reduce dry mouth. This should include oral hygiene twice per day unless this causes distress, and support and education for families wishing to participate in oral health care in line with person-centered care.

Discharge planning

Discharge planning should identify any problems with the patient's oral health; what oral health care has been provided to manage identified oral health conditions and/or if the patient needs to have a follow-up dental examination.

Additional resources

- Better oral health care in hospital online learning package www.dental.sa.gov.au/professionals/online-training/hospital-setting
- Booklet: *Oral Health Care for Adult Inpatients: Recommendations* includes strategies for improvement and auditable outcomes for quality improvement.

Questions?

For more information, please contact the Safety and Quality Advice Centre: AdviceCentre@safetyandquality.gov.au or call 1800 304 056.

References

1. SA Dental. 2019. South Australia's Oral Health Plan 2019–2026, SA Dental Service, Central Adelaide Local Health Network, SA Health, Government of South Australia, Adelaide, South Australia, p. 10.
2. COAG Health Council. 2015. Australia's National Oral Health Plan (2015–2024), viewed 24 May 2018. Available at www.coaghealthcouncil.gov.au/Publications/Reports/ArtMID/514/ArticleID/81/Australias-National-Oral-Health-Plan-2015-2024.
3. Bail K, Grealish L. 2016. Failure to Maintain: a theoretical proposition for a new quality indicator of Registered Nurse care rationing for complex older people. International Journal of Nursing Studies, vol. 63, pp. 146–61, DOI 10.1016/j.ijnurstu.2016.08.001.
4. Coker E, Pleog J, Kaasalainen S, Cater N. 2016. Registered Nurses' oral hygiene care practices with hospitalised older adults in postacute settings. International Journal of Older People Nursing, vol. 12, no. 1, pp. 1–12, doi:10.1111/opn.12124.
5. Kalisch BJ, Landstrom GL, Hinshaw AS. 2009. Missed nursing care: a concept analysis. Journal of Advance Nursing, vol. 65, no. 7, pp. 1509–17, doi: 10.1111/j.1365-2648.2009.05027.x.
6. NHS Health Education England. 2015. Mouth Care Matters Project, viewed 16 February 2022. Available at mouthcarematters.hee.nhs.uk/about-the-programme/adults.
7. Baker D, Quinn B. 2018. Hospital acquired pneumonia prevention initiative-2: incidence of nonventilator hospital-acquired pneumonia in the United States. American Journal of Infection Control, vol. 46, no .1, pp. 2–7.
8. Munro S, Baker D. 2018. Reducing missed oral care opportunities to prevent non-ventilator associated hospital acquired pneumonia at the Department of Veterans Affairs. Applied Nursing Research, vol. 44, pp. 48–53.
9. Kitson A, Muntlin Athlin Å, Conroy T. 2014. Anything but basic: nursing's challenge in meeting patients' fundamental care needs. Journal of Nursing Scholarship, vol. 46, no. 5, pp. 331–9, doi:10.1111/jnu.12081.
10. SA Dental Service. 2015. Better Oral Health in Residential Care Resources Professional Portfolio. 2nd Edition. SA Dental Service, Adelaide, South Australia.
11. Spencer JA, Dooland M, Pak-Poy A, Fricker A. 2006. Abridged report: the development and testing of an oral health assessment tool kit for GPs to use in aged care facilities, SA Dental Service, Adelaide, South Australia.
12. Everaars B, Weening-Verbree LF, Jerković-Ćosić K, et al. 2020. Measurement properties of oral health assessments for non-dental healthcare professions in older people: a systematic review. BioMed Central Geriatrics, vol. 20, no. 4, doi: 10.1186/s12877-019-1349-y.

safetyandquality.gov.au

© Australian Commission on Safety and Quality in Health Care 2023