

### In this article...

- How good oral health contributes to good general health and wellbeing
- What is required for good mouth care provision in hospitals
- Gaps in oral care policies, training and resources in 12 acute trusts in England

# Standardising the delivery of oral health care practice in hospitals



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## Key points

**Providing good mouth care for inpatients is an essential part of hospital care**

**The oral health of patients often deteriorates during a hospital stay, with negative consequences for their general health**

**Hospitals lack standardised mouth care tools, policies and pathways, and do not provide enough oral health training**

**Foam swabs pose a risk of choking and should not be used instead of toothbrushing**

**The Mouth Care Matters initiative helps ensure that staff have the knowledge, skills, tools and support needed to provide good mouth care**

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**Abstract** Good mouth care is important, not only for oral health but also for general health and wellbeing, yet it is an aspect of care that is often neglected. Mouth Care Matters was launched by Health Education England to improve the oral health of adults in care homes and hospitals. Between 2015 and 2016, the initiative was implemented in 12 acute hospital trusts in Kent, Surrey and Sussex. This article explains why mouth care is important and discusses the results of a questionnaire used to collect baseline data on the 12 trusts' oral care policies, resources and training.

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**M**outh care is an important aspect of patient care in hospitals, but is often identified as requiring improvement. Mouth Care Matters (MCM), an initiative funded by Health Education England (HEE), was launched in 2015 to improve the oral health of adults in settings such as care homes and hospitals.

In 2015, a dental team implemented the MCM programme at East Surrey Hospital. The initiative was then adopted in all other acute hospital trusts in Kent, Surrey and Sussex. This article highlights the importance of good mouth care in hospital and discusses mouth care provision in 12 acute trusts in Kent, Surrey and Sussex before implementation of MCM.

## Mouth care in hospitals

Supporting or providing good, regular mouth care for inpatients is essential (Department of Health, 2010). It contributes to good oral health and, in turn, improves general health, dignity and wellbeing (Locker et al, 2002). The hospital inpatient population is getting older and

increasingly presents with comorbidities. This population is in greater need of help with personal care, including oral hygiene. Barriers to providing effective mouth care may include a lack of regular staff training and the absence of resources such as tools for assessing and recording oral health care and mouth care policies and products.

## Why oral health is important

Good oral health can be defined as a state of being free from oral disease, pain or infection that limit an individual's ability to eat, speak and socialise (World Health Organization, 2017). The oral health of hospitalised patients has been found to deteriorate worldwide, with an increase in the amount of dental plaque and gingival inflammation present over a period of 7-20 days (Terezakis et al, 2011). Xerostomia or dry mouth is common in hospitalised older patients and can negatively affect their ability to eat, as well as their psychological wellbeing (Avcu et al, 2005). Poor nutritional intake resulting from oral problems can slow recovery and increase the length of hospital stay (Gil-Montoya et al, 2008).

## Nursing Practice Research

Mouth-related problems can have numerous causes: some may be attributed to poor oral hygiene, while others may be a result of dehydration, a side-effect of medication or a symptom of a systemic condition (Public Health England, 2017; Walsh, 2017; PHE, 2015). Regular mouth assessment and care can help maintain or improve both oral and general health.

If teeth are not brushed effectively, a sticky film called plaque, made up of millions of bacteria, will stay on and between the teeth. Dental plaque contains organisms that can cause oral diseases such as dental decay and gum disease, but also, if transported to the lungs, respiratory infections (Pace and McCullough, 2010).

Not only can oral hygiene interventions reduce the risk of pneumonia in both ventilated and non-ventilated hospitalised patients (Shi et al, 2013; Abe et al, 2006), but they may also reduce the risk of mortality from the disease by reducing the number of febrile days and microbial colonisation (Manger et al, 2017; Sjögren et al, 2008; Azarpazhooh and Leake, 2006; Scanapieco, 2006).

Pneumonia is not the only systemic disease to be linked with oral health: there is also strong evidence of links between oral health and cardiovascular disease and diabetes (Dietrich et al, 2017; Demmer et al, 2010; Lockhart et al, 2009).

### Deterioration in hospital

Research shows that hospitalised patients who are unwell or immobile tend to neglect their normal oral care practices, which leads to worsening oral health (Michaeli et al, 2007). Studies in Finland and England have found that the standard of mouth care provided to hospitalised patients is often poor (Peltola et al, 2004; Adams, 1996), leading to a deterioration of oral health. Measures of oral health such as the amount of dental plaque and gingival inflammation were found to worsen during hospital stays in Brazil, the UK and France (Sousa et al, 2014; Franklin et al, 2000; Fourrier et al, 1998).

Perhaps the worse effect that hospitalisation can have on patients' oral health is the loss of their dentures (Michaeli et al, 2007). This will affect their ability to eat, speak and communicate, and consequently their nutrition, general health and psychological wellbeing. Making new dentures is costly and time-consuming; and they may be unsuccessful due to a lack of neuromuscular control (as in stroke patients) or a reduced ability to learn and adapt (for example, in patients with dementia) (Kalyan et al, 2014).

### Lack of policies and resources

Hospital trusts generally have a range of policies and procedures covering clinical and corporate activities, but policies on mouth care are often lacking (Sousa et al, 2014). A study in an Irish university hospital showed that there was no standardisation in the delivery of oral care; no tools available to assess and record oral health; and a lack of equipment such as toothbrushes and toothpaste (Stout et al, 2009).

### Insufficient training

Nurses often receive education on oral health in the early stages of their training and may not get regular updates thereafter. In a survey of 71 stroke wards in Scotland, only a third had had oral care training in the preceding year and training had been mostly ward-based (Talbot et al, 2005). Hands-on training in mouth care has been shown to improve oral hygiene provision, and consequently clinical outcomes, for hospitalised patients (Ross and Crumpler, 2007).

Healthcare assistants (HCAs), who often provide mouth care to hospital inpatients, frequently receive no training in oral care. Currently, the Care Certificate, which sets standards for HCAs in the UK, does not include mouth care.

Research into the oral care training and knowledge of health professionals has demonstrated similar gaps. A study exploring doctors' knowledge of oral conditions showed that the majority felt their training was inadequate (Morgan et al, 2001). Nurses have reported a lack of both training and knowledge in relation to oral care and oral health (Preston et al, 2006; Adams, 1996).

### Mouth care at 12 acute trusts

In 2014, a report by the Care Quality Commission on East Surrey Hospital – part of Surrey and Sussex Healthcare Trust – found that some patients on the wards had dry mouths, that the provision of mouth care was not clearly recorded, and that there was no consensus among staff on where to record it. The CQC recommended carrying out a review of mouth care (CQC, 2014).

MCM was deemed the right tool to address the issues flagged up by the CQC, standardise care, educate hospital staff and generally promote oral health. In 2015 a dental team working at East Surrey Hospital implemented the initiative, developing a training programme and introducing a range of tools and resources.

In 2016, the other 11 acute hospital trusts in Kent, Surrey and Sussex received

HEE funding to each recruit either a nurse, a dental nurse or a speech and language therapist to be their mouth care lead for 12 months; they would be responsible for improving oral care in their respective trusts through the MCM programme.

As part of the initiative, all 12 acute trusts provided baseline information about mouth care via a questionnaire (Table 1) that collected data on:

- Trusts' policies on mouth care;
- Availability of mouth care recording tools;
- Mouth care training for staff;
- Availability of mouth care products for patients;
- Use of foam swabs for mouth care;
- Pathways for accessing urgent dental care/advice when necessary.

All trusts comprehensively answered all questions, and the collected information is summarised and discussed below.

### Policies

None of the 12 trusts had a stand-alone policy on mouth care. In two of them, mouth care was mentioned in the nutrition and hydration policy, but these sections were brief, comprising only two or three sentences. This demonstrates a lack of guidance on oral care for hospitalised patients. Establishing policies and protocols is recommended to address gaps in oral care provision (Michaeli et al, 2007; Fitch et al, 1999) and forms part of the MCM programme.

### Recording tools

Five of the 12 trusts had a dedicated mouth care form or a specific place to record mouth care, albeit in different documents or sections of patients' notes. There was considerable variation in form, from a 'one-line tick box' in a personal care sticker in the nursing notes to a whole paragraph in a nutrition and hydration risk assessment tool. None of the forms asked patients whether they were experiencing any oral problems, nor whether they had products such as a toothbrush, toothpaste or denture pot. None recorded whether patients had refused mouth care.

Recording mouth care provision, as well as instances when it is refused, helps ensure that all necessary care is provided and prevents duplication of care. There is currently no standardised mouth care tool consistently used in hospitals in England. The MCM programme includes the use of a dedicated mouth care recording tool, which helps standardise how mouth care and mouth assessments are recorded.

## Nursing Practice Research

Table 1. Baseline data questionnaire

Does your trust have an existing mouth care/oral care policy?	Y/N	If yes, please provide details
Does your trust have mouth care as part of another policy; for example, nutrition and hydration?	Y/N	If yes, please provide details
Does your trust have an existing mouth care/oral health recording tool?	Y/N	If yes, please provide details If not, where is mouth care currently recorded: a) Not currently consistently recorded b) Hydration form c) Skin bundle d) Other forms
Is there any current oral health/mouth care training for staff in your trust?	Y/N	If yes, is it: a) Ward-based training? b) Classroom training? c) E-learning? d) Video? e) Other?
If there is mouth care training in the trust, who is it for: a) Nurses? b) Healthcare assistants? c) Doctors? d) Allied health professionals?	Y/N	
If a patient/carer is unable to access mouth care products 24 hours after being in hospital, will they be provided with: a) A toothbrush b) Toothpaste c) A denture storage pot	Y/N	If yes, please provide product details
Are oral foam swabs currently used in your trust?	Y/N	If yes, are they used for: a) Cleaning the mouth? b) Hydration? c) Both of the above?
Are there pathways for dental care if the inpatient has the following problem during their hospital stay: a) Missing dentures b) Severe tooth ache c) Very loose tooth d) Swollen face due to dental abscess e) Sharp tooth affecting eating f) Head and neck trauma g) Suspicious lesion in the mouth	Y/N	If yes, please provide details

### Training

Only five trusts provided oral health training to their staff. These five trusts all trained their healthcare assistants and three of them also trained nurses. Among the three trusts that also trained nurses, one only trained nurses working on stroke wards. All training was provided in the form of classroom sessions. No trust regularly delivered oral health training to doctors or allied health professionals.

This suggests that many staff lacked key mouth care knowledge and skills. As part of the MCM programme, training in mouth care and oral diseases for healthcare assistants, nurses and doctors, both ward- and classroom-based, was introduced at the 12 trusts.

### Products

In case of unplanned admission, patients often do not have time to collect personal



Fig 1. A foam swab

items, such as a toothbrush and toothpaste, for their hospital stay. Some will have family or friends who can bring these, but others will rely on hospital supplies. Reassuringly, most trusts did provide essential mouth care products: 10 of the 12 said they would supply a toothbrush and toothpaste, and all said they would supply denture pots, if needed. However, many toothbrushes provided had large heads and hard bristles, making them unsuitable for frail patients with sore mouths, and the toothpaste provided was mostly of the foaming type, which may be unsuitable for patients with advanced dysphagia.

### Foam swabs

Among the 12 trusts, 11 used foam swabs (Fig 1), but none provided training or protocols regarding their use; 9 out of 11 used foam swabs both for hydration and cleaning the mouth, one trust used them for hydration only, and another used them only for mouth cleaning.

Foam swabs are used in many trusts in England to moisten the mouth or soak up saliva secretions. Research has shown that oral foam swabs are not an effective means to remove dental plaque (Pearson and Hutton, 2002), so they should not be used as an alternative to toothbrushing.

In 2012, after the death of a patient in Wales, the Medicines and Healthcare Products Regulatory Agency published a medical device alert on oral swabs with a foam head, highlighting a risk of patients choking if the head became detached (Medicines and Healthcare Products Regulatory Agency, 2012). It advised not to use swabs in patients who were likely to bite and not to soak them before use. The MHRA has since received 78 reports on

## Box 1. Mouth care matters

Mouth Care Matters states that, to be able to provide good mouth care, staff need:

- **Knowledge** of good mouth care and how oral health is linked to general health and wellbeing
- **Skills** gained through training on how to assess the mouth and carry out mouth care
- **Tools** needed to provide effective mouth care, such as toothbrushes and denture pots
- **Support** from doctors/dentists/mouth care team when necessary

oral swabs, most commonly reporting detachment of the foam head. It is likely that safety issues with foam swabs are under-reported.

## Pathways

None of the 12 trusts had a set pathway to follow should a patient need to see a dentist urgently. The general consensus was that, in the event of an oral-related emergency such as head and neck trauma or severe facial swelling, advice would be sought from the on-site maxillofacial department – which 10 of the 12 trusts had. One of the 10 trusts had an on-site special care dental department, as well as an informal pathway for urgent dental advice/care; the pathway included treating patients with severe pain that was slowing down their recovery and re-making dentures that had been lost during the stay.

Some common dental problems, such as dry mouth, lost dentures and oral candidiasis, require multidisciplinary input, and clear pathways reduce the time from recognition of an issue to its resolution, which means shorter hospital stays, more efficient and safer treatment, and increased patient satisfaction. The 12 trusts lacked clear patient care pathways for oral care problems commonly occurring in hospital.

## Conclusion

The baseline data shows that oral health care in the 12 acute trusts in Kent, Surrey and Sussex needed to be improved. Before the MCM initiative was adopted, there was no standardised provision of oral health-related resources and policies; more than half the trusts were not training staff in oral care; and most trusts had no clear pathway for ensuring specialist support when necessary.

The MCM programme rests on four key needs of staff: knowledge, skills, tools and support (Box 1). It has now been implemented across the 12 acute trusts, and it is hoped that this will lead to improved oral care for patients. **NT**

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