

Recommendations for Paediatric Dentistry during the recovery phase of the COVID-19 pandemic

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1. Scope of Document

This document provides advice and guidance to support the delivery of oral health care for children and young people (<16 years of age) during the COVID-19 recovery and is intended for use by dental teams working in England. The term 'recovery' will be used to describe the stage in the pandemic where disease levels will have dropped below peak observed levels. The recovery period signifies that pandemic activity appears to be decreasing; however, it is uncertain if additional waves will occur.

2. General principles

The decision to postpone routine dental care during the COVID-19 pandemic, will inevitably have created a considerable backlog of incompletely treated dental disease in the child population as a whole.

Beginning a road to recovery will require a new way of thinking. This will not be a 'return to normal'. As part of this recovery, clinicians will need to completely re-evaluate how services are prioritised and delivered. Relieving children of pain must take priority over routine dental care services, especially where chair space and potentially nursing support will be at a premium for some time to come. This will not be comfortable, but it is necessary.

As we move forwards during the recovery phase of the COVID-19 pandemic, our philosophy will be to:

- · Provide urgent dental care following an effective system of triage and prioritisation.
- Reduce footfall into clinics in order to maintain social distancing, thus protecting staff and patients.
- Increase our use of health technology to deliver remote consultations and to support self-care.
- Renew our focus on prevention for every patient, at every opportunity.
- Support the commissioning of evidence-based oral healthcare interventions in the community.
- Provide evidence-based, non-Aerosol Generating Procedures (AGP) in preference to AGP, wherever possible, whilst recognising that provision of oral healthcare, particularly for children, represents a scale of aerosol generating exposure. For this reason, clinicians are encouraged to risk assess every face-to-face contact.
- Ensure services are accessible to all, including those who may be shielded, socially vulnerable or have safeguarding concerns.

Recommendation

 Clinical urgency must take priority over referral to treat (RTT) times. Whilst the latter remains relevant, clinical teams must be able to prioritise care on the basis of clinical urgency (including well-being and quality of life factors).

3. Delivery of prevention

Every child and young person should continue to receive tailored oral health advice in line with *Delivering Better Oral Health*.¹ Oral health advice can be given as part of a remote consultation using the resources listed in section 13. Never has there been a more important time to invest in regional programmes of prevention and promote public health campaigns such as 'Dental Check by One'.² With oral health services under pressure to manage existing disease, it is critical that we maximise efforts to prevent new disease and slow the progression of existing disease.

Recommendation

• There needs to be support for supervised brushing in all early years settings along with other evidence-based interventions.³

4. Management of dental caries

a) Primary dentition

Management of caries in the primary dentition should favour minimally invasive oral healthcare including consideration of the use of less invasive measures such as silver diamine fluoride (SDF), Atraumatic Restorative Technique and the Hall Technique,⁴ and, where a biological approach is contraindicated, considering extractions over more invasive approaches. The use of selective carious tissue removal should be considered as a way of reducing the likelihood of pulp exposure and avoiding the need for local analgesia.

b) Permanent dentition

Management of caries in the permanent dentition may favour temporisation and stabilisation for a six-month period to minimise AGP. After this timeframe, it is hoped that the risk of providing AGP will be significantly reduced. Minimally invasive oral healthcare can also be considered. Clinicians should refer to the SDCEP guidelines on management of caries in children.⁵

5. Treatment with inhalation sedation

Treatment with inhalation sedation is a key component in the armamentarium of a Paediatric Dentist. Sedation can support children and young people to manage treatment and potentially avoid a General Anaesthetic (GA). Inhalation sedation is not currently considered to be an AGP by Public Health England.⁶ The AGP evidence review⁷ will continue to be updated in light of emerging evidence for this new pathogen.

6. Treatment with intravenous sedation

Treatment with intravenous sedation is safe to proceed, subject to safe staffing levels and national guidelines.

7. Treatment under general anaesthesia

Many young children, or those with additional needs, cannot be treated unless care is provided under general anaesthetic (GA). During the COVID-19 pandemic, all elective activity was cancelled so that theatre space, equipment and manpower could be redeployed as part of the NHS wide COVID-19 response. It will be challenging to re-establish access to theatre time and this is likely to take place in a phased approach to allow for the return of redeployed staff and currently repurposed theatre/recovery space. Failure to provide increased access to GA will result in an increased pressure on the wider system with increased calls to 111, attendances at A&E and calls to General Medical Practitioners.

For the foreseeable future the following children should be prioritised for urgent treatment under GA:

- Children who have sustained trauma to the primary dentition, where the child is symptomatic (pain not managed with analgesics, infection not managed with antibiotics or interference with eating), and treatment under local anaesthetic is not possible.
- Children who have had trauma to the permanent dentition which needs intervention, and treatment under local anaesthetic or sedation is not possible.
- Children who have acute dental infection which is not responsive to antibiotics which cannot be managed under local anaesthesia.
- Children who have intractable pain or discomfort which cannot be managed under local anaesthetic.
- Children who have facial swelling as a result of dental disease, and treatment under local anaesthetic is not possible.
- Children whose poor dental health is impacting on, or is highly likely to impact on, their medical health, eg children with diabetes, cardiac conditions, epilepsy or inherited metabolic disorder – and a decision is made that the benefits of surgery outweigh the risks of bringing a child into hospital during the COVID-19 pandemic (see section 8).
- Children and young people with additional needs such as those with learning disabilities or autism, where dental pain is resulting in self harm or other disruptive or detrimental behaviours.
- Patients who have a compromised swallow and are at risk of aspirating a tooth which cannot be removed under local anaesthetic.

Elective patients should be admitted and, where possible, pre-operatively tested in line with national guidance and local Trust protocols. Airway management should not change in response to the COVID-19 crisis.⁸ Clinical urgency must take priority over Referral to Treatment (RTT) when selecting patients for admission. Sessional use of FFP3 can be employed, in line with PHE guidance⁹ for the operating surgeon and assisting nurse.

General Dental Practitioners should provide enhanced prevention in line with 'Delivering Better Oral Health, stabilisation, ongoing support and Advice, Analgesia and, if indicated, prescription of Antimicrobials (AAA) whilst a child is waiting for treatment under GA. Where possible, removal of the source of pain and/or infection should be attempted. Use of SDF and enhanced prevention at the point of referral may arrest the progression of caries whilst a child is waiting for treatment.

8. Care of medically complex children and young people

For children with medical 'red flags', discussions with their paediatric team may help decision making and should be encouraged.

Priority should be given to:

- Children with underlying medical conditions which place them at greater risk of complications arising from any subsequent infection if the tooth is not treated (see 'red flag' list below).
- Children with additional needs such as those with learning disabilities or autism, where
 dental pain is having a severe impact on the child/family with evidence of adverse
 behaviours such as self-harming.

The list below, although not exhaustive, provides examples of potential 'red flag' conditions that may exacerbate/complicate a child's presenting dental condition and should be taken into consideration when justifying the need for urgent dental care:

- Increased risk of bleeding from medications or conditions (eg chronic renal failure, liver disease, haematological malignancy, recent or current chemotherapy, idiopathic, inherited bleeding disorders including all types of haemophilia and von Willebrand's disease).
- Increased risk of infection (eg any immunocompromised state, transplant patient, diabetic, child on immunosuppressants /steroids/chemotherapy).
- At increased risk of infective endocarditis.

9. Shielded patients

There are children and young people who are identified as being at significantly increased risk from COVID-19.¹⁰ The decision to bring these children into a hospital or dental clinic environment during the recovery phase should be decided after careful consideration of the risks and benefits:

- Long term respiratory conditions, including: chronic lung disease of prematurity with oxygen dependency, cystic fibrosis with significant respiratory problems, childhood interstitial lung disease, severe asthma, respiratory complications of neurodisability;
- Immunocompromised (disease or treatment), including: treatment for malignancy, congenital immunodeficiency, immunosuppressive medication including long term (>28 consecutive days) of daily oral or IV steroids (not alternate day low dose steroid or hydrocortisone maintenance), post-transplant patients (solid organ or stem cell), asplenia (functional or surgical);

- Haemodynamically significant and/or cyanotic heart disease;
- Chronic Kidney Disease stages 4, 5 or on dialysis.

These children require care in a Specialist setting, in a spatially separated location to non-shielded children. We must ensure that medically complex patients have their oral health needs met as an integrated part of their general health thus minimising the need for additional contacts in the dental environment. Mini Mouth Care Matters¹¹ is essential for all in-patients.

10. Management of dental trauma

The aim of trauma management should be to minimise the number of visits required and the number of AGPs provided. Outcomes should be optimised by providing evidence-based initial management with low risk of complications requiring further intervention. Clinicians should refer to the BSPD consensus guidelines on the management of dental trauma in relation to the COVID-19 pandemic.¹²

For avulsed teeth, clinicians should assess the likely prognosis of the tooth prior to replantation. The extra-oral dry time, total extra-oral time, degree of tooth maturity, patient co-operation and time until extirpation can be performed should be considered prior to replantation.

Consideration should be given to the placement of single visit MTA or bio ceramic material in non-vital immature incisor teeth.

11. Safeguarding

Our responsibilities to safeguard children and young people continue during the pandemic and its aftermath. Be aware that our patients may be exposed to increased risks of abuse or neglect during lockdown, particularly of witnessing domestic abuse. If you have concerns that a child is being abused or neglected, do not hesitate to seek further advice from usual sources.¹³

12. Preparation of the patient prior to face-to-face contact

- Ask both child and escort about a history of cough, and/or fever, self-isolation and loss
 of taste/smell for anyone in their household. For children, also ask about gastrointestinal
 symptoms and hand/foot lesions. Non-urgent treatment for children who are displaying
 COVID-19 symptoms should be delayed.
- It is recommended that paediatric patients have only one accompanying adult with them. Ideally, this will be a person with parental responsibility (PPR) who is not pregnant, however if this is not possible, for example, because the PPR is isolating, the child can be brought by a responsible adult and the PPR should be contacted by telephone. Local guidelines for the obtaining of informed consent should be followed.
- Patient preparatory resources are available on the British Society of Paediatric Dentistry website.¹⁴ These include leaflets and social stories to explain the need for increased Personal Protective Equipment (PPE).
- Consideration should be given to history taking via digital means prior to attendance to minimise face-to-face time required in the clinic.

13. Resources to support self-care

Patients should be encouraged to perform optimal self-care in order to minimise the development of new disease. Use of digital health technology can be used to deliver and reinforce key prevention messages. The following videos deliver key information in line with *Delivering Better Oral Health*¹ and can be freely distributed and placed on practice websites or social media pages if used in their entirety:

- 0-3 video https://youtu.be/owbp5F0K45c
- 3-6 video www.youtube.com/watch?v=IQE4xxk1r5g
- 7+ video www.youtube.com/watch?v=GHS27DHyli0

Clinicians may also wish to signpost to oral health apps listed in the NHS Apps Library such as Brush DJ.¹⁵ Health technology has been shown to motivate positive behaviour change.

14. Workforce issues

Undoubtedly, in the recovery phase, there will be significant workforce issues that may challenge our capacity to provide dental care for children and young people. These may include:

- Temporary/permanent reductions in the overall availability of dental team members because of shielding, self-isolating, child-care demands, recovery from COVID-19 illness and mental health considerations.
- The need to change working patterns, such as extending the working day, to compensate for changed booking schedules as a result of national COVID-19 guidelines.
- The impact on undergraduate and postgraduate clinical training which will have serious longer-term implications for the workforce.

In addition, there are existing workforce challenges with insufficient Specialists and Consultants in Paediatric Dentistry able to manage the current population disease levels and demand for treatment. Oral health needs assessments should be updated in order to better understand this shortfall and facilitate workforce planning.

15. References

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