DENTAL PROCEDURES:
SAFETY AND QUALITY PROTOCOL

SmileTrain | fdi FDI World Dental Federation

DENTAL PROCEDURES:
SAFETY AND QUALITY PROTOCOL

Purpose

Patient safety is our number one priority. This protocol describes detailed requirements that must be met by healthcare organizations providing dental care for people born with clefts. The following requirements outline important policies and procedures to ensure safe treatment and care for all Smile Train patients.

Part 1: Patient Dental Records

REQUIREMENT	
1.1	**DOCUMENTATION STANDARDS** • Register all patients undergoing dental care with a Smile Train partner team appropriately in Smile Train Express (www.smiletrainexpress.org). • Patient dental records must include medical and dental history, intra- and extra- oral assessment, study models, photographic and radiographic assessment, dental risk assessment and screening (caries, periodontal disease and sleep apnea), diagnosis and details of discussion with the patient and/or parent (guardian). • Standardized forms and templates shall be used for patient assessments and documentation in dental records. Documentation must be clear, legible, and contemporaneous.
1.2	**EVALUATION OF DENTAL CARE** • Where possible, have regularly scheduled team meetings when key members of the cleft and dental team (paediatric dentists, orthodontists, oral health educators, surgeons, paediatricians, speech services providers and other comprehensive care specialists) review all patient records, develop treatment plans for the patient, discuss outcomes and treatment results appropriate to the patient's age and developmental stage.

Part 2: Assessment

REQUIREMENT

2.1 **PATIENT EVALUATION**

- A thorough medical and dental history must be received from each patient. Referrals should be made for proper diagnosis and treatment if necessary. Pre-procedural preparation shall include education to patients and care providers, detailed information regarding planned procedures, and post-procedural care, identification of medical and dental risk factors and dental disease preventative advice and care (such as 3x/monthly scaling and polishing, fluoride therapy and fissure sealing).
- Ionization radiation exposure to patients shall be limited or minimized by following the ALARA (As Low as Reasonably Achievable) Principle.
- Each oral health professional providing dental services shall formulate policies and procedures that clearly outline the management of life-threatening emergencies and care. These shall minimally include, at a minimum, airway obstruction, cardiopulmonary and anaphylactic emergencies and other unanticipated complications.
- Patient informed consent shall be obtained from the patient/parent/grandparent/legal guardian through a defined process and carried out by trained staff in a manner and language the patient can understand.

Part 3: Specific Clinic Requirements

REQUIREMENT

3.1 **ORGANIZATIONAL REQUIREMENTS**

- Each oral health professional providing dental care shall have adequate equipment for safe, effective and efficient service to patients, including appropriate sterilization equipment, diagnostic and radiographic equipment (where possible) and supplies.
- If applicable, valid contracts for contracted services, e.g. hazardous waste removal, laboratory services, laundry, cleaning, sterilization, radiographic and photographic procedures, shall be maintained. A process to assure that contracted services are monitored for quality and patient safety shall be in place.
- A Safety Management Program must be established to manage risks in the environment and reduce the risk of injury to patients, staff and visitors.
- Risk assessment / evaluation shall be carried out for monitoring radiation exposure to the staff (where applicable).

3.2 STERILIZATION REQUIREMENTS

- Written policies and procedures on sterilization and manufacturer reprocessing instructions for reusable instruments shall be available to ensure reusable patient care instruments and devices are reprocessed appropriately.
- The sterilization policy shall cover all the details and steps from collecting dirty instruments, transportation, cleaning, chemicals used and their dilutions, packaging and sterilization and storage.
- The sterilization area shall consist of a de-contamination zone and a clean working zone.
- Instruments shall be thoroughly cleaned according to manufacturer instructions and visually inspected for residual contamination before sterilization.
- Dental hand pieces (including the low-speed motor) and other devices not permanently attached to air and waterlines are cleaned and heat-sterilized according to manufacturer instructions.
- A mechanical technique for sterilization monitoring shall include assessing cycle time, temperature, and pressure by observing the gauges or displays on the sterilizer and noting these parameters for each load (if applicable). Use of sterilization monitoring strips or self-monitoring sterilization pouches are recommended.
- After sterilization, clean supplies and instruments shall be stored in closed or covered cabinets and in such a way that sterility is not compromised.
- Provisions for work-practice controls that minimize contact with sharp instruments, e.g. long-handled brush, and appropriate personal protective equipment (PPE), e.g. puncture- and chemical-resistant utility gloves, shall be available.
- Healthcare professionals responsible for reprocessing reusable dental instruments and devices shall be appropriately trained upon hiring, at least annually and whenever new equipment and processes are introduced.

3.3 DENTAL WATERLINES

- Dental unit waterline treatment products/devices are used to ensure the water meets local regulatory standards for drinking water for routine dental treatment output water.
- Manufacturer recommendations shall be followed for the method of maintaining an acceptable water quality, water delivery system and the recommended frequency of monitoring.
- Appropriate measures should be taken to control formation of biofilm in waterlines and to control legionella bacteria.

3.4 SPECIFIC CLINICAL REQUIREMENTS

- Staff must have an annual course in emergency life support and management of medical emergencies. Only qualified credentialed oral health professionals with current certification in their country may provide medical emergency support.
- All clinical dental areas should have immediate access (within the first minutes of a cardiorespiratory arrest) to oxygen, resuscitation equipment for airway management including suction, and an automated external defibrillator (AED). The standard AED sign should be used in order to reduce delay in a defibrillator in an emergency. For more information, please visit www.resus.org.uk/defibrillators/standard-sign-for-aeds/
- All primary dental care staff must have a means of calling for immediate help, e.g. internal or external landline telephone, mobile telephone with a reliable signal, alarm bell.
- Primary dental care staff should be trained to use the available equipment according to their expected roles.
- Staff must be familiar with the location of all resuscitation equipment within their working area.
- Responsibility for checking resuscitation equipment rests with the staff at the dental facility where the equipment is held. This process should be designated to named individuals, with reliable arrangements for cover in case of absence. The frequency of checks will depend upon local circumstances but should be at least weekly. Checking should be the subject of a local audit.
- The manufacturer's instructions must be followed regarding the use, storage, servicing and expiry of emergency drugs and equipment.
- A planned replacement programme should be in place for disposable equipment items that have been used or that have expired.
- PPE (e.g. gloves, aprons, eye protection, must be available according to local policy.

Key point

- All patients must wear protective eye wear during appointments.

- Oxygen cylinders should be easily portable but also allow adequate flow rates (for example 15 liters per minute) until an ambulance arrives or until the patient fully recovers. Consider what size cylinder to use and whether you need a second one in case the first one is at risk of running out.

3.5 **INFECTION PREVENTION AND CONTROL GUIDANCE FOR DENTAL PRACTICE DURING THE CORONAVIRUS DISEASE 2019 (COVID-19) PANDEMIC**

Key Points

- Recognize dental settings have unique characteristics that warrant specific infection control considerations.
- Prioritize the most critical oral healthcare services and provide care in a way that minimizes harm to patients from delaying care and harm to personnel and patients from potential exposure to SARS-CoV-2 infection.
- Proactively communicate to both personnel and patients the need for them to stay at home if sick.
- Know the steps to take if a patient with COVID-19 symptoms enters your facility.

Dental practices should balance the need to provide necessary services while minimizing risk to patients and oral health professionals (OHP). OHPs should regularly consult their state dental boards and national or local health departments for current local information for requirements specific to their jurisdictions, including recognizing the degree of community transmission and impact, and their region-specific recommendations.

Essential reading: https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html

Part 4: Dental Care Requirements

REQUIREMENT

4.1 **QUALIFIED CLINICAL PROFESSIONALS**

- Only qualified credentialed oral health professionals with current certification in their country may provide dental care for Smile Train patients.
- Oral health professionals should be adequately supported in the dental practice should a medical emergency arise.

4.2 **SUPPORT AND FOLLOW-UP**

- Regular phone calls will be made to the patient and parents (where applicable) to find out how they are coping with the psychosocial effect of having a child with cleft and maintaining their oral health.
- Regular recalls should be made to ensure motivation.

Part 5: Quality Improvement and Monitoring Requirements

REQUIREMENT

5.1 QUALITY IMPROVEMENT

- Each oral health professional shall establish a quality assurance/improvement program to monitor and review the quality of services provided by the dental services facility. (Scaling and polishing, fluoride therapy and fissure sealing).
- Each oral health professional shall establish and approve a program for quality and safety that includes both patient and staff and includes risk management and quality control activities.
- All staff members shall continuously participate in risk management and quality improvement activities.
- 5 and 10-year outcome audit to include decayed, missing and filled teeth (DMFT) as a measure of caries experience.
- End of treatment audits should be completed.

Part 6: Guidelines on the Provision of Sedation and General Anesthesia

6.1 GENERAL INFORMATION

The administration of local anesthesia, sedation, and general anesthesia are an integral part of oral healthcare. Patients should always be treated using behavioral management techniques and local anesthesia as a first approach. Smile Train and FDI World Dental Federation are committed to the safe and effective use of these modalities by appropriately trained and certified oral health professionals in the safest of locations.

Clinics providing sedation (oral, inhalation or general anesthetic) must adhere to their regional guidelines and provide the level of support, training and emergency resuscitation equipment and medication specified.

Part 7: Medications or Minimum Medications Required

These medications are recommended to manage the most common medical emergencies encountered in dental practice. Clinics should check their local regulations for a definitive list of emergency drugs:

Emergency Drug	Medical Emergency Indicated	Essential/ Desirable/Optional
Adrenaline/epinephrine injection, adrenaline 1:1000, (adrenaline 1 mg/mL as acid tartrate)	Anaphylaxis	Essential
Antihistamine (oral or IM)	Allergic reactions	Essential
Aspirin dispersible tablets (300 mg)	Myocardial infarction	Essential
Glucose tablets or gel (for administration by mouth)	Hypoglycemia	Essential
Glyceryl trinitrate sublingual spray (400 micrograms/ metered dose)	Angina pectoris	Essential
Salbutamol aerosol inhalation (100 micrograms/metered inhalation)	Asthma, anaphylaxis	Essential
Glucagon injection (1mg)	Diabetic hypoglycemia with loss of consciousness	Essential
Midazolam (10mg)	Status epilepticus	Desirable

Minimum Equipment Requirement

FOR MEDICAL EMERGENCIES IN THE DENTAL SETTING

Airway and Breathing

Item	Suggested Availability	Essential/ Desirable/Optional
Personal protective equipment—gloves, aprons, eye protection	Immediate	Essential
Pocket mask with oxygen port	Immediate	Essential
Portable suction e.g. Yankauer	Immediate	Essential
Oropharyngeal airways sizes 0,1,2,3,4	Immediate	Essential
Self-inflating bag with reservoir (adult)	Immediate	Essential
Self-inflating bag with reservoir (child)	Immediate	Essential
Clear face masks for self-inflating bag (sizes 0,1,2,3,4)	Immediate	Essential
Oxygen cylinder (minimum of five litres)	Immediate	Essential
Oxygen masks with reservoir	Immediate	Essential

Item	Suggested Availability	Essential/ Desirable/Optional
Pocket mask with oxygen port	Immediate	Essential
Oxygen tubing	Immediate	Essential

Circulation

Item	Suggested Availability	Comments	Essential/ Desirable/Optional
Automated external defibrillator (AED)	Immediate	Type of AED and location determined by a local risk assessment. In places with numerous clinics, one AED per floor/level. Consider facilities for paediatric use, especially for practices that treat children.	Essential
Adhesive defibrillator pads	Immediate	Spare set of pads also recommended.	Essential
Razor	Immediate	n/a	Essential
Scissors	Immediate	n/a	Essential

Recognizing that patient safety is always our number one priority, I have read Smile Train and FDI's Dental Procedures: Safety and Quality Protocol, and certify that

_____ meets and will adhere to these requirements.

Organization/hospital/clinic

_____ _____

Signature *Printed Name*

_____ _____

Title *Date*

Further Reading

Guidance for dental clinics. Infection prevention and control. Centers for Disease Control and Prevention. Updated December 1, 2020. Accessed June 18, 2021. https://www.cdc.gov/oralhealth/infectioncontrol/index.html

Content developed by the Oral Health in Comprehensive Cleft Care Task Team:
P. Mossey, Muthu MS, S. Yan, M. Campodonico, L. Orenuga

This resource was produced as part of a partnership between FDI World Dental Federation and Smile Train, with support from GlaxoSmithKline Consumer Healthcare (GSK CH). No editorial control, apart from ensuring compliance with legal and regulatory considerations/requirements, has been exercised by GSK CH. Funding for the development of this educational resource was provided by GSK CH.

SmileTrain

fdi FDI World Dental Federation

Supported by

gsk GlaxoSmithKline