

# 2024 DENTAL ASSISTING

## Program Standards

### CONTENT STANDARD 1.0: PROFESSIONAL ORGANIZATIONS AND LEADERSHIP

#### Performance Standard 1.1: Student Leadership in Career Technical Student Organizations (CTSO) and Professional Associations

- 1.1.1 Explore the role of professional organizations and/or associations in the Dental Assisting Industry.
- 1.1.2 Define the value, role, and opportunities provided through career technical student organizations.
- 1.1.3 Engage in career exploration and leadership development.

### CONTENT STANDARD 2.0: DENTAL PROFESSIONS

#### Performance Standard 2.1: Introduction to the Dental Field

- 2.1.1 Describe the history of dentistry and the contributions made to modern dentistry.
- 2.1.2 Describe professional characteristics necessary to become a dental health care worker (DHCW).
- 2.1.3 List members of the dental team, describing their roles.
- 2.1.4 Describe dental specialties and related procedures.
- 2.1.5 Identify career pathways in the dental field.
- 2.1.6 Describe education and credential requirements for the dental assisting career pathway and members of the dental team.

#### Performance Standard 2.2: Patient Relations

- 2.2.1 Conduct patient reception and processing for an appointment.
- 2.2.2 Demonstrate patient communication skills (e.g., reviewing a MDHX medical dental history, post-operative instructions).
- 2.2.3 Identify dental terminology and abbreviations.
- 2.2.4 Communicate treatment plan options and financial arrangements.
- 2.2.5 Manage patient referrals to other dental or medical specialists.

### CONTENT STANDARD 3.0: LAW AND ETHICS

#### Performance Standard 3.1: Legal and Ethical Considerations

- 3.1.1 Describe the State Dental Practice Act and the roles of the Board of Dentistry.
- 3.1.2 Compare levels of supervision for auxiliaries.
- 3.1.3 Describe requirements for reporting abuse and neglect.
- 3.1.4 Describe Health Insurance Portability and Accountability Act (HIPAA) regulations.
- 3.1.5 Describe the professional code of conduct.

#### Performance Standard 3.2: Risk Management

- 3.2.1 Describe the significance of the medical and dental health record.
- 3.2.2 Describe OSHA and CDC guidelines and the need for compliance.
- 3.2.3 Describe the necessity for appropriate consent (e.g., implied, informed, written, oral, patient refusal) for dental treatment.
- 3.2.4 Describe the standard of care (e.g., fraud, negligence).

### CONTENT STANDARD 4.0: ORAL HEALTH AND PREVENTION OF DENTAL DISEASE

#### Performance Standard 4.1: Oral Health

- 4.1.1 Define early childhood caries (ECC) and contributing factors.
- 4.1.2 Describe the caries disease process.
- 4.1.3 Describe the periodontal disease process.

#### Performance Standard 4.2: Nutrition

- 4.2.1 Identify cariogenic foods (e.g., frequency, exposure).

4.2.2 List the components of a dietary analysis as it relates to orthodontics, post-surgical procedures, recurrent and rampant caries, and periodontal disease.

**Performance Standard 4.3: Prevention**

- 4.3.1 Describe the types (e.g., topical, systemic) and benefits of fluoride.
- 4.3.2 Identify dentifrices and oral rinses.
- 4.3.3 Identify brushing techniques and intraoral aids.
- 4.3.4 Instruct a patient with oral hygiene instruction (e.g., brushing, flossing, oral aids).

**Performance Standard 4.4: Oral Pathology**

- 4.4.1 Identify anomalies of the oral cavity.
- 4.4.2 Describe eating disorders and how they relate to oral health.

**CONTENT STANDARD 5.0: INFECTION PREVENTION AND CONTROL**

**Performance Standard 5.1: Prevention of Disease Transmission**

- 5.1.1 Describe infectious diseases (e.g., modes of transmission, chain of infection, cross contamination).
- 5.1.2 Demonstrate hand hygiene according to ADA, CDC, and OSHA guidelines.
- 5.1.3 Demonstrate personal protective equipment (PPE) requirements (e.g., select, prepare for reuse, don and doff sequence, patient safety precautions, disposal) according to ADA, CDC, and OSHA guidelines.
- 5.1.4 Demonstrate use of barriers (e.g., intraoral, equipment, treatment room).
- 5.1.5 Clean and disinfect treatment areas and laboratories (e.g., breakdown and setup of room, equipment, clinical contact surfaces, position indicating and beam alignment devices, critical and semi-critical instrument sterilization) according to ADA, CDC, and OSHA guidelines.
- 5.1.6 Prepare and use chemical disinfectants.

**Performance Standard 5.2: Instrument Processing**

- 5.2.1 Describe workflow patterns (e.g., transport contaminated instruments).
- 5.2.2 Identify methods of pre-cleaning, cleaning, and disinfection.
- 5.2.3 Identify methods of sterilization (e.g., chemical, dry heat, steam).
- 5.2.4 Prepare instruments for sterilization (e.g., package, label, load).
- 5.2.5 Store instruments, maintaining sterility.

**CONTENT STANDARD 6.0: OCCUPATIONAL SAFETY AND ADMINISTRATION PROTOCOLS**

**Performance Standard 6.1: OSHA Bloodborne Pathogens Standard**

- 6.1.1 Identify engineering and work practice controls.
- 6.1.2 Demonstrate needle and sharps safety handling procedures.
- 6.1.3 Identify protocols for post-exposure management (e.g., sharps, aerosols, chemicals).
- 6.1.4 Identify protocols for record keeping and training (e.g., biological monitoring, water and vacuum line management, employee training, immunizations).

**Performance Standard 6.2: OSHA Hazard Communication Standard**

- 6.2.1 Identify chemical exposure/hazard and first aid.
- 6.2.2 Describe the contents and requirements for safety data sheets (SDS).
- 6.2.3 Describe protocols for using secondary containers.
- 6.2.4 Describe federal regulations (e.g., FDA, EPA).
- 6.2.5 Describe infection prevention and safety policies (e.g., exposure control plan, infection control breaches, quality assurance or quality improvement).

**Performance Standard 6.3: Waste Management**

- 6.3.1 Identify waste management (e.g., sharps, biohazards, chemicals, infectious waste).
- 6.3.2 Identify waste management protocol according to local, state, and federal regulations.

**CONTENT STANDARD 7.0: ANATOMY AND PHYSIOLOGY**

**Performance Standard 7.1: Head, Neck, and Oral Cavity**

- 7.1.1 Identify hard tissues (e.g., bones, tooth tissues).
- 7.1.2 Identify soft tissues (e.g., muscles, tongue, glands, sinuses).

7.1.3 Identify landmarks of the face and oral cavity.

**Performance Standard 7.2: Tooth Anatomy, Morphology, and Physiology**

- 7.2.1 Identify tooth surfaces.
- 7.2.2 Identify the Universal and Palmer numbering systems.
- 7.2.3 Identify the characteristics of tooth morphology (e.g., cusp, roots, grooves, pit, fissures).
- 7.2.4 Identify classification of occlusion.

**Performance Standard 7.3: Body Systems**

- 7.3.1 Identify the circulatory and lymphatic systems.
- 7.3.2 Identify the muscular/skeletal system.
- 7.3.3 Identify the nervous system.

**CONTENT STANDARD 8.0: EMERGENCIES**

**Performance Standard 8.1: Management of Dental and Medical Emergencies**

- 8.1.1 Participate in a health care provider CPR and first aid training program.
- 8.1.2 Take and record vital signs.
- 8.1.3 Identify medical emergencies (e.g., syncope, hypoglycemic event, bleeding, seizure, cardiovascular incident, choking and abnormal breathing situation).
- 8.1.4 Describe response to medical emergencies relating to specific medical conditions.
- 8.1.5 Identify dental emergencies (e.g., trauma, pain, broken tooth).
- 8.1.6 Describe components and protocols of the medical emergency kit.
- 8.1.7 Describe protocol for oxygen administration.

**CONTENT STANDARD 9.0: PHARMACOLOGY AND PAIN MANAGEMENT**

**Performance Standard 9.1: Dental Anesthesia**

- 9.1.1 Identify the role of the dental assistant in pain management.
- 9.1.2 Identify the types of anesthesia used in dental procedures.
- 9.1.3 Identify indications and contraindications for local anesthetics, vasoconstrictors, and sedations.
- 9.1.4 Demonstrate placing topical anesthetic.
- 9.1.5 Demonstrate assembling and disassembling an anesthetic syringe.
- 9.1.6 Identify the components of a prescription.
- 9.1.7 Interpret a prescription.

**CONTENT STANDARD 10.0: DENTAL ASSISTING SKILLS**

**Performance Standard 10.1: Collecting and Recording of Clinical Data**

- 10.1.1 Chart (e.g., symbols, abbreviations, soft tissue exams) clinical findings.
- 10.1.2 Maintain patient treatment records (e.g., photos, models, medical history).
- 10.1.3 Manage patients with special needs.

**Performance Standard 10.2: Preparation for Dental Treatment**

- 10.2.1 Prepare the treatment room for a patient.
- 10.2.2 Prepare armamentarium for specified procedures in sequence of use.

**Performance Standard 10.3: General Chairside Assisting Skills**

- 10.3.1 Demonstrate ergonomic techniques when working independently and with patients.
- 10.3.2 Maintain clear field of operation (e.g., oral evacuation devices, air/water syringe and other isolation techniques).
- 10.3.3 Perform a single and two-handed instrument transfer.
- 10.3.4 Demonstrate instrument grasps.
- 10.3.5 Provide pre-operative and post-operative instructions.
- 10.3.6 Demonstrate four-handed dentistry in treatment procedures.
- 10.3.7 Identify dental equipment.
- 10.3.8 Identify dental instruments and their uses.
- 10.3.9 Describe the steps in restorative procedures.
- 10.3.10 Clean removable dental appliances (e.g., denture, partials, nightguard).
- 10.3.11 Describe placement and removal of the retraction cord.

- 10.3.12 Describe the use of technologies (e.g., CAD/CAM, intraoral scanner, intraoral camera).
- 10.3.13 Describe procedures to take intraoral and extraoral photographs.
- 10.3.14 Apply desensitizing agents.
- 10.3.15 Describe placement of a dental dam.
- 10.3.16 Describe the application of fluoride agents (e.g., varnish).
- 10.3.17 Describe placement of matrix systems.
- 10.3.18 Describe removal of excess cement.
- 10.3.19 Obtain preliminary impressions.
- 10.3.20 Fabricate trays (e.g., bleaching trays, mouth guard trays, custom trays).
- 10.3.21 Describe procedures to remove sutures.
- 10.3.22 Describe orthodontic functions (e.g., placing and removing ties).
- 10.3.23 Describe supragingival coronal polishing with the use of rubber cup or brush.
- 10.3.24 Describe the application of pit and fissure sealants.
- 10.3.25 Describe procedures to fabricate and place temporary crowns.

#### **CONTENT STANDARD 11.0: DENTAL MATERIALS**

##### **Performance Standard 11.1: Preparation of Materials**

- 11.1.1 Describe procedures for mixing and placement of bases and liners.
- 11.1.2 Assist with the application of etchant and bonding agents.
- 11.1.3 Describe expectations to assist with placement and removal of provisional restorations.
- 11.1.4 Prepare, mix, and deliver restorative materials.
- 11.1.5 Prepare, mix, and deliver dental cements.
- 11.1.6 Prepare, mix, and deliver lab materials.
- 11.1.7 Prepare, mix, and deliver impression materials.

#### **CONTENT STANDARD 12.0: RADIOLOGY**

##### **Performance Standard 12.1: Radiology Techniques and Practices**

- 12.1.1 Describe anatomical landmarks, conditions, and materials observed on images (e.g., apical pathology, caries, dental anomalies such as supernumerary teeth, dental implants, edentulous arches, localization of impacted teeth and foreign objects, periodontal conditions, sinus areas, temporomandibular joint).
- 12.1.2 Describe the purpose of dental images (e.g., periapical, bitewing, full mouth series, full mouth survey, occlusal, panoramic, cephalometric, cone-beam computed tomography [CBCT]).
- 12.1.3 Identify sizes and types of dental radiographs.
- 12.1.4 Describe techniques to acquire dental images through patient dental history review, intraoral techniques (e.g., paralleling, bisecting angle) and extraoral techniques (e.g., panoramic, cephalometric, CBCT basics).
- 12.1.5 Identify components of the x-ray machine.
- 12.1.6 Identify types of radiographic receptors.
- 12.1.7 Identify function of receptor device holders.
- 12.1.8 Describe technique for making modifications based on anatomical variations and clinical conditions (e.g., tori, cleft palate, shallow palate, narrow arch).
- 12.1.9 Describe error correction (e.g., unexposed sensor, underexposed sensor, overexposed sensor, sensor placement, position-indicating or beam alignment device placement, horizontal angulation or overlapped contacts, vertical angulation or distorted image, artifacts and foreign objects, sensor integrity).
- 12.1.10 Describe the purpose and maintenance of radiographic equipment (e.g., sensors [wired or wireless, PSP, CMOS, CCD], x-ray unit [e.g., control panel, extension arm, tube head], computer [e.g., monitor, keyboard, mouse]).
- 12.1.11 Manage patients verbally and non-verbally during radiology procedures.
- 12.1.12 Describe how to mount and view images (e.g., anatomic landmarks, anatomic order, radiopaque vs. radiolucent, tooth names, universal primary and permanent tooth



numbers, orientation [e.g., anterior/posterior, mesial/distal, maxillary/mandibular, facial/lingual]).

12.1.13 Describe the legal requirements for maintaining dental images (e.g., HIPAA, retention, transfer).

## Performance Standard 12.2: Radiation Protection

- 12.2.1 Describe the factors affecting x-ray production (e.g., kVp, mA, exposure time, dose).
- 12.2.2 Describe radiation characteristics (e.g., wavelength, frequency, velocity).
- 12.2.3 Describe primary and scatter (i.e., secondary) radiation physics (e.g., absorption, penetrating power, travel).
- 12.2.4 Describe radiation biology (e.g., cell and tissue radiation sensitivity, acute or cumulative exposure, latent and recovery effect periods, short-term or long-term, genetic and somatic biological effects, units of radiation measurement).
- 12.2.5 Demonstrate radiation protection procedures for the oral healthcare provider and patient.
- 12.2.6 Identify maximum permissible dose (MPD) of radiation exposure.
- 12.2.7 Describe factors that affect radiation protection (e.g., filtration, shielding, collimation, position indicating device [PID], beam alignment device).
- 12.2.8 Describe informed consent or patient refusal of exposure to radiation.
- 12.2.9 Describe protocol for suspected x-ray unit malfunctions.

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## Program Standard Revision: HPPS Dental Assisting