



# DENTAL ASSISTING 51.0600.00

## TECHNICAL STANDARDS

An Industry Technical Standards Validation Committee developed and validated these standards on November 11, December 5, January 9, and February 23, 2021. The Arizona Career and Technical Education Quality Commission, the validating authority for the Arizona Skills Standards Assessment System, endorsed these standards on May 19, 2021.

Note: Arizona's Professional Skills are taught as an integral part of the Dental Assisting program.

**The Technical Skills Assessment for Dental Assisting is available SY2022-2023.**

Note: In this document i.e. explains or clarifies the content and e.g. provides examples of the content that must be taught.

### STANDARD 1.0 DEMONSTRATE DENTAL OFFICE BUSINESS PROCEDURES

- 1.1 Explain the importance of patient scheduling according to procedure time requirement
- 1.2 Describe the function of a recall system
- 1.3 Prepare and maintain patient clinical records
- 1.4 Prepare and maintain patient financial records
- 1.5 Prepare and maintain inventory control and purchasing
- 1.6 Recognize common terminology associated with third party payments
- 1.7 Describe public relations responsibilities of the dental team
- 1.8 Use front office business equipment (i.e., phone, computer, scanner, etc.)
- 1.9 Maintain the dental office environment
- 1.10 Receive and dismiss patients and visitors
- 1.11 Identify psychological considerations influencing behaviors of dental patients
- 1.12 Summarize dental practice business finances (i.e., accounts receivable, collections, overhead expenses, etc.)

### STANDARD 2.0 USE INFORMATION TECHNOLOGY TOOLS COMMONLY FOUND IN DENTAL SETTINGS

- 2.1 Demonstrate basic computer hardware and software skills
- 2.2 Identify technological tools to expedite workflow (i.e., word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, internet applications, virtual platforms, etc.)
- 2.3 Interpret information from electronic patient documents (e.g., referrals, lab tracking slips, prescriptions, and diagnostic data) and direct to appropriate entity for processing/treatment
- 2.4 Employ dental management software to access, create, manage, integrate, and store dental practice information to increase workplace efficiency

### STANDARD 3.0 DEMONSTRATE DISEASE PREVENTION, INFECTION CONTROL, AND WASTE MANAGEMENT PROCEDURES

- 3.1 Differentiate between pathogenic and nonpathogenic microorganisms
- 3.2 Classify pathogens and their modes of disease transmission
- 3.3 Describe infectious diseases and their relationship to patient safety and occupational risk
- 3.4 Examine the need for immunizations for dental healthcare workers as a protection against infectious diseases
- 3.5 Perform hand hygiene protocols
- 3.6 Select and use personal protective equipment as needed (i.e., gloves, mask levels, face shields, eyewear, etc.)
- 3.7 Demonstrate aseptic and nonaseptic techniques used in dentistry (i.e., sterile/nonsterile, clean/dirty, treatment and surgical rooms, reception area, dental lab, etc.)
- 3.8 Select methods of aerosol management based on procedure (i.e., air/water combination, rubber dam, low-volume and high-volume evacuation systems, etc.)
- 3.9 Perform instrument processing and sterilization

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- 3.10 Apply methods of surface cleaning and disinfection
- 3.11 Comply with state and federal regulations for infection control and disease prevention
- 3.12 Comply with the OSHA Bloodborne Pathogens Standard (29CFR-1910.1030)
- 3.13 Adhere to the OSHA Hazard Communications Standard (29CFR-1910.1200)
- 3.14 Distinguish among agencies with guidelines for infection control (i.e., OSHA, CDC, OSAP, NIOSH, ADA, etc.)

#### **STANDARD 4.0 IDENTIFY STRUCTURES AND FUNCTIONS OF ORAL, HEAD, AND NECK ANATOMY AND RELATED DENTAL PATHOLOGIES**

- 4.1 Describe structures and functions of head and neck anatomy including bones, muscles, sinuses, salivary glands, nerve, lymphatic system, and blood vessels
- 4.2 Describe embryonic development of head, oral cavity, and teeth
- 4.3 Identify dental anatomy, tooth morphology, tooth surfaces, and periodontium
- 4.4 Select oral structures and landmarks
- 4.5 Differentiate among dental numbering systems
- 4.6 Recognize and describe oral pathological conditions and their development (e.g., gingivitis, caries, periodontal disease, classifications of occlusion, and hard and soft tissue abnormalities)

#### **STANDARD 5.0 MAINTAIN AND UTILIZE DENTAL INSTRUMENTS AND EQUIPMENT**

- 5.1 Operate and maintain operator, lab, and sterilization equipment (i.e., autoclave, ultrasonic, lathe, model trimmer, etc.)
- 5.2 Identify types and functions of dental instruments used in a general dental practice (i.e., restorative, surgical, prosthodontic, hygiene, periodontal, endodontic, etc.)
- 5.3 Maintain dental instruments and handpieces emphasizing their value to the practice/treatment
- 5.4 Operate and maintain waterlines and evacuation systems

#### **STANDARD 6.0 IDENTIFY FUNCTIONS OF PHARMACOLOGY AND ANESTHESIA RELATED TO DENTISTRY**

- 6.1 Identify drug agencies and regulations (e.g., EPA, FDA, and DEA)
- 6.2 Record dispensed or prescribed drugs in the patient's clinical record
- 6.3 Recognize drug references to identify drug actions, side effects, indications, and contraindications
- 6.4 Identify common drugs used in dentistry by their classifications (i.e., antibiotics, pain management, OTC, therapeutics, local anesthetics, etc.)
- 6.5 Identify delivery methods of topical anesthesia
- 6.6 Prepare syringes for the administration of local anesthetics [e.g., needle selection (block, infiltration, injection site) and use of vasoconstrictor]
- 6.7 Demonstrate safe handling of sharps [e.g., needles (contaminated and sterile) and anesthetic cartridges]
- 6.8 Monitor patients and identify precautions and legal guidelines in the use of nitrous oxide-oxygen conscious sedation

#### **STANDARD 7.0 MANIPULATE DENTAL MATERIALS**

- 7.1 Mix and pour gypsum and trim models and casts (i.e., study models, bleaching tray casts, denture models, etc.)
- 7.2 Manipulate restorative materials and identify their uses and properties (i.e., amalgam, composite, etc.)
- 7.3 Manipulate dental cements and identify their uses and properties (i.e., permanent, temporary, interim restoratives, etc.)
- 7.4 Differentiate the properties and uses of impression materials, manipulate impression materials, and obtain an impression
- 7.5 Identify properties and uses of acrylics and/or thermoplastics (i.e., used in the fabrication of bleach trays, retainers, night guards, custom impression trays, etc.)
- 7.6 Identify properties and uses for provisional materials and describe methods for fabrication of provisionals and preformed crowns
- 7.7 Identify properties and uses and manipulate commonly used waxes (i.e., utility, baseplate, etc.)
- 7.8 Clean and polish removable dental appliances
- 7.9 Identify properties and uses of abrasive agents used to polish coronal surfaces of natural and restored teeth and appliances

#### **STANDARD 8.0 DEMONSTRATE DENTAL RADIOGRAPHIC PROCEDURES**

- 8.1 Describe the history, physics, and biological effects of ionizing radiation
- 8.2 Apply ALARA Principles for operator and patient safety (e.g., shielding, distance, proper techniques, and limited exposure by following prescription)

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- 8.3 Identify components of radiographic equipment (i.e., tube, control panel, etc.)
- 8.4 Examine radiation exposure factors, identifying errors and corrections [e.g., exposure time, milliamperage, voltage, receptor placement, Position Indication Device (PID) angulation, etc.]
- 8.5 Perform various intraoral radiographic imaging techniques (i.e., bitewing, periapical, occlusal, etc.)
- 8.6 Explain extraoral imaging techniques (i.e., panoramic, CBCT, cephalometric, etc.)
- 8.7 Identify radiographic anatomical landmarks and mount radiographic surveys (i.e., full mouth series, horizontal and vertical bitewings, pediatric exposures, etc.)
- 8.8 Interpret radiographic findings (i.e., pathologies, normal and abnormal anatomy, atypical landmarks, dental restorations, etc.)
- 8.9 Describe storage and disposal of film, processing solutions, and hazardous/regulated waste

## **STANDARD 9.0 DEMONSTRATE CHAIRSIDE PROCEDURES FOR DENTISTRY**

- 9.1 Prepare and maintain aseptic working area for intraoral/extraoral procedures
- 9.2 Apply principles of four-handed dentistry (e.g., instrument transfer, dental team and patient position, evacuation and maintenance of operating field, and ergonomics)
- 9.3 Assist with general procedures (i.e., direct and indirect restorations, simple extractions, fabrication of temporary crowns, etc.)
- 9.4 Recognize the role of the dental assistant in specialty procedures (e.g., periodontics, endodontics, oral surgery, orthodontics, public health, prosthodontics, and pediatric dentistry)
- 9.5 Prepare armamentarium (tray setup and operatory equipment) to assist in general dental procedures
- 9.6 Select and manipulate dental materials for general procedures
- 9.7 Perform visual assessment of existing oral conditions
- 9.8 Perform patient management practices (i.e., communication, comfort, assurance, etc.) to meet individual patient needs (i.e., anxiety, fear, pediatric, gag reflex, etc.)

## **STANDARD 10.0 RECORD PATIENT ASSESSMENT AND TREATMENT DATA**

- 10.1 Record medical and dental histories
- 10.2 Record existing intraoral and extraoral conditions
- 10.3 Record conditions diagnosed by the dentist
- 10.4 Record treatment plan in patient's clinical chart
- 10.5 Record treatment-related data in the patient's clinical record (e.g., treatment provided, anesthetic administered, post-operative instruction, reactions to treatment, medications administered and/or prescribed, and referrals)

## **STANDARD 11.0 DEMONSTRATE TECHNIQUES OF PREVENTIVE DENTISTRY**

- 11.1 Instruct patients on oral homecare and oral disease prevention
- 11.2 Differentiate the properties and explain the rationale for use of dental sealants
- 11.3 Differentiate the properties and explain the rationale for use of systemic and topical fluorides
- 11.4 Apply anticariogenic treatment such as topical fluoride and dental sealants
- 11.5 Perform coronal polishing procedures
- 11.6 Identify principles of nutrition essential for optimal oral health and lifestyle

## **STANDARD 12.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS**

- 12.1 Obtain, monitor, and record vital signs
- 12.2 Recognize medical conditions that may impact dental treatment
- 12.3 Recognize common emergencies, emergency preventive measures, and emergency response strategies
- 12.4 Maintain certification in cardiopulmonary resuscitation (CPR) approved by the Dental Assisting National Board (DANB)

## **STANDARD 13.0 EXAMINE THE LEGAL AND ETHICAL RESPONSIBILITIES OF DENTAL PROFESSIONALS**

- 13.1 Describe ethical considerations/obligations between the dental team-patient relationship
- 13.2 Explain risk management (i.e., OSHA, maintaining standard of care, avoiding professional negligence, recordkeeping, etc.)
- 13.3 Discuss the Arizona State Dental Practice Act as it applies to the members of the dental team
- 13.4 Follow HIPAA laws related to the practice of dentistry
- 13.5 Discuss local and state laws and rules related to the practice of dental assisting in Arizona (e.g., rules specific to supervision levels and Article 7)

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## STANDARD 14.0 KEEP CURRENT WITH SERVICES AND INDUSTRY TRENDS

- 14.1 Identify sources for up-to-date information [i.e., journals, professional organizations (i.e., ADA, ADAA, etc.), professional websites, laws/statutes, rules, etc.]
- 14.2 Identify the importance of continuing education for the profession
- 14.3 Discuss the importance of participating and belonging to professional organizations (i.e., networking, mentoring, social communication, etc.)
- 14.4 Explore opportunities and career pathways in the profession of dentistry
- 14.5 Explore certifications and credentials that support careers in dentistry (i.e., certifications and credentials offered through Arizona State Board of Dental Examiners, Dental Assisting National Board, etc.) and how to maintain them

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