

## College of Dental Surgeons of Saskatchewan (CDSS) Standard for Cone Beam Computed Tomography

The College of Dental Surgeons of Saskatchewan's Standard for Cone Beam Computed Tomography CBCT in the dental practice is divided into the following five components:

### 1. General Considerations for CBCT

- 1.1 All principles associated with all radiographic imaging, including ALARA, apply to the use of CBCT. **The use of CBCT should conform to the applicable principles outlined in the Canadian Dental Association's Position Statement on Control of X-Radiation in Dentistry.**
- 1.2 All patients must have an updated medical history and a current intraoral examination before they undergo a CBCT **scan.**
- 1.3 CBCT imaging is not to be used for "screening" purposes, and should only be used for a specific indication where other forms of imaging are not adequate. Indications for CBCT include, but are not limited to, evaluation of possible implant sites, evaluation of impacted teeth, orthodontic evaluation, evaluation of **pathological lesions in or affecting bone**, etc.
- 1.4 All staff who will be involved in the **performing CBCT imaging** must **receive training in the use of the equipment before using it on patients.**
- 1.5 **Dentists using CBCT imaging for diagnostic purposes must be currently registered in Saskatchewan, and have successfully completed a theoretical and practical training program which includes indications for CBCT imaging, acquiring CBCT scans, and interpreting and reporting of CBCT scans.**
- 1.6 All continuing education (CE) that is required by the CDSS Standard for Cone Beam Tomography may have been obtained prior to this standard coming into effect. **Documentation of any such continuing education** must be submitted to the CDSS Standards Committee for approval **prior to using CBCT equipment.** CE Credits that are required for the Standard will also count towards the overall CE requirements for licensure.

### 2. CBCT Ownership

- 2.1 Any member of the CDSS who holds a valid license may own a CBCT **unit** if the following criteria are met:

i) The CBCT unit must be registered with, and meet the requirements of, the Radiation Safety Unit, Ministry of Labour Relations and Safety, Government of Saskatchewan.

ii) The member(s) responsible for the CBCT **equipment** must have a Radiation Safety Unit Facility Permit for **it** (effective January 1, 2018).

iii) The member(s) listed on the Radiation Safety Unit **Facility Permit** must have training in **safe** operation of the CBCT **machine**. This can be obtained on site (either at time of installation or at a later date), or at an off-site location. This training must be documented.

iv) Any member(s) listed on the Radiation Safety Unit Facility Permit must have at least three (3) hours of continuing education related to CBCT every three (3) years.

v) The member(s) listed on the Radiation Safety Unit Facility Permit are responsible for arranging the appropriate ongoing maintenance and testing of the CBCT unit **in accordance with provincial regulations**.

### 3. CBCT Prescription

3.1 The CDSS member who prescribes any type of CBCT **imaging** is responsible for the ordering, acquisition, interpretation, and communication of any findings of the **imaging**.

3.2 Any member of the CDSS who holds a valid license and meets the following criteria may prescribe any CBCT designed for dental use (regardless of the imaging volume):

(i) The member must have attended a course or courses on CBCT for a minimum total of six (6) CE credits by Day Month Year (I plan for this date to be one year after the CBCT Standard is communicated to the membership). This Continuing Education **DOES NOT** include **training in safe operation of the unit see 1)iii) above**). The focus of the CE is to be directed towards indications for CBCT, radiation physics, and interpretation of normal and abnormal findings. Members are encouraged to have these CE courses pre-approved by the CDSS Standards Committee.

(ii) The member must attend a course or courses on CBCT for a minimum of six (6) CE credits every three years with the same focus as that indicated in i) above. Members are also encouraged to have these CE courses pre-approved.

(iii) The member prescribing a CBCT must ensure that the interpretation of the **scan** is done in a timely manner. This includes the completion of a suitable report (see section on Reporting) and communication of the findings to the patient and any other professionals that need to be involved in **the** patient's care.

3.3 Whenever possible, the field of view used should include only the anatomical regions required for the diagnostic purposes used to make the decision to use CBCT imaging. Unless a large field of view unit is being used, or unless they must be included for a specific diagnostic purpose, imaging the base of the skull, the cervical spine, or other anatomical areas beyond those described under "Small Field of View Imaged Volumes" under 3.1 should be avoided.

#### 4. CBCT Interpretation

4.1 As mentioned previously in this document, it is the responsibility of the dentist who prescribes the CBCT to make sure that the interpretation of the image is completed by a professional who has the proper training and credentials. The interpretation of any CBCT is the only component of the CDSS CBCT Standard that is dependent on the size of the image acquired.

(A) **Small Field of View Imaged Volumes** are those that **normally** do not measure greater than 10cm **in any dimension**. **The field of view would usually include the teeth, their supporting structures, the mandible and/or the maxillae (up to the floor of the nose)**. These image **volumes** may be interpreted by any individuals who meets one or more of the following criteria:

(i) Completion of a post-graduate program in Oral and Maxillofacial Radiology or Medical Radiology and a current license in his or her designated specialty in any Canadian or American jurisdiction.

(ii) Completion of a post-graduate program in Oral and Maxillofacial Surgery and a current license in his or her specialty in any Canadian or American jurisdiction.

(iii) Completion of a minimum two (2) day course with successful completion of an examination administered at the **end of the** course. This course is to be either administered at **or by** an accredited university or is to be approved by the CDSS Standards Committee. Any member looking to complete this portion **must do so before** December 31, 2018. However, they are encouraged to complete this in a more timely manner, or make alternative arrangements for another professional to interpret the CBCT **scans**.

(iv) Any dentist currently holding a valid license in any jurisdiction in Canada or the United States who meets the criteria outlined in iii) above. If this professional is located outside of Saskatchewan, they must have already completed the CE outlined in iii) prior to the date of the acquisition of the CBCT **unit**.

(B) **Large Field of View Imaged Volumes** are those that normally measure greater than 10cm in any dimension. The field of view may include, in addition to the structures described under “Small Field of View Imaged Volumes”, intracranial structures, the base of the skull, the temporomandibular joint, the paranasal air sinuses, the cervical spine, the neck and/or the airway spaces. These image volumes may only be interpreted by an individual who meets one or more of the following criteria:

(i) Completion of a post-graduate program in Oral and Maxillofacial Radiology or Medical Radiology and a current license in his or her designated specialty in any Canadian or American jurisdiction.

(ii) Completion of a post-graduate program in Oral and Maxillofacial Surgery and a current license in his or her specialty in any Canadian or American jurisdiction.

(iii) Any individual who feels their post-graduate education or training allows them to interpret Large Field of View CBCT images may petition the CDSS Standards Committee for authorization to interpret Large Field of View images.

## 5. CBCT Reporting

5.1 All CBCT images must have a proper report or documentation in the patient’s chart. All reports or documentation must include the following:

- (i) Patient Identification
- (ii) Name of the Prescribing Member
- (iii) Name of the Interpreting Dentist
- (iv) Date that the CBCT Scan was acquired
- (v) **Field of View** of the CBCT Scan that was acquired
- (vi) Findings from the CBCT Interpretation and diagnosis **or differential diagnosis** if possible
- (vii) Any further recommendations for follow-up imaging or other diagnostic testing **or referral/consultation**