



# The Role of Dental Hygienists, Assistants, and Office Staff in CAMBRA

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**ABSTRACT** The role of the dental team in caries management by risk assessment is critical to successful patient outcomes. Positive patient interactions and communication, proper appointment scheduling, diagnostics and data gathering, as well as implementation of noninvasive or minimally invasive procedures can be the responsibility of all members of the dental team. This article will evaluate the role of the clinical and administrative staff in maintaining a practice with a focus on disease prevention and management..

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**T**he role of the dental hygienist in implementation of caries management by risk assessment will vary by the dental practice philosophy and will vary according to the state Dental Practice Act. Hygienists are knowledgeable and prepared to contribute to risk assessment through the development of office protocols, the creation of patient literature, and the expansion of treatment recommendations. Many of the disease prevention and management procedures fall within the purview of the dental hygienist; however, only a synergistic relationship with other members of the staff will establish a comprehensive approach to CAMBRA.

The role of the dental hygienist may be the initiation of CAMBRA protocols in the office. One aspect of CAMBRA incorporation will include staff meetings about the philosophy and implementation of risk assessment and the

corresponding treatment modalities. Several initial meetings will be necessary and may include role-play exercises for the staff to become comfortable with the information and protocols (see Kutsch et al., this issue). The entire team must support the CAMBRA protocol for successful patient outcomes.<sup>1</sup>

The role of the dental hygienist may include medical history review, risk assessment, necessary radiographs, intraoral photos, saliva assessment and bacterial testing, patient education about methods to decrease the risk of dental disease, and fluoride varnish and sealant application. The dental hygienist, as an example of assessment, may use a laser fluorescence carious lesion detection device such as the DIAGNOdent by KaVo. This device when properly used may assist in the evaluation of occlusal surfaces of the teeth and has been reported to be more reliable when these surfaces are free of biofilm.<sup>2</sup>

One method for removing the organic

material is with the use of an air powder polisher. The removal of organic material is important in gathering quality information from laser or fiberoptic detection instruments. After the hygienist debrides the teeth, the surfaces are assessed and readings are recorded. The dental assistant may be involved in recording the data. This type of synergy between team members creates an environment of excellent patient care.

### Role of the Dental Assistant

The current dental practice model of the dental hygienist as an income generator/producer and the dental assistant as a support staff member can change with additional CAMBRA direct patient care duties for the dental assistant. Education and licensure can support the dental assistant with new responsibilities for an additional commitment to his or her career. The current workforce situation finds support staff available for practicing disease prevention and management.<sup>3</sup>

The dental assistant that is knowledgeable and experienced in CAMBRA can interview the patient, take diagnostic radiographs and photos, and perform saliva and bacterial testing.<sup>4</sup> Once a patient's risk status has been evaluated, the dental assistant can explain the results and offer preventive counseling to the patient. Standing orders can be relied on to provide for oral hygiene instruction, diet counseling, and instructions in the use of chlorhexidine, fluoride, and xylitol.<sup>5</sup> Chemical treatments such as chlorhexidine, fluoride, or xylitol must be communicated to the patient with an emphasis on the need to use the product exactly as prescribed. Reminder phone calls are recommended as a measure to encourage patient compliance. Additionally, the dental assistant can maintain the

necessary dental inventory for the disease prevention management protocols.

This new model creates a shift in the responsibilities of the dental assistant such that he or she would contribute to the overall office revenue, as well as become a critical and valued member of the CAMBRA team. With proper education and training, and within the rules of the state Dental Practice Act, the dental

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assistant can administer portions of the risk assessment to include saliva and bacterial testing and advising the patient of the results with an explanation of diet, nutrition, and oral hygiene modifications.

Use of a dental assistant in this practice model helps to control the cost of CAMBRA and will be reflected in reasonable patient fees while providing an increase in production for the office. The ADA Current Dental Terminology book for 2007/2008 contains billing codes for risk assessment, bacterial culturing, caries risk tests, saliva testing, nutritional counseling, fluoride varnish, and oral hygiene instructions<sup>6</sup> (TABLE 1). Strictly traditional dental practices not practicing CAMBRA may find themselves at an economic disadvantage to their contemporary colleagues who grasp the CAMBRA model and see the benefit for their patients (see Kutsch et al., this issue).

### Role of the Administrative Staff

The administrative staff is pivotal in supporting a CAMBRA prevention-focused practice. Acting as practice ambassadors, the administrative staff is often the first to be approached when patients have questions about treatment, protocols, or office philosophy. Staff may be involved with the development and production of patient brochures and newsletters. Drafts can be discussed at staff meetings or written communications can be distributed to the various office departments for feedback. The administrative staff may also be responsible for maintenance of the practice Web site. This is an excellent method to disseminate knowledge about prevention and to stimulate patient referrals.

The administrative staff is crucial in the third-party payer process. Narrative letters for benefit coding are important and necessary to ensure that patients receive optimal reimbursement for the treatment received. Additionally, the administrative staff is in a position to process financial transactions or respond if insurance benefits are denied. As dental codes struggle to keep up with science, new diagnostic codes may need to be developed. In some instances, medical codes could be employed to bill medical insurance for certain procedures. Education on billing codes is continuous.

Administrators may support the office protocols with reminder phone calls or post cards reinforcing CAMBRA information and specific patient instructions. One of the challenges patients face is remembering the steps they are to take each day to decrease the risk for caries disease infection/transmission and carious lesion progression and conversely increase the chance of prevention and lesion repair. A word on dispensing products from the dental office is worthwhile. The complex

TABLE 1

## CAMBRA-associated ADA Procedure Descriptions and Codes With Corresponding Provider

| Procedure Description   | CDT Code*                       | Denti-Cal Code                        | Provider                         |
|---|---------------------------------|---------------------------------------|----------------------------------|
| Oral eval under 3 years old   | D 0145                          | 010                                   | Dentist                          |
| Comprehensive exam new or established patient   | D 0150                          |                                       | Dentist                          |
| Exams: Periodic/limited/detailed and extensive problem-focused/limited problem-focused    | D 0120/D 0140/<br>D 0160/D 0170 |                                       | Dentist                          |
| Radiographs: Complete series/horizontal bitewings/vertical bitewings                      | D 0210 /<br>D 0274 /D 0277      |                                       | DA with CA X-ray<br>LICENSE, RDH |
| Oral/facial photographic images   | D 0350                          |                                       | DA, RDH                          |
| Collection of microorganisms for culture  | D 0415                          | 160                                   | DA, RDH                          |
| Caries susceptibility test  | D 0425                          | 160                                   | DA, RDH                          |
| Diagnostic casts  | D 0470                          |                                       | DA                               |
| Laser light florescence   |                                 |                                       | RDH                              |
| Prophylaxis adult   | D 1110                          | 050                                   | RDH                              |
| Prophylaxis child   | D 1120                          | 049                                   | RDH                              |
| Toothbrush prophylaxis (to age 5) including fluoride                                      | D 1120                          | 061                                   | RDA, RDH                         |
| Prophylaxis with fluoride (age 6 to 17)   | D 1120                          | 062                                   | RDH                              |
| Fluoride application child (prophylaxis not included)                                     | D 1203                          |                                       | RDA, RDH                         |
| Fluoride application adult (prophylaxis not included)                                     | D 1204                          |                                       | RDA, RDH                         |
| Fluoride varnish for moderate to high caries risk patients                                | D 1206                          | 061 or 062<br>age dependent           | RDH                              |
| Nutritional counseling for control of dental disease                                      | D 1310                          |                                       | DA, RDH                          |
| Oral hygiene instructions   | D 1330                          |                                       | DA, RDH                          |
| Sealant application 1st perm molar  | D 1351                          | 045 to age 21                         | RDA with sealant<br>sticker, RDH |
| Sealant application 2nd perm molar  | D 1351                          | 046 to age 21                         | RDA with sealant<br>sticker, RDH |
| Glass ionomer 1 surface anterior  | D 2330                          |                                       | Dentist                          |
| Glass ionomer 2 surface anterior  | D 2331                          | 646                                   | Dentist                          |
| Glass ionomer 1 surface posterior   | D 2391                          | 600 Primary<br>611 Permanent          | Dentist                          |
| Glass ionomer 2 surface posterior   | D 2392                          | 601 Primary<br>612 Permanent          | Dentist                          |
| Sedative filling  | D 2940                          |                                       | RDA, RDH                         |
| Case presentation, detailed and extensive treatment planning                              | D 9450                          |                                       | Dentist                          |
| Other drugs and/or medicaments dispensed in office: i.e., chlorhexidine, topical fluoride | D 9630                          | 998 or 999                            | DA, RDH                          |
| Xylitol gum   |                                 |                                       | DA, RDH                          |
| Fluoride lozenges (Rx)  |                                 |                                       | DA, RDH                          |
| Application of desensitizing medicament per visit   | D 9910                          | 080 with emer-<br>gency justification | DA, RDH                          |
| Application of desensitizing resin per tooth  | D 9911                          |                                       | DA, RDH                          |
| Enamel microabrasion  | D 9970                          |                                       | Dentist                          |

\*Procedure codes from the ADA book of Current Dental Terminology 2007-2008

pathogenic biofilm responsible for caries is not easy to modify without proper mechanical, chemical, and dietary aids.

The importance of having products available from the office cannot be overstressed. Private practices and dental school clinics experienced with CAMBRA have reported that writing prescriptions or telling patients to shop for products does not work well. Patients leave with good intentions then become discouraged at the complexity of locating several specialty items. Patients are best served if support materials and supplies are offered immediately at the office.

### Typical Appointment

The risk assessment appointment can vary slightly depending on the patient's dental knowledge. The first step in the clinical examination is the completion of the caries risk assessment form that has been adopted by the dentist and staff (see Featherstone et al. in last month's issue; Kutsch et al., this issue). For new patients, the dentist should personally review the health history and all risk assessment forms with the patient. During this interview, the dentist establishes a relationship of trust and forms a partnership of prevention with the patient. This partnership reflects the philosophy where cavities are treated as an infectious disease. The dental hygienist or assistant will use information obtained during the risk assessment to then follow the CAMBRA recommendations for disease prevention and management (TABLE 2). For instance if the patient is determined to be high risk, a bacterial test would be administered followed by patient education and the recommendations for and dispensing of antibacterial agents.

The dental team and patient will work together to treat the current condition. Patients appreciate a dental team that

takes time to tell them what they can do to prevent more disease from occurring. After this interview and a thorough clinical evaluation, including information gathered earlier by the team such as caries risk assessment data, radiographs, digital photographs, ICDAS coding, and DIAGNOdent readings, along with periodontal, oral cancer, and occlusal discrepancies, the dentist will be able to assess the patient's risk status and make treatment plan

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recommendations based on this assessment. If a patient is assessed as low risk, the next step may be a prophylaxis appointment with another risk assessment examination in a year's time. If a patient is assessed as moderate or high risk, then the next appointment should be with the dental assistant for saliva assessment and bacterial testing and CAMBRA counseling.

Once the CAMBRA protocols are established (see Ramos-Gomez et al. and Jenson et al., previous issue), the dental hygienist can provide reinforcement and continue to assess the process as well as report progress to the patient.

Introducing existing patients to CAMBRA for the first time can be done at the recare appointment when the caries risk assessment form will be completed. The dental hygienist will then evaluate the forms as part of the patient's recare appointment. Depending on the risk

status of the patient, the dental hygienist will follow the appropriate CAMBRA protocol. Patients who are found to be moderate or high risk for caries will then be referred to the dental assistant for a subsequent appointment where additional saliva assessment or bacterial testing and prevention counseling can occur. The hygienist can continue the process of CAMBRA through chairside education and helping the patient to establish a commitment to oral health.

The dental hygienist or assistant can provide oral hygiene instructions with a focus on brushing techniques and fluoride toothpastes or gels. The office protocol for fluoride will be explained and dispensed, as will the protocol for xylitol products (see Jenson et al., previous issue). This is also a time for intraoral photographs that document current conditions. Detailed instructions on the use of each product should be reviewed orally and supported by written material (see Featherstone et al., previous issue for sample letters to patients). An involvement calendar, especially for chlorhexidine use, is a very helpful tool to ensure that patients keep current with the regimen.

With the new patient, the dentist will have already completed a comprehensive hard and soft tissue examination with a treatment plan for restorative needs and sealant recommendations. The dental team will have discussed the results of the caries risk assessment with the patient. The laser fluorescence carious lesion examination and ICDAS coding will be charted and the frequency of recall examinations will be established. In California, registered dental assistants who have completed a board-approved course are allowed to place sealants. The type of sealant to be used, resin-based or glass ionomer, will be discussed with the dentist and

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TABLE 2

## CAMBRA-related Therapy Recommendations Based on Caries Risk Assessment

| New Patient | Overwhelming Bacterial Infection | Poor Diet | Poor Saliva | Therapy   |
|-------------|----------------------------------|-----------|-------------|---|
| X           | X                                | X         | X           | Oral eval under 3 years old   |
| X           |                                  |           |             | Comprehensive exam new or established patient   |
|             | X                                |           | X           | Exams: Periodic/limited/detailed and extensive problem-focused/limited problem-focused    |
| X           | X                                |           | X           | Radiographs: Complete series/horizontal bitewings/vertical bitewings                      |
| X           | X                                | X         | X           | Oral/facial photographic images   |
| X           | X                                |           |             | Collection of microorganisms for culture  |
| X           | X                                | X         | X           | Caries susceptibility test  |
|             | X                                |           |             | Diagnostic casts  |
| X           | X                                | X         | X           | Laser light florescence   |
| X           | X                                | X         |             | Prophylaxis adult   |
| X           | X                                | X         |             | Prophylaxis child   |
|             | X                                |           |             | Toothbrush prophy (to age 5) including fluoride   |
|             | X                                | X         | X           | Prophylaxis with fluoride (age 6 to 17)   |
|             | X                                | X         | X           | Fluoride application child (prophy not included)  |
| X           | X                                | X         | X           | Fluoride application adult (prophy not included)  |
|             | X                                | X         | X           | Fluoride varnish for moderate to high caries risk patients                                |
|             | X                                | X         | X           | Nutritional counseling for control of dental disease                                      |
|             | X                                | X         |             | Oral hygiene instructions   |
|             | X                                | X         | X           | Sealant application 1st perm molar  |
|             | X                                | X         |             | Sealant application 2nd perm molar  |
|             | X                                |           |             | Sedative filling  |
| X           | X                                | X         | X           | Other drugs and/or medicaments dispensed in office: i.e., chlorhexidine, topical fluoride |
| X           | X                                | X         | X           | Xylitol gum   |
|             | X                                | X         | X           | Fluoride lozenges (Rx)  |

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patient. Sealants can be delivered at the risk assessment appointment as outlined previously. The dental hygienist in some states may take over at this point. If radiographs are indicated, then the dental assistant will take them as prescribed by standing orders or prescription.

Often, the dental hygienist will find that the patient is taking a new medication during the first part of the recare appointment. This red flag is often overlooked

during the subsequent hard tissue examination unless numerous lesions are evident. Office protocol may include stopping at the health history stage of the treatment sequence to do a risk assessment for caries. The patient is often engaged at this point and will follow the discussion and treatment recommendations. A saliva or bacterial test, fluoride varnish, dispensing fluoride, calcium-phosphate paste, applying glass ionomer sealants to any remain-

ing pits and fissures will surely make up for a loss in production for that time. The planned prophylaxis should be rescheduled.

### Tips for Success

The CAMBRA approach to patient care can be readily incorporated into the practice by collecting and evaluating data as it relates to the patient's risk for caries development. There are several steps to consider for successful implementation

of CAMBRA for the first time. First, the office must have meetings to discuss, study, and role-play with CAMBRA so that the dental team is comfortable with the information. Concurrently, the office may need to order supplies such as risk assessment forms, saliva or bacterial tests, fluoride varnish, advanced cariostatic materials, and antibacterial rinses. The office will need time to develop a brochure and if applicable place CAMBRA information on the office Web page.

The office can begin by incorporating CAMBRA into all new patient examinations and all known high-risk patients. Soon after, the dental team can initiate risk assessment and prevention or treatment protocols with all patients. To aid the patient in the implementation of home regimes, the dental team may want to consider the use of involvement calendars and diagnostic casts and disclosing tablets to demonstrate the patient's pattern of biofilm. Additionally, rewards such as a gift certificate for children who return with a completed involvement calendar and good oral hygiene are also useful.

One example of a population that is in need of disease prevention and management are pregnant women. They are usually very open to behavior change with the goal of a healthy pregnancy and baby. Emphasis on the contagious nature of caries can be stressed and expectant moms can be informed of how reducing levels of cariogenic pathogens in their own mouths can positively affect their child's future oral health.

Other examples of patient populations in great need of disease prevention and management are the patients with lower socioeconomic status, the elderly, and special needs patients. Often these patients do not have good access to care or do not have the ability to obtain or apply current treatment interventions or products.

## Conclusion

The team approach to CAMBRA is integral to the decrease in the incidence and prevalence of dental caries among various populations. Together, the dental team can assist the patient in the prevention or control of dental disease. Carious lesions can and do affect the lives of people. Understanding and treating caries as a curable and preventable infectious, biofilm disease is the single most important step a dental practice can take to improve the lives of its patients and the quality of the practice. Through the process of assessment and corresponding protocols, the dental team can work with patients to motivate and inspire behavior changes that will have a lasting impact. ■■■■

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