

A Proposal:

The Risk Factor Manager



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Many oral health care providers are becoming less and less satisfied with the status quo in delivering care to their patients. They're becoming acutely aware that their traditional dental diagnostics are inadequate and that jumping into treatment without a definitive diagnosis isn't in anyone's best interest. They also are wondering if they can add more procedures into their treatment time without increasing their own cortisol levels.

Clinicians have started questioning and debating their reliance on a hand instrument, like an explorer or probe, and the unaided eye as the only means to detect disease, as compared with the practice of medicine, where advanced diagnostics range from bacterial cultures to T-scan imaging. New diagnostic procedures take time, and many clinicians prefer to use their available time for treatments that make money in the current dental insurance system. Good conscience demands a change and possibly the development of a new type of clinician: the risk factor manager or RFM. A dental hygienist and/or a registered or certified dental assistant are well suited for this position. The dentist would still declare the diagnosis; the RFM would gather all the information, dispense products, and follow cases.

Following the Medical Model

The first diagnostic tool in a medical office is the blood pressure cuff. The nurse chooses the correct cuff size and takes a reading. This reading is entered into the patient's record along with weight, temperature, and pulse. Medications, both prescribed and

over-the-counter, are also noted. The data can be evaluated by the doctor before entering the treatment room or once there with the patient.

The same can be done in a dental practice by a designated clinician, either a new hire for the position or a specialist that is already a member of the team. The RFM can take a patient's blood pressure and collect data pertaining to oral health practices, such as toothpaste or other oral health care products and adjuncts. The dentist then evaluates the data and may request further tests.

Depending on the dentist's recommendations, the RFM may do any 1 or a multitude of clinical diagnostic tests. Table 1 lists many of these tests. This separate, designated time will streamline appointments for new and returning patients. It also will help make treatment planning more definitive and accurate for the case presentation. No longer will patients be treated for a periodontal condition, for instance, when the real reason for alveolar bone loss and hemorrhagic tissue is diabetes, shifting the focus from hole repair to tissue health. Practicing dentistry with a proper diagnosis will allocate resources appropriately.

Separating the time for the diagnostic tests from the treatment time will help assure that all necessary testing is conducted. This time could be the first 30 minutes in a re-care appointment for an existing patient. It could be in the middle of a new patient appointment after the dentist has done an initial assessment and before a treatment plan is developed. Benefit plans can be charged appropriately. If done correctly, this position

can be lucrative for the office. (The January 2007 "Connectivity" discussed how to use medical and dental codes effectively for advanced diagnostics.)

Gathering Data

After taking blood pressure and an oral health practice history, perhaps the next test would be a salivary test to evaluate the health of the saliva (CRT bacteria test, Ivoclar Vivadent Inc, Amherst, NY, www.ivoclarvivadent.us; Saliva-Check, GC America, Inc, Alsip, Ill, www.gcamerica.com). Additionally, taking a salivary test before stimulating salivary flow with x-rays, prophylaxes paste, or other diagnostic tests provides a more accurate reading. These tests only take 10 minutes of a clinician's time.

The next logical diagnostic test is taking x-rays. Radiographs, whether film or digital, are still a very good diagnostic tool. To ensure quality diagnostic radiographs, they should be taken by a clinician with a good eye and a good grip on 3 dimensions. Clinicians without this natural talent can use film holding instruments to help them align the x-rays to produce high-quality radiographs, including a panoramic image. The RFM also would keep track of the patient's x-ray schedule as dictated by risk. Often this important and dangerous procedure is relegated to benefit coverage, not the disease risk of the patient.

Laser caries detection using an early caries detection tool (DIAGNOdent, KaVo Dental Corp, Lake Zurich, Ill, www.kavousa.com; Inspektor Pro, Omnii Preventive Care, A 3M Company, www.omniipharm.com; D-Carie *mini*, *neks* Technologies, Laval, Quebec, www.neks.com) will give accurate readings of lesions that can be reproduced by all the team's clinicians. Laser caries detection manufacturers recommend a quick treatment with an air slurry polisher (PROPHYflex, KaVo Dental Corp; Prophy-Jet, Dentsply Professional, York, Pa, www.dentsply.com), which will assure a minimum number of false readings by effectively removing the organic plug in anatomical pits and fissures. Because of the potential for positive readings with colored prophy pastes and the inability of prophy brushes to access the depths of an anatomical pit or fissure, an air slurry polish is the recommended pretreatment on all natural surface enamel. The added time for preparing the teeth still takes less than 10 minutes for this extensive caries examination.

For patients with suspected proximal decay, impression material can aide with caries diagnosis. As described in the May 2006 "Connectivity," the suspected tooth is separated from the neighboring teeth with an orthodontic separator for a few days. When the separator is removed, a wash of impression material is squeezed between the teeth to give the dentist a clear view of the tooth. Either of these 2 steps could be fitted into this comprehensive diagnostic appointment. In many states, registered or certified dental assistants can place and remove orthodontic separators and take impressions for diagnostic models. Another new technology, the DIAGNOdent pen (KaVo Dental Corp) also can be used to detect proximal decay on adjacent teeth.

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A periodontal examination is then in order. A clean mouth undisturbed by recent ingestion of food is required to perform a TOPAS test (Affinity Laboratory Technologies Inc, Lexington, Ky, www.altcorp.com/affinitylaboratory.htm) and a BANA test (OraTec Corp, Manassas, Va, www.ortec.net). TOPAS, a paper point test, measures sulcular bacterial byproducts and detects inflammatory markers. BANA detects the presence of enzymes in biofilm samples from the base of the periodontal pocket. Both tests take only a few minutes. This is also a good time to take a sample of the biofilm for viewing under a phase contrast microscope. If the RFM is a dental hygienist, he or she will have access to an additional tool, the periodontal probe.

Although archaic, the probe is still the tool we need to create a periodontal chart. A voice-activated system can enhance the periodontal charting done with this basic tool. PerioPal (Beaumont, Tex, www.periop.com) quickly creates an accurate periodontal chart that reflects pocket depths, calculates clinical attachment loss, and charts suppuration, hemorrhage, recession, and restorations—all by voice control. Patterson EagleSoft Perio (Patterson Dental Supply, Inc, St Paul, Minn, www.pattersondental.com).

eaglesoft.net) and Dentrix Voice (Dentrix Dental Systems, Inc. A Henry Schein Company, American Fork, Utah, www.dentrix.com) are other popular dental office computer programs that offer voice-activated charting. In addition to voice-activated charting, the Florida Probe (Florida Probe Corp, Gainesville, Fla, www.floridaprobe.com) offers a measured-pressure probe, which removes the burden of an accurate reading from the clinician. Using voice activation can cut the time of this tedious 20-minute procedure in half.

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The clinician might next choose to do further testing for a periodontal infection. If an unhealthy periodontal condition is found, blood glucose testing can help evaluate a patient's diabetic status. The blood test can be done in the office in 10 minutes or the patient can be given a prescription for laboratory work at a nearby location.

Once tests are underway, it is a good time for an oral cancer screening. Because cancers start at a cellular level, whatever tools we have available to help detect changes before they are visible to the naked eye are a boon (ViziLite Plus, Zila Pharmaceuticals, Inc, Phoenix, Az, www.zila.com; VELscope, LED Dental, Inc, Vancouver, British Columbia, www.velscope.com; Microlux/DL, AdDent, Inc, Danbury, Conn, www.addent.com). Brush biopsy is also a great diagnostic tool that can ease the mind of a patient and clinician or motivate them to action.

Further diagnostics could include occlusal tests, such as the T-scan II (Tekscan, Inc, South Boston, Mass, www.tekscan.com). Patients bite on a wafer-thin material, which provides information about occlusion to a computer that maps it in detail. This 5-minute test gives the dentist amazing detail to create a treatment plan for temporomandibular disorders or equilibration.

Checking for plaque would also be helpful. Many disclosing solutions are on the market, including 2-tone solutions that discern new biofilm from bio-

film older than 24 hours (2Tone, Young Dental Manufacturing, Earth City, Mo, www.youngdental.com; PlaqueFinder Pro-Dentec, Batesville, Ark, www.pro-dentec.com; HurriView Beutlich Pharmaceuticals, Waukegan, Ill, www.beutlich.com). In less than 1 minute a prima educational experience springs forth.

Impressions for diagnostic casts can be taken to support patient education as described in the February 2006 "Connectivity." The clinician marks the disclosed biofilm onto the casts and gives them to the patient to take home as a 3-dimensional educational tool. This is unlikely to happen during a routine recare appointment. This level of home-care instruction would be part of a periodontal therapy treatment plan or a caries management treatment. The RFM could help make sure patients understand the critical importance of this part of the treatment.

Nutritional counseling and evaluating nutritional diaries also would fall to the RFM. Although it's unlikely that it would be a part of the data gathering appointment, this visit would be 30 minutes of evaluating a patient's food diary and giving sound nutritional advice to change their oral health for the better.

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Finally, intraoral photographs would be a part of this clinician's duties. Depending on the case presentation, the photography appointment may take only a few minutes or much longer. Photographs of before and after treatment can illustrate beyond words the effect of changing a diet, applying remineralization therapies, or esthetic dentistry. After the diagnostic tests are completed, the patient is ready for either a prophylaxis or treatment planning, as directed by the findings of the diagnostic tests.

As caries or periodontal protocols evolve into this medical model, the role of the RFM also would include dispensing products and educating patients

Table—Diagnostic Tests That Can Be Performed by the Risk Factor Manager

Diagnostic Test	Insurance Code	Provider Type
		Dental Assistant (DA), Dental Hygienist (DH)
Caries		
Saliva evaluation	D0425	DA
	D0415	
Laser caries detection	D0470	DH
Radiographs	D0274	DA, DH
	D0330	
	D0272	
Disclosing solution	NA	DA, DH
Diagnostic casts	D0470	DA, DH
Nutritional counseling	D1310	DA, DH
Photographs	D0350	DA
Oral hygiene instruction	D1330	DA, DH
Periodontium		
TOPAS	NA	DH
BANA	NA	DH
Periodontal charting	NA	DH
Nutritional counseling	D1310	DA, DH
Oral hygiene Instruction	D1330	DA, DH
Microscope	NA	DA, DH
Mucosa		
Oral cancer screening	NA	DA, DH
Brush biopsy	NA	DH
Blood		
Blood pressure	NA	DA, DH
Blood glucose	NA	DA, DH
H _g A _{1c}	NA	DA, DH
Occlusion		
T-scan II	NA	DA, DH

on their use. Ranging from advanced manual toothbrushes to intricate management of caries infections with weekly chlorhexidine rinses for the entire family, the RFM would oversee all types of diagnostic tests and patient education and report valuable information to the overseeing dentist.

A New Type of Clinician

This is a busy appointment. Separating the diagnostic workload from treatment procedures will ensure that premier service is provided to the practice clientele. Your office could have 2 oral health care specialists perform this most entertaining job, rotating weekly or daily. Taking turns performing advanced diagnostic testing can create a collaborative atmosphere between team members.

Currently, coding and charging for diagnostics is foreign to many dental practices, but one need only

look at how medicine is charging for in-clinic diagnostics, such as the strep test swab, and specialty diagnostics, such as computed tomography scans and magnetic resonance imaging. Blood tests are routine in the medical clinic, and before the decade is over they are likely to be a bigger part of the dental exam. Noninvasive tests also are likely to be more popular in the dental setting, and oral health care specialists can be well educated to take on this role. Charging for diagnostics using proper dental and medical codes will make this position cost-effective. [COH](#)

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Shirley is the co-author (with Amy Nieves, RDH) of *The Purple Guide: Developing Your Clinical Dental Hygiene Career*, which helps new and newly graduated dental hygienists make the transition to the real world of dental hygiene. She is an award-winning author and popular speaker. Shirley invites you to visit her Web site at www.shirleygutkowskirdh.com.