

Journal

CALIFORNIA DENTAL ASSOCIATION



October 2015

Interdisciplinary
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Collaborative Practice Models



Dentistry Is a Team Sport:
Who's on Your Team?
Debra S. Finney, MS, DDS, and Cindy Lyon, RDH, DDS, EdD

Vol 43
No 10



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DEPARTMENTS

- 561 The Editor/The D Word
- 563 Impressions
- 609 RM Matters/Dentists and the Virtual Dental Home
- 613 Regulatory Compliance/Mandated Reporting
- 615 Periscope
- 620 Tech Trends

FEATURES

- 573 Dentistry Is a Team Sport: Who's on Your Team?
An introduction to the issue.
Debra S. Finney, MS, DDS
- 575 California's Clinical Dental Team: Evolving Together With an Eye to the Future
Reflecting on our collective history may help inform collaboration and innovation that will serve us well as we create ways to care for patients and thrive in our professional lives.
Cindy Lyon, RDH, DDS, EdD
- 579 Multidisciplinary Management of Severe Tooth Surface Loss: A Case Report
Working in concert, coordinated by the lead dental practitioner, the medical and dental team can achieve the best possible patient care.
Warden Noble, DDS, MS; Faroud Hakim, DDS, MBA; Anders Nattestad, DDS, PhD; and Donni Poe, CDT
- 585 Satellite Specialty Practice
This article focuses on how a host practice can best accommodate a satellite specialist and vice versa. The author and David Corradi, DDS, share their experiences and guidelines for establishing a satellite specialist relationship are included.
Gregory J. Kolber, DDS, and David Corradi, DDS
- 591 Dentists and Pharmacists: Paradigm Shifts and Interprofessional Collaborative Practice Models
The purpose of this article is to explore the current relationship between dentists and pharmacists and to propose new models of interprofessional collaboration.
Cynthia Valle-Oseguera, PharmD, and Eric G. Boyce, PharmD
- 597 Caring for Older Adults With Complex Needs: Drafting an Interdisciplinary Team
Providing dental care for anyone with complex medical and/or social needs, but especially for people of advanced age, can seem daunting.
Elisa M. Chávez, DDS, and Amruta Hendre, DDS
- 605 CDA Practice Support: We're on Your Team

563



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The D Word

Kerry K. Carney, DDS, CDE

There are transformative moments in life. Moments when something that is said or read or seen sticks in one's mind. From that moment forward, something is changed. The transformative moment can be as casual as hearing a respected friend articulate the relative importance of a dentist's cancer screening: "If we miss caries, we can lose a tooth. If we miss cancer, we can lose everything." It can be as personal as reading your grandparents' love letters. It can be as fleeting as glimpsing the low water level in Lake Shasta in 2015. These are brief experiences that stay with us. I will never do an oral exam, contemplate beloved grandparents or think of everyday water use the same way again.

Lake Shasta is the largest reservoir in California. Water levels there now rival the historic low levels of 1976-77. After seeing that shrunken body of water, it is hard to feel the same way about the precious commodity that flows from the tap at home or at the office.

In California, we enter the 2015 water year after four years of drought.¹ Of California's population of 38 million, more than 37 million are experiencing severe drought conditions.¹ Conservation of existing water supplies can be addressed in three ways: quality acceptability, behaviors and equipment.

Using drinking-quality water for anything other than ingestion might be considered extravagant in some areas of the world. This drought is forcing us to look at downgrading the quality of the water that is not ingested or used for hygiene purposes. Grey water systems are becoming more common for landscape irrigation but there are few other opportunities to switch to grey water in the dental office.

Behaviors are hard to change. We all struggle to help our patients change their oral hygiene behaviors and improve their oral health. Changing water-use behaviors



Between hand washing and toothbrushing, a small dental office could save around 17,000 gallons a year with behavior changes.

is equally difficult. When water is left running during toothbrushing, the water loss can be somewhere around 2.5 gallons for each occurrence (assume the faucet is a 2.5 gallons per minute (gpm) low-flow faucet and that the time spent brushing is one minute). At the plaque control station of a small dental office, that behavior could account for at least 10,000 gallons a year (2.5 gallons times 16 patients a day, five days a week, 50 weeks a year). That is a lot of water to watch flow down the drain.

There is a lot of hand washing in a dental office, too. When water is left running during hand washing, the water loss could be somewhere around 6,666 gallons per year (assume 20 seconds per wash, 32 washes among the dentist, the assistant and the hygienist seeing 16 patients a day). Between hand washing and toothbrushing, a small dental office could save around 17,000 gallons a year with behavior changes. For comparison, the average backyard swimming pool holds 15,000 gallons. That is a conservative estimate for a small office. A large, very busy dental practice could realize that water savings many times over.

Changing staff and patient behavior on such a simple thing as water conservation in the dental office can save a remarkable amount of drinking-quality water.

Dental office equipment changes can also help conserve water. The same water-saving equipment changes that are recommended for households can be implemented at the dental office: low-flow faucets, toilets and efficient dishwashers and washing machines. However,

dentistry has some unique opportunities for water savings. Recent research projects significant water savings by an industry-wide change in the equipment used for dental office vacuum pump systems.²

A 2012 report was prepared for the California Urban Water Conservation Council. It compared one manufacturer's dry vacuum pumps, the basic once-through liquid ring vacuum pumps and liquid ring pumps with a partial recovery water recycling system.²

The analysis estimated that dry vacs make up about 15 percent of the vacuums installed in dental offices in California. The report assumed 70 percent of the wet vacs were once-through and 15 percent were partial recovery recycler equipped wet vacs.

Two scenarios were postulated. One in which half of the wet vacs were replaced with dry vacuum pumps and half with partial recycled liquid ring pumps. In that case, the anticipated water savings was 8,769 acre feet per year (af; an acre foot is equal to approximately 325,851 gallons).

In the second scenario, all the liquid ring vacuum pumps were replaced with dry vacuum pumps. In this case, California could be expected to reduce its annual consumption by 10,586 af per year. That equals more than 3.4 billion (with a B) gallons of water. That water could fill approximately 230,000 swimming pools. For comparison, that amount of water is equal to the entire year's water allotment for my town, a small Northern California town that includes a water-thirsty refinery and a population of 28,000.

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Granted, 10,586 af represents literally a drop in the bucket (0.6 percent) when compared to Lake Shasta's present capacity of 1.9 million af. Yet 10,586 af is a significant contribution to be made available from just one segment of the commercial users: dentistry. The report indicated that "some California water agencies already have rebate programs for dry vacuum pumps or mechanisms such as customized rebate programs for CII customers who can handle rebates for dry vacuum systems. However, it appears the activity level of existing programs for dry vacuum systems is very low."²

When we first set up our office, my knowledge of dry vacuums and wet (ring) pumps was superficial. I knew that the business end of the vacuum made it possible to work in a wet environment. I knew that in the basement there was a machine that I hoped to never become familiar with. I knew that ring pumps had a price and lifespan half that of dry vacs.

By the time my wet vac finally died, I had done a little more research and decided to invest in a dry vac. At the time, I was concerned with the savings in water and sewage charges over time. But now, after seeing Lake Shasta's shrinking waterline, I understand the moral imperative of every Californian to conserve water not just at home but at work, in our practices.

Shakespeare wrote that the quality of mercy is not strained; it droppeth as the gentle rain from heaven. However, in California in 2015, the quantity of water is strained and every water district would appreciate our small mercies in water conservation. ■

REFERENCES

1. <http://drought.unl.edu/Planning/DroughtPlans/StatePlanning.aspx?st=ca>.
2. Water Use in Vacuum Pump Systems and Viability for a Water Conservation Best Management Practice in California an Investigation for the California Urban Water Conservation Council By James Fryer, environmental scientist, jfryer.iwrc@gmail.com December 2012.



The Cost of Ignorance

David W. Chambers, EdM, MBA, PhD

Dentists and lawyers bill differently. Fee-for-service means that an MOD is charged at \$150, regardless of whether it was easy or difficult or whether it was done well or poorly. Lawyers bill by the fraction of an hour, regardless of what they were doing during that time. I have always fretted that neither system is quite right, but I know of no practical way of capturing value added.

What particularly irks me about lawyers is that they learn on the client's nickel. I have to pay for an attorney to study precedents and get smart about the applicable law. I think patients would be skittish of a dentist who says, "I really have never placed an implant in the zygomatic space so I will have to read the literature on that topic. I figure I should charge you about \$750 for that."

Dentists are supposed to know or refer. But dentists do need to update their knowledge and there are costs associated with this. The ethical issue is who should bear these costs.

Health care professionals generally have three ways to update their knowledge: the literature, their own experience and advice from peers and commercial sources. Research on physicians has shown that the most powerful influence, measured in terms of propensity to change practice behavior, is the latter. Going to C.E. courses to hear what experts think about the literature they have read or the results they have achieved on atypical patients is not inexpensive. The hall talk is often invaluable as a way of finding out about what ads and studies do not report.

In my own research on innovation among practicing dentists, the No. 1 lever for self-improvement is trial and error. I have nothing particular against trial. And if we could use a kinder term, "difficulties" or "small and correctable unexpected outcomes" are actually very valuable learning opportunities. There is a sort of "secondary wisdom" that guides the primary learning. Negligence, malfeasance and obsolescence are some of the terms we use to describe a shortfall on this wisdom about the imperative for continuous self-improvement.

There is an old story about a curmudgeon who kept the power plant in a small town going until he retired. Four months after the new guy showed up, the whole system went down and all the obvious fixes were ineffectual. The veteran was called back. He looked things over, took a huge wrench and wacked the machinery. That worked great. The city fathers were grateful, but none too pleased with the bill at \$501. "For beating the thing with a pipe," one politician complained. "I want to see an itemized bill." The reckoning came: "Hitting machinery: \$1; knowing where to hit: \$500." ■

The nub:

1. Knowing what you don't know is valuable.
2. Finding out about what you don't know is a professional obligation.
3. The patient should never bear the cost of what you don't know.

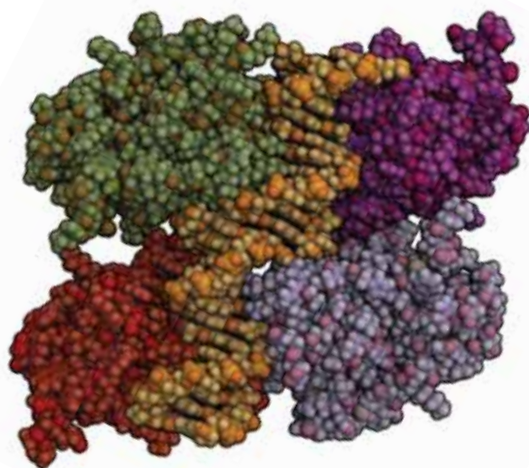
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Study: Protein That Helps Suppress Tumors Fades With Age

Researchers at the University of California, Los Angeles, have found that a protein that serves as a suppressor of cancer diminishes in skin and mouth epithelial cells as the human body ages, according to a new study. In the new report, researchers showed that the level of p53 — a tumor suppressor protein known as “the guardian of the genome” because of its involvement in DNA repair, cell cycle regulation and cellular deterioration — diminishes during replicative senescence and oncogene-induced senescence (OIS) in normal human keratinocytes in vitro as well as in epithelial layers of human oral mucosa by aging in vivo.

The researchers obtained normal human oral epithelia (NHOE) from 20 healthy individuals at different ages. These tissues were subjected to paraffin embedding and immunohistochemical staining was performed against p53, the authors wrote. They found that the p53 protein expression decreased in an age-dependent manner as high numbers of p53 positives were seen in the below 40s age group, a mixture of p53 staining patterns was observed in the 40s to 60s age range, and almost a complete loss of p53 positives was observed in individuals in their 60s and above, the report states.

“Looking at ways to maintain levels of p53 as one ages may provide a therapeutic clue to preventing cancer development,” said No-Hee Park, DMD, PhD, dean of the UCLA School of Dentistry, in a news release.

Previous studies have shown that p53 accumulates in large quantities as

Neutrophils in Oral Cancer Metastasis

An abnormal immune response or “feedback loop” could very well be the underlying cause of metastases in oral cancers, according to one of the authors of a new study published in the journal *Cancer Immunology Research*.

Researchers analyzed the effects of neutrophils, immune cells commonly found in saliva and the oral cavity, in the invasion of oral squamous cell carcinoma (OSCC) using a combination of conditioned media, direct and indirect co-culture of human peripheral blood neutrophils and UMSCC47 cells (OSCC cell line), the authors wrote. Like other immune cells, neutrophils secrete a group of molecules, including TNF α that regulates how the body responds to inflammation.

The study found that oral cancer cells secreted IL8, another inflammatory mediator, which activates neutrophils, effectively establishing a massive immune-response buildup or “feedback loop.”

The researchers found that the immune-response loop resulted in increased invasive structures known as “invadopodia,” used by the cancer cells to invade and metastasize.

The results show that “neutrophils increase the invasiveness of OSCC through the activation of invadopodia and matrix degradation, suggesting a paracrine activation loop between the two cells,” the authors concluded, noting that “the presence of neutrophils in the oral environment may modulate the clinical behavior of OSCC.”

“If we understand how the immune system interacts with the cancer we can modulate the immune response to acquire an anticancer response instead of a pro-tumor response,” said corresponding author Marco Magalhaes.

For more, see the study in the journal *Cancer Immunology Research*, published online first June 25, 2015.

connective tissue cells, called fibroblasts, age and stop dividing. It has been believed that the accumulation of p53 causes cells to stop dividing, which prevents out-of-control cells from growing into tumors.

“Inasmuch as approximately 90 percent of human cancers are originated from epithelial cells, we suspect this may have

to do with the increased incidences of skin and oral cancers in elderly patients,” said Reuben Kim, DDS, PhD, an associate professor at UCLA Dentistry and a co-corresponding author of the study.

For details, see the full study published online ahead of print in the journal *Aging Cell*, July 1, 2015.

Oral Microbiome Study Uncovered Markers for RA

A recent metagenome-wide association study on the oral microbiome found that oral and gut microbiomes are perturbed in rheumatoid arthritis (RA) and partly normalized after treatment. The results show that the gut and oral microbiome are involved in the pathophysiology and management of RA and provide

indication for developing microbiome-assisted personalized treatments.

Bacterial infection has long been suggested to relate with RA, however, the identity and functional capacity of the RA-associated bacterial agent(s) have been largely unclear. In the new study, researchers carried out metagenomic



Teeth Reveal Lifetime Chemical Exposures

A recent article in the journal *Nature Reviews Neurology* discusses the potential long-term implications of excessive iron intake in early life and how teeth may be a method for retrospective analysis.

"Teeth are of particular interest to us for the measurement of chemical exposure in fetal and childhood development: they provide a chronological record of exposure from their microchemical composition in relation to defined growth lines, much like the rings in a tree trunk," said Manish Arora, BDS, MPH, PhD. "Our analysis of iron deposits in teeth as a method for retrospective determination of exposure is just one application: we believe teeth have the potential to help track the impact of pollution on health globally."

The authors explain that "high levels of redox-active iron in the brain have been associated with neurodegenerative disorders, most notably Parkinson disease," but that a gradual increase in brain iron seems to be a feature of normal aging. "Increased brain iron levels might result from intake of infant formula that is excessively fortified with iron, thereby altering the trajectory of brain iron uptake and amplifying the risk of iron-associated neurodegeneration in later life," the authors wrote.

While not all formula-fed babies will experience neurodegeneration in adulthood, the combination of increased iron intake during infancy with a predisposition to impaired metal metabolism, such as the inability of brain cells to remove excessive metals, may damage those cells over time. In the article, authors also call for evidence-based optimization of the chemical composition of infant dietary supplements.

For more, read the "Perspectives" article published online June 23, 2015, in *Nature Reviews Neurology*.

shotgun sequencing and a metagenome-wide association study (MGWAS) of fecal, dental and salivary samples from a cohort of individuals with RA and healthy controls. They observed dysbiosis changes in the gut and oral microbiome partially restored after treatment with disease-modifying antirheumatic drugs (DMARDs), according to the study.

The researchers also found that *Haemophilus* sp. is depleted in RA patients at all three gut and oral sites and negatively correlates with RA auto-antibodies, while *Lactobacillus salivarius* is over-represented in RA patients at all three sites, especially in the very active cases. The study indicates that fecal, dental and salivary microbial markers could all be useful for the diagnosis and management of RA, while the oral microbiome might be more sensitive to DMARD treatment than the gut microbiome.

While metagenome-wide association studies have used to study gut microbiome for type II diabetes, colorectal cancer, etc., this is the first study on dental and saliva microbiomes. A comprehensive understanding of the RA-associated microbiome holds promise for new advancement in RA pathophysiology, as well as early diagnosis and precision treatment.

For more information, see the study published online in *Nature Medicine*, July 28, 2015.



Computer-Based Technology May Improve Facial Transplants

After several years of research and collaboration, physicians and engineers at Johns Hopkins and Walter Reed National Military Medical Center say they have developed a computer platform that provides rapid, real-time feedback before and during facial transplant surgery, which may someday improve face-jaw-teeth alignment between donor and recipient.

Facial transplants have led to the improvement of patient survival and enhancement of physical appearances. However, current surgical methods often leave patients with some undesired residual deformities and abnormalities in function. Authors of an article published in the journal *Plastic and Reconstructive Surgery* describe a new computer-assisted platform used in mock surgeries performed on plastic and cadaveric human donor/recipient pairs. Called the computer-assisted planning and execution (CAPE) system, the new platform should make it less likely to misalign the new set of bones, jaw and teeth, and prevent other reconstructive abnormalities for patients with severe craniofacial trauma, the researchers report.

Using information from CT scans, the donor's anatomy is matched to the recipient's anatomy in an effort to optimize form, or appearance, and function, such as chewing and breathing, according to senior author Chad Gordon, DO. During surgery, real-time cephalometry

Study: Alcohol Consumption Can Have Negative Impact on Gum Health

Aimed at determining the effect of alcohol consumption on the levels of subgingival periodontal pathogens as well as the levels of pro-inflammatory cytokines in the gingival fluid among individuals with and without periodontitis, a recent study has found that consumption of alcoholic beverages can have a negative effect on gum health.

Published in the *Journal of Periodontology*, the new study assessed a sample of 542 regular alcohol users, occasional drinkers and nondrinkers, both with and without periodontitis, and found that drinking alcohol can aggravate an existing case of severe periodontal disease or raise periodontal disease risk factors, according to a news release from the American Academy of Periodontology.

Researchers found that the severity of a regular alcohol user's existing periodontitis correlated incrementally with the frequency of his or her alcohol consumption. These individuals were found to require additional periodontal treatment as well.

Additionally, the researchers evaluated the study participants' clinical attachment levels. They reported that more frequently than the nondrinkers in the study, drinkers who did not have periodontitis presented clinical attachment levels of four millimeters or greater. Among participants, researchers also found drinkers without periodontitis exhibited a higher presence of plaque than their nondrinking counterparts. The authors noted that alcohol's drying effect on the mouth may contribute to the formation of plaque.

For more on this research, see the study published online ahead of print in the *Journal of Periodontology*, June 11, 2015.

(RTC) provides the surgeon with objective measurements and angles related to ideal jaw-teeth positions, with instantaneous visual feedback in the operating room unlike ever before.

"Every time the donor's jaw-teeth segment moves during facial transplant inset, the computer recalculates its movements in comparison to the face transplant recipient, meaning the surgical team can have unprecedented visual

data in achieving ideal alignment of the face, jaw and teeth," Gordon said in the news release. The preciseness of the technology will likely reduce the need for patients to undergo revision surgery and will help to improve outcomes in various areas, Gordon said.

For more information, see the study in the journal *Plastic and Reconstructive Surgery*, August 2015, vol. 136, issue 2, pp. 350-362.

Tooth Fairy Leaving 24 Cents Less in 2015

The Tooth Fairy is leaving children in the U.S. an average of \$3.19 per lost tooth this year, a decrease of 24 cents from last year, according to a recent survey by Visa. This marks the second consecutive year that the Tooth Fairy has reduced what she leaves under pillows.

The survey also found that 32 percent of respondents reported that one dollar was left by the Tooth Fairy, the most common

amount, according to the report. While nearly 20 percent of respondents said that the Tooth Fairy left a \$5 bill under the pillow, just 5 percent of households reported that the Tooth Fairy left \$20 or more. On the other end of the spectrum, 10 percent of survey respondents said their child receives nothing from the Tooth Fairy.



Variation in Rates of Secondary Cleft Lip and Palate Surgery

For children with cleft lip and palate, the chances of undergoing secondary surgery vary depending on the center where they're treated, according to a study in *Plastic and Reconstructive Surgery – Global Open*. The new study compared the use of secondary surgery between cleft centers and found that when secondary surgeries are performed, they don't necessarily improve the child's final facial appearance.

"This study raises the important question of why variation exists between centers in the use of secondary surgery," the authors wrote, explaining that "one hypothesis is that clinical outcomes of primary surgery differ between centers, thus leading some centers to perform more secondary surgery in an attempt to achieve the same results other centers reach from primary surgery alone. The researchers note that their study did not include photos to assess the results of the primary surgery.

In the study, researchers analyzed 130 children undergoing surgery to repair cleft lip and cleft palate at four specialized centers. All patients had cleft lip/cleft palate as their only abnormality, unrelated to any congenital syndrome. The authors concluded that use of secondary lip and nasal surgery varies significantly between cleft centers and that, "although the sources of this variation remain unclear, the effect is broad differences in a child's burden of surgical care depending upon where they are treated."

According to the study, these results highlight a need for additional studies to evaluate the efficacy and effectiveness of secondary surgery for children with cleft lip and palate.

See the full study in the journal *Plastic and Reconstructive Surgery – Global Open*, July 2015, vol. 3, issue 7, p. e442.

When it comes to comparing moms and dads, the survey found that for the second year in a row, fathers reported a far more indulgent Tooth Fairy, saying that she left nearly 30 percent more than moms did: \$3.63 versus \$2.87. Additionally, the annual survey reported that in the Northeast, one in four children received \$5 or more while about one in 13 got \$20 or more, bringing the average amount in that area up to \$3.56. And in the Midwest, the Tooth Fairy reportedly left an average of \$3.13 per tooth while kids in the West and South got an average of \$3.09 and \$3.07, respectively.

The survey results are based on 4,027 telephone interviews conducted nationally between May 28 and June 21, 2015.



Poor Oral Hygiene Habits and Hypertension Risk

In a recent study, researchers found that poor oral hygiene habits may be associated with an increased incidence of hypertension. Authors of the study hypothesized that oral hygiene promotion activities could have an effect on hypertension prevention or the degree of hypertension control, according to the report. Published in the *Journal of Periodontology*, the new study suggests periodontitis and hypertension may be linked by way of inflammation and blood pressure elevation.

Researchers examined the relationship between oral hygiene behaviors and hypertension using data from 19,560 individuals in the Korea National Health and Nutrition Examination Survey (KNHANES). Hypertension was diagnosed in 5,921 study participants and identified by an individual's use of antihypertensive medication or an average blood pressure greater than 140/90 mmHg, according to a news release. The authors evaluated the participants' daily frequency of toothbrushing and use of secondary oral health products including dental floss, mouthwash, interdental

brushes and electric toothbrushes and found that as the frequency of toothbrushing increased, the prevalence of hypertension decreased in multivariate analysis after adjusting for various factors, including the presence of periodontitis.

"Although this subject may require further study, the association between hypertension and periodontitis is reminiscent of the link periodontal disease shares with other systemic conditions, including diabetes and

heart disease," said Joan Otomo-Corgel, DDS, MPH, president of the American Academy of Periodontology, in a news release. "Literature continues to support the idea that what affects a person's mouth can affect his or her body and vice versa. Taking care of your teeth and gums is as essential to a healthy lifestyle as diet and exercise."

For more, see the study in the *Journal of Periodontology*, July 2015, vol. 86, no. 7, pp. 866-873.

Wild Blueberry Extract Could Help Fight Gum Disease

Researchers recently investigated the effect of extracts from a polyphenol-rich lowbush blueberry, *Vaccinium angustifolium* Ait., against *Fusobacterium nucleatum*, one of the main etiologic components of periodontitis, and found the polyphenol-rich extracts could help prevent dental plaque formation and could lead to a new therapy for periodontitis and a reduced need for antibiotics.

In the new study, published in the American Chemical Society's *Journal of Agricultural and Food Chemistry*, researchers found that the wild blueberry polyphenols, which work against foodborne pathogens, successfully inhibited the growth of *F. nucleatum*, as well as its ability to form biofilms. They discovered that the extracts also blocked a molecular pathway involved in inflammation, a key part of gum disease.

In a summary of the study, the authors explained that phenolic acids, flavonoids (flavonols, anthocyanins, flavan-3-ols) and procyanidins made up 16.6 percent, 12.9 percent and 2.7 percent of the blueberry extract, respectively. The blueberry extract's antibacterial property may result from the ability of blueberry polyphenols to chelate iron, the authors wrote.

In addition, a pretreatment of macrophages with the blueberry extract (62.5 µg/mL) inhibited the secretion of IL-1, TNF- α , and IL-6 by 87.3 ± 1.3 , 80.7 ± 5.6 , and 28.2 ± 9.3 percent, respectively, following a stimulation with *F. nucleatum*. Similarly, the secretion of MMP-8 and MMP-9 was also dose-dependently inhibited, the authors wrote.

The researchers said in a news release that they are developing an oral device that could slowly release the extract after deep cleaning to help treat periodontitis.

For more information, see the study in the *Journal of Agricultural and Food Chemistry*, 2015, 63 (31), pp. 6999-7008.



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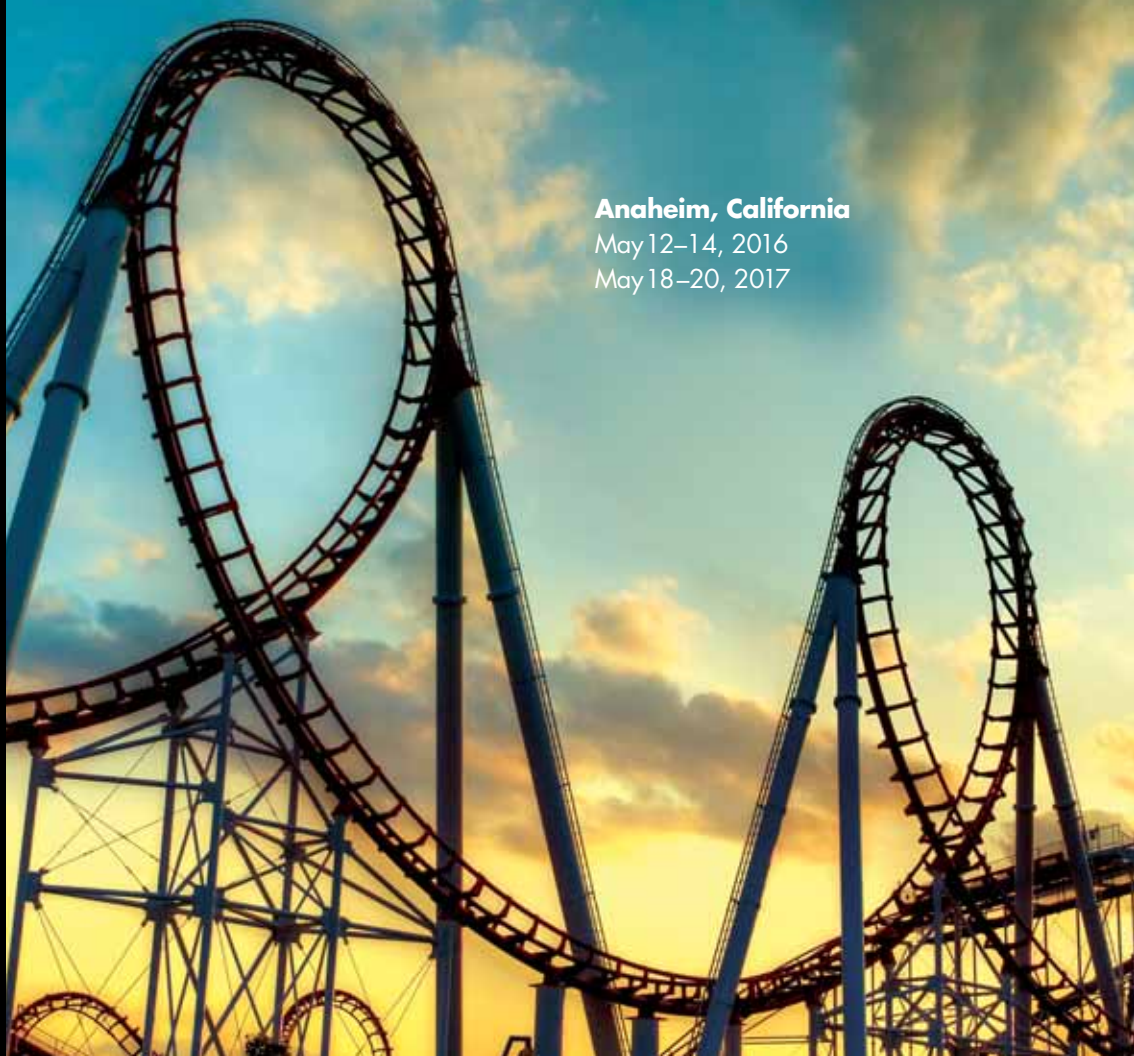


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Dentistry Is a Team Sport: Who's On Your Team?

Debra S. Finney, MS, DDS

GUEST EDITORS

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Conflict of Interest
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We've come a long way, baby, since I started working as a dental assistant at the age of 15 in my hometown, Ketchikan, Alaska. A friend of my parents' asked me to work in his dental office and my first reaction was, "No way, that would be gross!" Well, he convinced me to give it a try and today I am the owner of a periodontal practice, thanks to Dr. Aubrey Stephens. When I started working as a dental assistant in the late 1960s, dental assistants wore dresses, short dresses, so short that we couldn't sit down and, consequently, we had no choice but to do stand-up dentistry. When I did my dental hygiene training, our uniforms were white pantsuits complete with white caps. Those darn caps were a nuisance and kept bumping into the belt-driven slow-speed handpiece. Yes, things have changed ... thankfully!

In this issue, we offer a historical review of the dental team in California and a look at the extended circle of team members we have available today

along with examples of collaborative treatment. My classmate, Cindy Lyon, RDH, DDS, EdD, in her article, "California's Clinical Dental Team: Evolving Together With an Eye to the Future," takes us back to 1860, a time when dentists worked alone and did not have the benefit of dental assistants or the ability to refer to specialists. Since then, the clinical dental team has evolved in ways those early practitioners could not have imagined. In California, we have some of the most highly trained dental team members in the nation. We know, not only from our own experience but corroborated by research, that delegating care to dental assistants and hygienists benefits practices and patients, positively impacting efficiency, number of patient visits and practice income.¹ California has also just established a dentist-led model of dental care that utilizes telehealth technology and specially trained dental team members to provide access to comprehensive care to underserved populations located in community sites, such as Head Start and nursing homes (the virtual dental home).

Today, the term "solo practitioner"

is really a misnomer because we are surrounded by a support network — our dental team. Who is on your team? Do you have enough players for a hockey team, a cricket team or do you have enough to fill an entire football roster?

Corporate and group practice models are gaining popularity in dentistry today.² In these practice models, the owners and general managers may not be dentists. However, the dentist is always the head coach, the one determining the plays, calling the shots and directing the team in delivering the treatment play by play. The California Dental Practice Act requires that a dentist must diagnose dental disease and determine the best treatment. The team players execute scheduling of treatment, payment agreements, benefit determination, billing, collection, assisting, education and communicating with patients. Further support is provided by supply reps, equipment technicians, software and IT assistance, legal and accounting firms, insurance companies and practice management groups. Kind of makes you want to go back to 1860 when things were much simpler! Today, practicing dentistry often involves collaboration with other providers as well. The special team enters the field of play — dental hygienist, registered dental assistant in extended functions, dental specialist, lab technician, dental radiologist, oral pathologist, pharmacist, physician. Gee, it's beginning to look like it takes a village, not just a team, to deliver oral care. The articles that follow present examples of the partnerships necessary to deliver optimum care to our patients.

In the article “Multidisciplinary Management of Severe Tooth Surface Loss: A Case Report,” the authors state, “Well-formed working relationships with an interprofessional team are invaluable to ideal outcomes for

complex care cases.” They present a case that involved collaboration between medical and dental providers.

When I was working in my first dental office in Alaska, we had a visiting orthodontist who came by sailboat from Seattle. We also had an oral surgeon who visited from Anchorage during the summer months. There have been a couple of times during my career when I traveled to neighboring towns to provide periodontal care in general dental offices. Gregory J. Kolber, DDS, has authored an article that explains the traveling specialist of today and includes his personal experience as an endodontist along with an article by David Corradi, DDS, outlining his satellite periodontal practice.

Cynthia Valle-Oseguera, PharmD, and Eric G. Boyce, PharmD, in their article, offer examples and models of relationships between dentists and pharmacists that can enhance our knowledge and patient care. Their paper is followed by an informative piece by Elisa M. Chávez, DDS, and Amruta Hendre, DDS, titled “Caring for Older Adults With Complex Needs: Drafting an Interdisciplinary Team.” They provide invaluable information and resources to assist in navigating the health care system when providing dental treatment for our senior and special needs patients.

Finally, let's not forget the invaluable resources available through CDA Practice Support. Can you imagine practicing without the indispensable benefits that membership has to offer?

Dental teams of today have greater talent, experience and diverse resources than when I started in dentistry. Teams of the future will find it necessary to engage the circle of professionals surrounding them for assistance in diagnostics, treatment planning, education, research, management and

delivery of care. Leadership skills will be vital for dentists as the team coach. J. Richard Hackman explains team coaching as a group process. “It involves direct interaction with a team that is intended to help members use their collective resources well in accomplishing work.”³ The dentists of the future are learning how to integrate with medicine and the larger health system through interprofessional education (IPE) and practice. The 2014 January, September and October issues of the *Journal of the California Dental Association* presented the necessity for interdisciplinary collaboration in health care and provided models being implemented in several California dental schools. Through these model programs, dental students have opportunities to partner with students from other health science schools such as medicine, nursing and pharmacy. For example, the University of the Pacific, Arthur A. Dugoni School of Dentistry and the University of California, San Francisco, School of Medicine are working together on an interprofessional program that enables medical students to rotate through Pacific's Special Care Clinic. The medical students will garner a better understanding of how oral health care is delivered to the medically and developmentally compromised patient.⁴

We hope this issue will provide useful information and resources to support you and your team in succeeding at the sport of dentistry. Play on! ■

REFERENCES

1. Beazoglou T, et al. (2009). An Economic Study of Expanded Duties of Dental Auxiliaries in Colorado, ADA Health Policy Resource Center.
2. Kao R. (2014). Dentistry at the Crossroads. *J Calif Dent Assoc*, 42(2), 91-95.
3. Hackman JR. (2002). *Leading Teams: Setting the Stage for Great Performances*. Harvard Business School Press.
4. Boufis C. (2015, Spring). Interprofessional Education at the Arthur A. Dugoni School of Dentistry: Learning About, With and From Other Healthcare Professionals. *Contact Point*, 95(1), pp. 21-23.



California's Clinical Dental Team: Evolving Together With an Eye to the Future

Cindy Lyon, RDH, DDS, EdD

ABSTRACT California dentists enjoy some of the most well-trained clinical teams in the country. In these changing times, reflecting on our collective history may help inform collaboration and innovation that will serve us well as we create new ways to care for our patients and thrive in our professional lives.

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Conflict of Interest
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Few would deny that this is a pivotal time in our profession, with the dental landscape changing both here in California and across the nation. Our patients are becoming older and more diverse. Disease patterns are changing. Dental care utilization for children is steadily increasing while working-age adults are pursuing fewer services and overall dental spending is projected to remain flat.¹ In addition to challenge, there may also be opportunity in this changing marketplace. "The pressure to reduce costs will drive innovation, including exploring alternative care delivery models" and increased interprofessional partnership with medicine may improve coordination of oral and general health care models and strategies. Medicine shares this aspiration, as evidenced by the Institute for Healthcare Improvement's

advocacy for the newly developed Triple Aim construct to optimize health care system performance by improving the patient experience of care (including quality and satisfaction), improving the health of populations and reducing the per capita cost of health care.²

As unsettling as this new practice environment may be, we've been through changes in dentistry together before, haven't we? I'm reminded of this when I visit the 1860 dental office exhibit in Columbia State Historic Park, maintained by Pacific's Institute of Dental History and Craniofacial Study.³ It's been estimated that, at that time, only 15 percent of the nation's dentists were dental school graduates benefiting from instruction as we recognize it today.⁴ Not until 1884, with the public welfare in mind, would California enact a state dental practice act.⁵ Almost all care was for urgent, acute conditions. The

dentist worked alone, standing up. The patient expectorated into a spittoon (watch your shoes, Doc). The challenge of the day must have been to keep your horrified patient in the chair just long enough to complete a painful, primitive procedure. Thankfully, the environment in which we provide care has undergone profound transformation since then.

In 1926, as follow-up to the 1910 Flexner Report on medical education, the Carnegie Foundation for the Advancement of Teaching released a 300-page report, *Dental Education in the United States and Canada*, authored by William Gies, PhD,⁶ who visited every dental school in the nation during academic year 1921-22. Dr. Gies, a Columbia University biochemistry professor interested in dental education, science and clinical applications, founded the *Journal of Dental Research* in 1919 and was instrumental in the formation of both the International Association for Dental Research in 1920 and the American Association of Dental Schools in 1923. At the time, the scientific foundation for dental practice was scant and standards for dental education and standardized licensure exams were ideas yet to become reality. Supremely influential, the Gies Report prompted important change around student experiences, accreditation, the integration of dentistry with medicine and the important role of research. Dr. Gies also voiced some of the same professional concerns that we wrestle with today when he cautioned the profession to hold itself to the highest standards of science, education, collaboration and accountability, with a steadfast focus on the public good.⁶ These guiding imperatives are as important today as they were in 1926, both challenging and inspirational.

In 1933, the first national board dental examination was administered.⁴ By 1941,

dental school accreditation standards had been published by the American Dental Association.⁴ Independent Northern and Southern California Dental Associations were chartered in 1923 and unified in 1973 to better support members.⁷ As a profession, in a short number of years, we've changed in countless ways to better meet our professional needs as well as the needs, and expectations, of our patients and communities.

The allied professions with whom we partner today have been growing right alongside us, becoming more sophisticated

The Gies Report prompted important change around student experiences, accreditation, the integration of dentistry with medicine and the important role of research.

and codified. Our dental assisting colleagues were the first to join us, coming into wide existence in 1885, a manpower paradigm pioneered by C. Edmund Kells, DDS, who was also instrumental in the invention of X-ray technology. With the addition of these "ladies in attendance," as they were called, female patients were able to access treatment without a husband's approval and accompaniment.⁸ The presence of these new team members not only made dental care more comfortable and efficient, it proved a strategy for improved patient access and practice growth. The American Dental Assistants Association was organized in 1924 to advance the profession.⁹ In 1948, the American Dental Assistants Certification Board was founded and the certified dental assistant (CDA) was born.⁸

At home in California, the Legislature created the Advisory Committee on the Utilization and Education of Dental Auxiliaries in 1972, later to be known as the Committee on Dental Auxiliaries.⁸ Shortly after, in 1974, specific dental assisting duties and licensure categories came into being and have continued to advance.⁸

In 1972, beginning my career in dentistry as an assistant, I recall firsthand the loosely structured preceptor model that existed prior to such legislation. My only license was a radiology certification. I was fortunate, my dentist employer had been a dental school faculty member who was clearly passionate about dentistry and enjoyed teaching others. During my work hours, from 3 to 7:30 p.m., the practice often focused on specialty procedures, which might be referred out today, clearly a nod to adjusting the standard day to accommodate patients' work schedules and increase productivity. I have often appreciated the respect and reliance upon team, and the enthusiasm for patient care that this doctor demonstrated was an obvious influence on my personal career choice.

Today, registered dental assistants in extended functions (RDAEF) have the broadest scope of practice among our dental assisting team members, along with the foundational knowledge and technical training to support this scope. Among their duties, they are licensed to place retraction cord and take final impressions for indirect restorations, cement permanent indirect restorations, and place, contour and finish direct restorations under a dentist's direct supervision.¹⁰ With the contribution of these advanced RDAEF skills, dentists can delegate many functions and provide care at the top of their own scope of practice, incorporating principles and techniques to make practice and care

“faster, easier, better, less expensive and more enjoyable” in the oft-quoted words of Gordon Christensen, DDS, MSD, PhD.¹¹

Our dental hygiene colleagues have also traveled an interesting road to the present. Alfred Fones, DDS, recruited experienced professors in medicine, basic science, public health and dentistry to create the first dental hygiene school in 1913, later to become part of the University of Bridgeport.¹² These earliest dental hygiene graduates were educated to deliver care in traditional practice settings and, perhaps more important, to provide preventive care in the community and refer patients into the dental practice for restorative services. Dr. Fones confirmed the success of this community health strategy through a five-year demonstration project, which resulted in markedly improved children’s oral health with preventive care.¹³ With the advent of World War I, Dr. Fones’ dental hygiene class of 1917 became part of one of the earliest organized efforts to provide care for soldiers. They examined and cleaned the teeth of 600 soldiers, supplying each with home care instruction and referral to local dentists for restorative care.¹²

Dental hygiene educational accreditation standards were formalized in the 1950s and the National Board examination was instituted in 1962.¹⁴ The journal of the American Dental Hygienists’ Association, *Journal of Dental Hygiene (JDH)*, was first published in 1927 and stressed science as the basis for practice. Today 75 percent of *JDH* is comprised of research manuscripts.¹⁵

Among the nation’s early adopters of change, California certified dental hygienists to deliver local anesthesia in 1976.¹⁶ Although controversial at the time, today it’s hard to imagine halting your own patient treatment throughout the day to deliver anesthesia to facilitate your hygienist’s root planing procedures.

My first position as a new dental hygiene grad was in 1978 with a young dentist working out of two operatories. He immediately saw the advantage of coordinating our schedules so that I might give anesthesia for not only my own patients, but often his as well. Certainly, this made us more efficient; it also inspired me to refine my skills. He trusted me in a greater way, with the expectation that, more important than any other care I provided, my oral cancer exams should be regular, disciplined and thorough. I’ve never forgotten the weight

“If we miss caries, we lose a tooth — if we miss oral cancer, we lose everything.”

of his statement and the responsibility he gifted me with, saying ... “if we miss caries, we lose a tooth — if we miss oral cancer, we lose everything.”

The state has also been a leader in experimenting with improving scope of practice for dental providers and expanding the roles of our teams. Through Health Workforce Pilot Programs, we’ve undertaken 21 dental pilot programs since the early 70s.¹⁷ Later pilot projects were implemented to advance registered dental hygienists in alternative practice (RDHAP) and teledentistry practices.¹⁷ With approval of RDHAP licensure in 1998, we’ve returned to Dr. Fones’ vision of the dental hygienist leveraging our ability to reach deeply into the community.¹² By providing easily accessible preventive care and

subsequent referral to our practices for targeted restorative procedures, skilled RDHAPs, often working in concert with medicine, are helping our profession bring care to a patient population that has historically been challenging to reach. Today’s teledentistry technology makes it possible for dental hygienists to gather and forward comprehensive diagnostic data (health and social history, hard and soft tissue charting, radiographs, photos, etc.) in advance of a patient’s visit to our traditional practice, allowing us to target and maximize our in-office time with them (RDAEF2s, by current legislation, may also gather such information).¹⁸ Together we are broadening our consumer base in responsible, quality ways while removing barriers to care for some of our most vulnerable patients, young and old.

Participating in my rural county’s grant-driven, school-based screening, prophylaxis and sealant program, I’m embarrassed to admit how shocked I was to encounter so many children suffering from rampant, full-mouth caries, often to the gumline ... so different from those we care for in our private practices. By providing preventive care directly in our schools and referring children in need of urgent restorative care, a visiting hygienist with mobile equipment has made significant contributions in the last 15 years to the improved oral health of our county’s school-age children. As the granddaughter of a 102-year-old matriarch with 31 teeth, I’ve appreciated, in an even more personal way, that delivery of care is not always about low dental priorities, compensation models or provider willingness to care for a patient with a fragile medical picture — sometimes it’s about a model of care that comes to the patient.

Today, finding ourselves at one of the most challenging crossroads in our professional history, it may be important to reflect back on the sometimes-bumpy

road we've traveled together. The first university-based dental schools were created independent of medical schools because of physicians' misunderstanding of the importance of oral health to overall health and disregard for the dental profession's origins, seen as overly influenced by commercialism and self-interest.⁶ Today, both medicine and dentistry value, and have codified, diligent collaboration to provide authentic, interprofessional patient care.¹⁹ In 1902, the proposal of the new dental hygiene practitioner prompted one author to worry that this "partially educated subspecialist would drift into illegal practice of dentistry."¹² Today, it's impossible to imagine concentrating appropriate levels of preventive care in both traditional and nontraditional settings without our dental hygiene colleagues. Although less controversial, dental assisting scope of practice changes have engendered similar debate. Yet today, few among us find it unusual to observe, for example, our orthodontic colleague's team's ability to leverage care.

The ADA's Health Policy Research publication, *A Profession in Transition*, states eloquently, "It is a critical moment for dentistry and a time for the profession to define its destiny. Given the significant environmental changes on the horizon, this is a watershed moment for the profession. It is not a time for complacency. Understanding the key forces at work will assist the profession in defining its own destiny. Ignoring what is happening in the health and consumer environment will mean ceding the future of the profession to others."¹ Business management expert Peter Drucker encourages us further with his assertion that, "The greatest danger in times of turbulence is not the turbulence; it is to act with yesterday's logic."²⁰

Yes, we've been through changes in

dentistry together before. Reassuringly, we are no longer alone in our operatories, standing next to a spittoon, providing primitive care. We are joined by highly trained teams, colleagues with the same passions and aspirations as our own for the improved oral health of Californians and their communities. The future of our profession belongs to us all. We are, together, responsible for its continued service and success. ■

REFERENCES

1. American Dental Association. A profession in transition. Key forces reshaping the dental landscape. 2013. www.ada.org/~media/ADA/Member%20Center/Files/Escan2013_ADA_Full.ashx. Accessed Feb. 14, 2015.
2. Institute for Healthcare Improvement. Initiatives. The IHI Aim. www.ihl.org/Engage/Initiatives/TripleAim/pages/default.aspx. Accessed Feb. 16, 2015.
3. A.W. Ward Museum of Dentistry Collection, Institute of Dental History and Craniofacial Study, University of the Pacific Arthur A. Dugoni School of Dentistry. dental.pacific.edu/Institute_of_Dental_History_and_Craniofacial_Study/DHCS_Collections.html. Accessed on Feb. 13, 2015.
4. Field M, ed. Committee on the Future of Dental Education, Division of Health Care Services, Institute of Medicine. Dental Education at the Crossroads: Challenges and Change. Washington D.C.: National Academy Press, 1995.
5. Robinson JD. The American association of dental examiners. *J Am Dent Assoc* 1958;58:150-157.
6. Gies WJ. "Dental education in the United States and Canada." New York: The Carnegie Foundation for the Advancement of Teaching, 1926.
7. Carney K. Color TVs and prepaid dental benefit plans. *J Calif Dent Assoc* 2013;41(10):729-730.
8. Becker SL, Paulhamas C. Reaching up and reaching out: The extended functions dental assistant. *Inside Dental Assisting*. March/April 2011;7(2). www.dentalaegis.com/ida/2011/04/reaching-out-and-reaching-up. Accessed Feb. 23, 2015.
9. History of ADAA. American Dental Assistants Association. www.dentalassistant.org/?page=ADAAHistory. Accessed Feb. 14, 2015.
10. Business and Professions Code, Section 1753.5 California Law, Business and Professions Codes. ca.regstoday.com/law/bpc/ca.regstoday.com/laws/bpc/calaw-bpc_DIVISION2_CHAPTER4.aspx#1753.4 Accessed Feb. 15, 2015.
11. Christensen G. Practical Clinical Courses. www.pccdental.com/products/ce-courses/caribbean-cruise/caribbean-cruise.php. Accessed on February 25, 2015.
12. Fones AC. The origin and history of dental hygiene. *J Am Dent Assoc* 1926;13(12):1809-182.
13. Gadbury Amyot CC, Nathe C. The intersection of education and technology at the century mark. *J Dent Hyg Special Commemorative Issue* 2013; 87 (no. suppl 1): 44-49.
14. American Dental Hygienists' Association. 100 years of dental hygiene. www.adha.org/timeline. Accessed Feb. 16, 2015.
15. Bowen DM. History of dental hygiene research. *J Dent Hyg Special Commemorative Issue* 2013; 87(no. suppl 1):5-22.
16. American Dental Hygienists' Association. Local anesthesia administration by dental hygienists state chart. www.adha.org/resources-docs/7514_Local_Anesthesia_Requirements_by_State.pdf. Accessed Feb. 16, 2015.
17. Legislative and Executive Resource Handbook. The oral workforce in California. dental.pacific.edu/Documents/community/special_care/acrobat/UOP_Issue%20Brief_Oral%20Health%20Workforce%20in%20CA.pdf. Accessed Feb. 16, 2015.
18. American Dental Education Association. State Update. Governor of California signs teledentistry bill into law. www.adea.org/Blog.aspx?id=25369&blogid=20132. American Dental Hygienists' Association. 100 years of dental hygiene. www.adha.org/timeline. Accessed Feb. 16, 2015.
19. Valechovic R. ADEA Charting Progress. Interprofessional collaboration benefits ADEA and its partners. adeachartingprogress.wordpress.com/2014/07/15/interprofessional-collaboration-benefits-adea-and-its-partners. Accessed Feb. 21, 2015.
20. Drucker P. *Managing in Turbulent Times*. New York: Harper Paperbacks, 1980.

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Multidisciplinary Management of Severe Tooth Surface Loss: A Case Report

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Patients with a worn dentition present many challenges for diagnosis and treatment planning. Dental wear is a multifactorial problem often involving attrition, abrasion, abfraction, acid erosion, changes in dental hard and soft tissues and a loss of vertical dimension of occlusion.¹ Each of these entities can occur independently, but the actual amount of tooth loss due to attrition and abrasion is highly dependent on the presence of factors that cause acid erosion of the enamel and dentin. Therefore, a multidisciplinary team approach is needed to develop strategies to control the clinical devastation resulting from dental wear.² Clear communication and coordination within this team is imperative.

Successful treatment of complex dental problems involves several important factors. Prior to developing a treatment plan, a comprehensive medical and dental history must be obtained. As the complexity of a patient's problems increases, so must

the detail of questions regarding medical issues, including medications, dental history, and behavioral and nutritional components. Examination parameters must also be expanded, including not only the dental hard and soft tissues, but also salivary pH and flow rate monitoring and the development of a caries management by risk assessment (CAMBRA) program.³ Additionally, esthetic expectations are important and must be addressed.⁴ After gathering detailed information from a history and examination, a diagnosis of complex problems can be made. At that point, etiologic factors must be determined and treatment strategies involving both medical (e.g., internal medicine, ear, nose and throat (ENT), behavioral psychology and nutrition) and dental concerns (e.g., orthodontics, endodontics, periodontics, prosthodontics and oral surgery) can be developed. Well-formed working relationships with an interprofessional team are invaluable for ideal outcomes in complex care cases.

TABLE

Definitions for Tooth Surface Loss

Acid erosion	The chemical dissolution of dental hard tissues without bacterial involvement.
Abrasion	Physical wear as a result of a mechanical process. Includes toothbrush abrasion, rough or hard opposing surfaces, hard food particles, sleep bruxism and daytime clenching and grinding.
Attrition	Physical wear as a result of clenching or grinding of opposing teeth.
Abfraction	Physical wear as a result of tensile or compressive forces in the area of the cementoenamel junction (e.g., wedge-shaped defects). Also called “noncarious cervical lesions.”
Erosive dental wear	A multifactorial chemical process that may encompass all of the above physical processes.



FIGURE 1. Preoperative full-mouth X-rays (FMX).

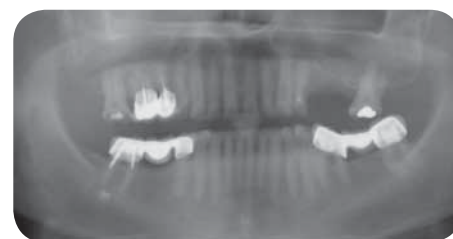


FIGURE 2. Preoperative panorex.

Prevalence data on acid erosion and tooth surface loss varies greatly depending on the criteria used to define tooth surface loss. However, tooth surface loss is a common and increasing problem among all age groups. Studies show a prevalence of 7 percent to 69 percent in young children and adolescents and 10 percent to 100 percent in adults.⁵ Because tooth surface loss is an irreversible problem (versus caries, where remineralization can occur), severity increases with age and, in severe cases, extensive reconstructive dentistry may be needed.⁶

Tooth surface loss has a multifactorial etiology involving interactions between acid erosion, attrition, abrasion and abfraction (TABLE).⁷ It can occur from acid attacks on enamel and dentin surfaces resulting in demineralization and softening of exposed surfaces. Further loss results from the frictional forces of attrition and abrasion, which exacerbates the removal of surfaces softened by demineralization.⁸

The source of the acids can be both intrinsic and extrinsic. Intrinsic acids involve gastric fluids and can be related to anorexia, bulimia,⁹ alcoholism and gastroesophageal reflux disease (GERD).¹⁰⁻¹¹ Extrinsic acids come from acidic fruits and drinks (fruit juices and sports and energy drinks, etc.)¹² and from various environmental (chlorine in swimming pools)¹³ and occupational (winemakers) sources.¹⁴ In the following case presentation, severe tooth surface loss was managed collaboratively by a medical and dental team.

Diagnosis and Etiology

As shown in FIGURES 1 and 2, at initial examination this 56-year-old woman was missing teeth Nos. 1, 16, 18, 30 and 32. Severe erosion and wear were present on numerous upper and lower teeth (FIGURES 2, 4, 5). Periodontal health was generally within normal limits and oral hygiene was adequate. Extensive caries was evident under poorly

fitting crowns on teeth Nos. 17, 19 and 31. A small loss of vertical dimension of occlusion (VDO) was also present; however, most of the deep anterior overbite (FIGURE 3) could be attributed to wear and compensatory eruption of upper and lower anterior teeth. Diastemas between upper anterior teeth were attributed to flaring caused by the deep overbite.

Initially the patient was concerned with her “short teeth” and the “spaces” between her upper anterior teeth. Although she noticed some sensitivity to hot and cold, she was unaware of the problems with her posterior teeth and her occlusion. It was determined that she had a history of anorexia and bulimia as a young adult and that she, more recently, had gastrointestinal problems including symptoms of “heartburn” and a “sour taste” upon awakening. She also stated that she had a long-standing habit of teeth clenching and grinding.¹⁵ She denied excessive



FIGURE 3. Initial anterior image, note loss of vertical dimension of occlusion.



FIGURE 4. Initial maxillary occlusal, note extensive wear from GERD.



FIGURE 5. Attrition.



FIGURE 6. Diagnostic wax-up at increased vertical dimension of occlusion.



FIGURE 7. Diagnostic wax-up, maxillary.



FIGURE 8. Diagnostic wax-up, mandible.

intake of acidic fruits or drinks. The combination of the etiologic factors noted above was the primary cause of the resultant severe tooth surface loss.

Medical consultation with ENT and gastroenterology specialists included endoscopic examination of the esophagus. Results showed only minimal inflammation, superior to the lower esophageal sphincter and no indication of Barrett's esophagus involving more serious esophageal tissue changes.¹⁶ A proton pump inhibitor (Nexium) was prescribed for control of GERD symptoms.¹⁷

Salivary tests were used to determine that the patient had slight hyposalivation and a resting (unstimulated) saliva of pH 6.2. This pH value, per se, would not cause surface loss, as demineralization does not occur until the pH at the tooth surface is 5.5 or lower.¹⁸ It should be noted that gastric fluids have a pH of approximately 1.2, which is very erosive. The patient was advised to begin using

a stannous fluoride toothpaste (Crest Pro Health), which has been shown to provide some protection from severe acid challenges.¹⁹ The dental hygienist may prove a strong ally in this continued behavior modification strategy.

Treatment Planning and Execution

Several factors were considered when determining the most optimal treatment plan for the patient, as listed below.

Addressing the Patient's Chief Complaint and Desired Outcomes

The patient presented with a desire to improve the general esthetics of her teeth, which included the resolution of anterior spacing, reducing the worn appearance and increasing tooth display when smiling. She wished to maintain as much of her natural dentition as possible and preferred implant-based fixed solutions in the event that certain teeth were deemed un-restorable. In the case of such extensive esthetic changes, collaboration with an experienced,

skilled dental lab technician is invaluable. Both preliminary functional and esthetic decisions, as well as final restorations, will be ideal through the strong partnership of a dentist and dental laboratory technician. In collaboration with the treating dentist, a diagnostic wax-up (**FIGURES 6-8**) was crafted by the technician to create a smile design, subsequently accepted by the patient.

Stabilized Occlusion

The final rehabilitation would yield bilateral posterior first molar occlusion that would limit non-axial forces on anterior teeth. Anterior teeth would, in turn, provide guidance and disclusion for posterior teeth in excursive movements. The final restorations would cover all exposed supragingival enamel and dentin as a barrier to further acid-induced dissolution. The rehabilitation would conclude with the fabrication of a nighttime occlusal splint as protection against possible parafunction.



FIGURE 9. Preparations on master cast, mandible.



FIGURE 10. Completed Emax crowns on teeth Nos. 6-11. Implants uncovered.



FIGURE 11. Maxillary "soft tissue" cast with implants.



FIGURE 12. Mandibular "soft tissue" cast with implants.

Vertical Dimension of Occlusion (VDO) Increase

While there was no evidence of a significant loss of VDO, evaluation of speaking spaces and facial landmarks supported a small loss of VDO. In turn, a small increase in VDO (FIGURE 6) was prescribed in the final rehabilitation with several goals in mind. These included the increase in length of anterior teeth for esthetics, reduction of anterior overbite, posterior restorative convenience and a reduced need for occlusal/incisal tooth removal during preparation (conservation of tooth structure).

Implant Treatment

Teeth Nos. 2, 3, 4, 15, 17, 19 and 31 were extracted. The treatment plan was to restore posterior occlusion by placing implants at Nos. 3, 4, 13, 14, 19 and 30 and, therefore, achieve first molar occlusion. Implant placement and function can best be achieved when the dentist and oral surgeon

agree on well-defined treatment priorities and processes. In the upper right, there was lack of bone both vertically and horizontally. Therefore, a lateral-window sinus lift and ridge augmentation with bovine xenograft material were done in the Nos. 3 and 4 areas. The implants were placed after six months of healing. At the same time, implants were also placed in Nos. 13 and 14. On the mandible, the bone in the buccal of the No. 30 area was augmented with autogenous bone harvested from the osteotomy site, which was overlaid by a xenograft. All implants were Biomet 3i tapered implants with internal hex connections.

Timeline

Considering the treatment setting was an educational, student-driven dental school clinic, particular attention was given to phasing treatment in a way that would maximize efficiency while also providing supervision in the academic setting.

Treatment Sequence

Incorporating the above-noted treatment principles, the following treatment sequence was followed:

1. September 2009 — Extraction of nonrestorable teeth Nos. 2, 3, 4, 15, 17, 19 and 31 (caries, periodontal and endodontic failure).
2. November 2009 — Post left maxilla lateral window sinus lift and ridge augmentation in preparation for future implant placement.
3. Definitive treatment design and wax-up completed (FIGURES 6-8).
4. Intraoral acrylic smile design overlay try-in completed. Esthetic verification observed and validated by patient. Acceptable phonetics verified.
5. Maxillary and mandibular interim removable partial dentures (RPDs) were fabricated at the prescribed VDO to provide posterior load buffer to support prototype provisionals.
6. Maxillary and mandibular tooth preparations were completed over two appointments. Laboratory-fabricated and segmentally splinted interim provisional restorations were delivered at the increased VDO in concert with interim RPD delivery.
7. Provisional rehabilitation was prescribed for maintenance and periodic evaluation over a four-month period while second-phase surgical treatment was initiated. During this phase, final validation of VDO, phonetics and esthetics were verified.
8. March 2010 — Nos. 19 and 30 implants placed with autogenous bone augmentation on the buccal of implant No. 30.
9. April 2010 — Nos. 3, 4, 13 and 14 implants placed. Interim provisionals removed and preparations were refined with respect to gingival zenith of maxillary anteriors and final margin placement.

10. Final impressions and master cast fabrication for phased restoration delivery, including centric jaw relations and custom incisal guide development (**FIGURE 9**).
11. Individual lithium disilicate crowns were delivered to teeth Nos. 5-12 and Nos. 20-29 (**FIGURE 10**). Phase-two restorative delivery was initiated with open tray master impressions for implant restorations (splinted porcelain-fused-to-metal crowns on Nos. 3, 4, 13 and 14 and crowns on Nos. 19 and 30). Soft tissue master model fabrication and jaw relation records (**FIGURES 11 and 12**).
12. Final implant restorations delivered and final occlusion adjustments made to develop prescribed anterior-posterior harmony (**FIGURES 13-22**).
13. Impressions for maxillary occlusal splint after one-week recall.
14. Delivery and adjustment of maxillary splint.

Discussion

A multidisciplinary approach may be necessary to properly manage the care of patients with severe erosion. Because of the multifactorial nature of the etiologic factors, it is often necessary to identify and seek input and support from a team of medical and dental professionals. Effective long-term management of these challenges requires authentic patient commitment to behavioral changes. Management of gastric reflux often involves dietary and lifestyle changes, such as avoiding spicy foods, not overeating and decreasing intake of alcoholic beverages. Other changes, such as decreased consumption of sugar-sweetened beverages and sports and energy drinks, may be necessary to decrease acid challenges to the dentition. Nutritional counseling may prove helpful.



FIGURE 13.
X-ray of implants for
teeth Nos. 3-4.

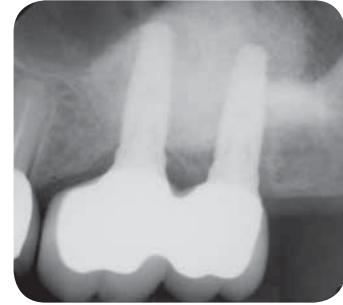


FIGURE 14. X-ray of implants for teeth Nos. 13-14.

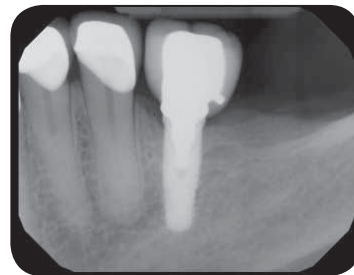


FIGURE 15. X-ray of implant for tooth No. 19.



FIGURE 16. Final maxillary reconstruction.



FIGURE 17. Final mandibular reconstruction.

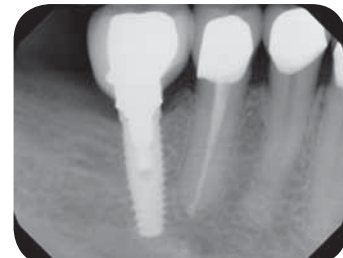


FIGURE 18. X-ray of implant for tooth No. 30.



FIGURE 19. Completed right posterior.



FIGURE 20. Completed left posterior.



FIGURE 21. Completed reconstruction.



FIGURE 22. Final smile.

Coordinated treatment planning, sequencing and execution are critical to ideal functional and esthetic outcomes. Working in concert, coordinated by the lead dental practitioner, the medical and dental team can achieve the best possible patient care. ■

REFERENCES

1. Lussi A, Carvalho TS. Erosive tooth wear: A multifactorial condition of growing concern and increasing knowledge. *Mono Oral Sci* 2014;25:1-15.
2. Spear FM, Kokich VG, Mathews D. Interdisciplinary management of anterior dental esthetics. *J Am Dent Assoc* 2006; 137: 160-9.
3. Featherstone JDB, Singh S, Curtis DA. *J Prosthodont* 2011;20:2-9.
4. Sessemann MR. Systematic analysis of an anterior wear case to fulfill esthetic and functional objectives. *Compend Contin Educ Dent* 2012; 33:124-129.
5. Jaeggi T, Lussi A. Prevalence, incidence and distribution of erosion. *Monogr Oral Sci* 2014; 25: 55-73.
6. Lussi A, Schaffner M. Progression of and risk factors for dental erosion and wedge-shaped defects over a six-year period. *Car Res* 2000; 34:181-187.
7. Barbour ME, Finke M, et al. The relationship between enamel softening and erosion caused by soft drinks at a range of temperatures. *J Dent* 2006; 34:207-213.
8. Shellis RP, Addy M. The interactions between attrition, abrasion and erosion in dental wear. *Monogr Oral Sci* 2014; 25:32-45.
9. Hudson, JJ, Pope HG, Kessler RC. The prevalence and correlates of the National Comorbidity Survey Replication. *Biol Psychiatry* 2007; 61:348-58.
10. Bartlett DW, Evans DF, et al. A study of the association between gastroesophageal reflux and palatal dental erosion. *Br Dent J* 1996; 181:125-132.
11. Ranjitkar S, Smales RJ, Kaidonis JN. Oral manifestations of gastroesophageal reflux disease. *J Gastroenterol Hepatol* 2012; 27:21-27.
12. Barbour ME, Lussi A. Erosion in relation to nutrition and the environment. *Monogr Oral Sci* 2014; 25:143-154.
13. Baghele ON, Majundar IA, et al. Prevalence of dental erosion among young competitive swimmers: A pilot study. *Comp Cont Educ Dent* 2013; 34:2-7.
14. Ranjitkar S, Smales RC, Lekkas D. Prevention of tooth erosion and sensitivity in wine tasters. *Wine and Viticulture J* 2012; 27:34-37.
15. Lavigne GJ, Khoury S, et al. Bruxism physiology and pathology: An overview for clinicians. *J Oral Rehabil* 2008; 35:479-494.
16. Dunbar KB, Spechler SJ. Controversies in Barrett's esophagus. *Mayo Clin Proc* 2014; 89:973-84.
17. Wilder-Smith CH, Wilder-Smith P, et al. Quantification of dental erosions in patients with GERD using optical coherence tomography before and after double-blind, randomized treatment with esomeprazole as placebo. *Am J Gastroenterol* 2009; 104:2788-2795.
18. Hara AT, Zero DT. The potential of saliva in protecting against dental erosion. *Monogr Oral Sci* 2014; 25:197-205.
19. Bellamy R, Harris R, et al. In situ clinical evaluation of a stabilized stannous fluoride dentifrice. *Int Dent J* 2014; 64 [suppl. 1]:43-50.

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Satellite Specialty Practice: An Introduction

Gregory J. Kolber, DDS

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Conflict of Interest
Disclosure: None reported.

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Conflict of Interest
Disclosure: None reported.

A few terms are used to describe a dental specialist who travels to different dental office locations to provide specialty care. For the purposes of this article, we use the term “satellite specialist” to describe the dental specialist who provides dental care at various locations. Other commonly used terms for the satellite specialist are “traveling specialist” or “in-house specialist.” The different practice locations are often referred to as “host practices,” “corporate offices” or “remote locations.” This will vary depending on whether the provider works exclusively with one large corporation at multiple locations or works with separate contracts for individual private practice offices or some variation thereof. This article focuses on how the host practice can best accommodate a satellite specialist and vice versa. The initial considerations include scheduling and patient preparation. Further consideration should include management of patient complications, contractual agreements, malpractice insurance limitations, management and provision of instruments, supplies, staff and, finally, provider compensation.

The host practice can best accommodate a specialist by ensuring proper scheduling and preparation of patients for treatment. It is very important that the host team prepare

patients prior to the consultation and treatment with the specialist. This includes discussing the financials of treatment, insurance specifics and delivering the treatment forms. Treatment forms include the medical and dental history, referral, consent form, on-call doctor information, preoperative instructions and postoperative instructions. When scheduling the patient, it is important that time is reserved prior to actual treatment time to complete the required forms and that the appropriate amount of treatment time is reserved for either consultation or treatment.

Managing complications is one of the challenges of satellite practice. Complications that present during treatment are the responsibility of the specialists. Satellite specialists need to travel with their own emergency medical kit or verify that each office has an appropriate emergency kit. Daily site verification of equipment by the specialist is critical because in a multispecialty practice, the materials in the kit may be used or expired. Typically, the equipment will include blood pressure monitoring, thermometer, pulse oximeter, automated external defibrillator, CPR and emergency medications with syringes and bandages.

When complications occur postoperatively, they may be managed directly by the satellite specialist, an associate specialist or triaged by the host dentist. The flow of patient contact after treatment should be identified in

the contractual agreement between the specialist and the host office. Satellite specialists should provide their emergency contact information to patients along with the postoperative instructions. Alternatively, the host office may have an on-call number that will be given to the patient. If the patient's situation is simple, the on-call dentist might take care of it, however, if the situation were more complex, he or she would contact the specialist who provided treatment. Additionally, the satellite specialist may practice with a group of other specialists who may take calls for the satellite specialist.

Often, the patient's needs can be satisfied with a prescription called in to the local pharmacy. However, occasionally, the patient will require an emergency office visit for evaluation and treatment or to deliver a prescription that cannot be called in. Coordinating this office visit might require the specialist to have after-hours access to each office he or she visits or access to a centralized office.

Contractual agreements are a necessity for any satellite specialty practice. The agreement can range from just a few pages to 30 or more depending on the situation. Contracts should include malpractice insurance requirements, procedures to be performed and arrangements for supplies and equipment. Scheduling, billing and dispute resolution are also often included in contractual agreements.

Typically, there are no additional requirements to acquire malpractice insurance as a satellite specialist. However, the premiums may be higher depending on the number of offices and the types of procedures performed. Some malpractice insurance carriers insure the provider irrespective of the locations that the specialist performs treatment. Other carriers require that a new form and approval be issued for every new location

that is added. There are many variations for management and provision of staff in a satellite specialty practice. Often, the host office will provide both the chairside assistants and front office staff. However, some satellite specialists will hire their own assistants who will travel from office to office. Compensation for the staff can be provided either by the host company directly as employees or by the satellite specialist. Sometimes, the entire staff may be local and the doctor travels to each location. In another variation, the chairside assistants travel with the doctor

Contracts should include malpractice insurance requirements, procedures to be performed and arrangements for supplies and equipment.

as a team and the front office staff is local. It is uncommon for front office staff to travel to multiple offices on a regular basis.

Provider compensation can be either a daily rate or a percentage of production, percentage of collection or a hybrid. Often, the provider is guaranteed a daily rate, which encourages the office to ensure a full schedule for the specialist. This rate is typically much lower than the expected percentage of production and is often not relied upon. The percentage of either production or collection can have some variation. If the calculation is based on the accounts receivable, then this is based on percentage of collections. If the calculation is based on the percentage of production, this is often normalized to what the anticipated production would be based on anticipated patient

insurance contributions, not based on the full fee for service for each procedure.

The advantages of satellite specialty practice include ease of provider communication, shared office overhead and patient familiarity with their regular dental environment. In contrast, the advantages of traditional private practice are more formal provider communication, facilitation of more advanced treatment methodologies and use of the highest-quality available equipment such as specialized motors, microscopes and cone beam CT imaging.

Satellite specialty practice has been increasing among recently graduated specialists. New graduates may not desire to commit to live in one specific area for their entire career. The flexibility of a limited commitment may be appealing. Additionally, new graduates may not feel confident establishing their reputation in their community of choice until gaining more experience. Finally, new graduates from residency programs are immediately faced with the decision of purchasing a practice or associating with another specialist or satellite specialty. The option to purchase a practice may not be available immediately upon graduation depending on the student debt load and personal financial situation.

Evaluation of differences between traditional private practice specialty and satellite specialty reveals distinct advantages and disadvantages that must be considered. The recent development of a satellite specialty practice can be considered a benefit under specific circumstances. Ultimately, the patient's best interest must be considered and quality of patient care should be the driving force behind practice methodology. Patient convenience must be weighed against quality of care to achieve the highest treatment success. ■

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Satellite Specialty Practice: Periodontics

David Corradi, DDS

Like many specialists, I entered into satellite (or “in-house”) practice, as a means of supplementing income while starting a new practice. In my case, it developed into a full-time mode of practice. I have since met a number of periodontists whose practices are exclusively in-house. This practice model seems to be growing in popularity, particularly among newer periodontists. In Southern California, I believe this trend is due in part to market factors such as oversaturation, decreased insurance reimbursement, general practitioners providing more periodontal and implant procedures, the high cost of practice purchase or start-up and high levels of student debt. Under these conditions, the option of providing care at an office where patients are already prepared is often more attractive. When I started in-house practice, most of my colleagues were either supplementing their own practices or planning to start or purchase a practice in the near future. It is not unusual to meet periodontists who have no intentions of owning a practice. I’ve even met some periodontists who have sold their practices and now practice exclusively in-house.

A popular way to practice in-house is through a corporate chain or multi-office management service organizations (MSOs). These offices have often planned for specialty care since their inception, and the employees usually have a reasonable level of training. In this setting, the specialist usually has a contract with the corporation and is paid based on a percentage of production or collection, often with a guaranteed minimum. Because these organizations have multiple offices, the specialist may be

able to expand into several locations. The corporation usually provides instruments and clinical supplies, but selection will likely be limited based on budgetary constraints. In some cases, I have seen implants purchased by the corporation. In others, the corporation negotiates with the implant companies to allow its specialists to purchase at a discount. In the

The option of providing care at an office where patients are already prepared is often more attractive.

latter situation, an increased percentage of remuneration is usually paid to the specialist in implant procedures to cover the cost of the fixture. Overall, this arrangement requires minimal investment in inventory and is often the easiest to establish as systems are already in place for a specialist. The corporation usually manages insurance participation. On the negative side, these practices usually enroll in virtually all insurance plans regardless of remuneration and may rely heavily on upselling of noncovered procedures or products to maintain profitability. They also may have a daily minimum production quota, whether stated or implied, and often schedule at a fast pace. These practices also may focus on same-day treatment, which can result in long hours as procedures are added to the schedule throughout the day.

Privately owned practices are another opportunity for the in-house specialist. These positions are usually found through word-of-mouth referrals, classified advertisements in trade journals and online classifieds. I have even seen one specialist offer to sell a collection of private in-house practices. These practices generally allow direct interaction with the owner, greater flexibility in the contract (in fact, many work on a handshake agreement) and may involve fewer insurance commitments. Material selection and purchase in private offices is usually negotiated between the owner and specialist. Treatment tends to be more collaborative in this arrangement than it is in a corporate setting. Private practices also come with their own set of challenges. First, the practice must have sufficient volume and generate enough referrals to keep the specialist busy at least one day per month. In addition, general offices may not be physically designed for specialty practice, and the staff may require additional training in specialty procedures. In some cases, the specialist may elect to provide his or her own assistant. Finally, the practice owner’s treatment philosophy must be reasonably close to the specialist’s.

Some aspects of in-house practice are the same regardless of the type of practice. The specialist must be accessible to both the office staff and patients while not in the office. It is also critical that the general dentist and staff are trained to provide postoperative checks and, most important, manage complications. Having an on-call policy is essential, and it is best if specialty patients contact the specialist directly. Scheduling needs must be communicated from the beginning, both in terms of how much time is required per procedure and in

terms of whether or not procedures can be booked directly or require a consultation first. Instruments are usually the responsibility of the specialist, particularly the more expensive and specialized equipment such as a surgical piezo or implant motor. It is not uncommon to see a travelling periodontist rolling an industrial toolbox full of equipment. Sterilization is usually the responsibility of the host office, as well as disposable products, surgical wraps, autoclave bags, handpiece lubricant, etc. The specialist should also have an agreement regarding referrals from outside the practice. While these referrals seem unlikely, patients will often see an in-house specialist simply because he or she accepts their insurance. Finally, the specialist must keep track of what insurance policies he or she is enrolled in and

ascertain that policies are billed from the proper address. Insurance reimbursement checks occasionally wind up at the wrong office location in spite of these efforts.

In-house specialty practice is increasingly popular in Southern California. Finding in-house opportunities is relatively easy but finding mutually beneficial and rewarding in-house opportunities can be difficult. At their best, they allow excellent communication and collaboration in patient care as well as significant financial rewards. The owner gets an additional income stream, increased scope of practice and often improved case acceptance. The specialist receives a steady flow of patients without the responsibilities or investment required to own a practice. Unfortunately, the ideal situation is not always attained. Ultimately, both parties

are tying their reputations to each other, so an agreement between two clinicians with dissimilar skill levels, treatment styles or ethical perspectives is likely to fail. In my experience, the best in-house arrangements are those between a general practitioner who knows or is willing to learn about the specialist's practice, and a specialist who is willing to train the staff and understands the difficulties of practice ownership. For the periodontist, it is also important to educate the hygienists in the host practice about referral protocols and periodontal treatment. Like any other dental associateship or partnership, the general practitioner-specialist arrangement depends on careful planning and clear communication for long-term success. ■

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Satellite Specialty Practice: Endodontics

Gregory J. Kolber, DDS

My introduction to satellite specialty practice began after associating in a traditional private endodontic practice. A year after my residency was completed, my bustling family was growing and we found ourselves needing to move back home to Northern California. After considering a variety of practice opportunities, I decided to piece my schedule together with a few different corporate dental groups on a part-time basis. For about two years, I contracted with multiple corporate groups and traditional private practice offices throughout Northern California.

The topics discussed in the introductory article apply very well to a satellite endodontic practice. In my experience, some of these concepts

can benefit from further discussion and are expanded upon below. These are specific recommendations for the satellite endodontic practice.

Coordinating the daily schedule is important, as each health care provider will have a preferred flow. Some endodontists will schedule consultations in the mornings or afternoons, others will prefer to schedule consultations between treatments. Some endodontists prefer a single or multiple visit orthograde treatment approach. Retrograde procedures and microsurgies are often performed as a first patient of the day or prior to lunch to allow for overflow time. More specifically, treatment will often be scheduled based upon units of time. One unit is often 15 minutes in the endodontic office. A simple anterior root

canal therapy fill visit might be scheduled for two units of treatment time, while a very complicated molar retreatment with post removal might be scheduled for eight units. There can be many variations to scheduling depending upon provider preferences or recommendations specific to a particular case.

In larger satellite specialty practices, particularly where 10 or more offices are covered, the endodontist will carry his or her own instruments and equipment from office to office. These instruments are kept in presterilized pouches and transported in a mobile plastic container. Typically, there will be six or more room equipment setups. There can be some variation of who transports the instruments. Most commonly, the opener assistant will carry half of the setups and

the doctor will carry the other half. This configuration allows for a good flow and a backup plan if the opener assistant is not able to work on a given day. In some satellite specialty practices, particularly where the covered offices are fewer than five, each location will carry three or more full setups and there is little to no need for the satellite specialist to carry his or her own instruments.

Specific to the endodontic practice, disposable products such as rubber dams, liquids, plastics, cottons and papers are typically provided by the host office. However, occasionally, the specialist is required to purchase products and store them onsite in each office. It is best practice to limit the amount of disposable products or liquids that are routinely carried from office to office for simplicity and to limit the potential for contamination or damage. Additionally, certain liquids, such as sodium hypochlorite, ethylenediaminetetraacetic acid (EDTA), antibacterial rinses and solvents such as chloroform, may require special commercial transportation signs or vehicle storage depending on state regulations.

Compared to a satellite endodontic practice, traditional private practice appeals for a variety of reasons, including a higher level of autonomy in patient scheduling and the ability to acquire and utilize more advanced equipment, such as cone beam computed tomography (CBCT) and the dental operating microscope. This type of equipment is not mobile and is often not available to a satellite endodontist. A traditional private specialty practice can maintain a significantly greater variety of supplies, including multiple types of disinfecting instruments such as ultrasonics, endosonics, EndoVac, NiTi rotaries and various irrigants. Satellite endodontists must be able to carry all of

their equipment and thus must limit their armamentarium. This limitation may not allow them to provide the optimum care for a unique or challenging case.

A 2014 publication by the American Association of Endodontists discussed magnification in an article titled “The Standard of Practice in Contemporary Endodontics.” This article described recent studies that have shown the dental operating microscope as an integral and important part of the performance of modern endodontic techniques. Procedures that benefit from the use of

In larger satellite specialty practices, particularly where 10 or more offices are covered, the endodontist will carry his or her own instruments and equipment from office to office.

the microscope are locating obstructed canals, removing materials such as solid obturation materials (silver points and carrier-based materials), posts or separated files, removing canal obstructions, assisting in access preparation to avoid unnecessary destruction of structural dentin, the ability to find and locate canals while preserving maximum structural integrity, locating cracks and fractures that are not clinically visible or palpable with an endodontic explorer, facilitating all aspects of endodontic surgery, particularly in root-end resection and placement of retrofilling materials. Use of the microscope also enables enhanced photographic documentation and improved ergonomics for the clinician. The modern approach to periradicular surgery is through magnification, illumination and

microsurgery. Microscopy provides a more detailed examination of the root apex and anatomic features such as isthmuses, unfound and accessory canals, fractures and crazing. It is documented that there are greatly improved prognoses when these techniques are employed for microsurgery.

The most significant challenge of the satellite endodontic practice is limited microscope availability. Portable microscopes are occasionally incorporated into the satellite endodontists armamentarium, however, because of mobility and efficiency requirements, the satellite endodontist often limits his or her clinical use of magnification to loupes with 3x-6x magnification. Use of magnifying loupes or similar devices that are adequate for coronal restorative procedures may prove inadequate for apical surgery or even conventional coronal endodontics when compared to microscopes.

In the course of my career, I have had to consider the proposed benefits of the satellite specialty practice against the limited availability of microscopy and CBCT imaging in the offices that I covered. Although a few of the satellite offices did have microscopes, they were portable in nature and not efficient in daily use. Ultimately, I chose to practice in the traditional private endodontic practice model. As a board-certified endodontist, my endodontic group now incorporates the use of the most advanced techniques and equipment currently supported in the literature. This includes the use of CBCT imaging in our offices and the dental operating microscope mounted in every treatment room. In my opinion, this decision has allowed me to provide the absolute best care for our patients and reach my full potential as a health care provider. ■

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TDIC Guidelines

When a general or home dentist establishes a relationship with a satellite specialist to provide treatment for the home dentist's patients, TDIC advises that both parties sign an independent contractor agreement, review professional and employment insurance policies and address the following issues in the contract:

Establish clear protocols for:

- Patient communication.
- Billing.
- Supervision of staff.
- Emergency contact information and protocol for emergency care.
- Postoperative and follow-up care.
- Use of provider numbers.
- Compensation.
- Patient refunds.
- Ownership of and access to records.
- Record-keeping requirements.
- Procedure for terminating contract.

Pretreatment considerations:

- Traveling dentists should meet all practice staff, verify licensure and qualifications, and set expectations, especially for emergencies.
- Provide patients with information regarding the specialist's relationship to the practice.
- Informed consent should be provided to patients prior to their treatment appointment as well as preoperative and postoperative instructions.

Treatment protocols:

- Ensure staff is familiar with and prepared to assist with specialty procedures.
- Ensure all staff involved in treatment are prepared to handle emergencies and that the traveling dentist knows where emergency equipment is located and the protocols for use.

Posttreatment protocols:

- Establish who performs postoperative care – the home dentist or the traveling/treating dentist.
- Establish clear responsibilities with regard to addressing posttreatment concerns.
- Ensure that all communication between the patient and home dentist regarding care provided by the traveling/treating dentist is immediately conveyed to the treating dentist.

This information is intended for general guideline purposes and is not legal advice.



Dentists and Pharmacists: Paradigm Shifts and Interprofessional Collaborative Practice Models

Cynthia Valle-Oseguera, PharmD, and Eric G. Boyce, PharmD

ABSTRACT Collaborations between dentists and pharmacists have the potential to improve patient care; however, there are limited examples in practice of interprofessional models between these disciplines. The purpose of this article is to explore the current relationship between dentists and pharmacists and to propose new models of interprofessional collaboration that target improvements in patient care.

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Conflict of Interest
Disclosure: None reported.

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Conflict of Interest
Disclosure: None reported.

Health care continues to evolve and move toward improvements in quality of patient-centered care through interprofessional collaboration among different disciplines. The Institute of Medicine (IOM) has designated interprofessional collaboration as one of the five core competencies that every health care professional should meet during the provision of care and irrespective of their discipline.¹ Collaborations between dentists and pharmacists have the potential to improve patient care, but there are limited examples in practice of interprofessional models between these disciplines. This may be related to perceptions that disconnect oral health from overall health, often regarding the former as a luxury and failing to appreciate its impact on overall well-being.² The

current relationship between these professionals appears to be limited to phone calls regarding ordering of prescriptions, prescription clarification and therapy modification due to insurance coverage or when medically necessary. However, there are many other areas, including prevention and treatment of infection and pain management, in which patient care can be enhanced through interprofessional collaborations between dentists and pharmacists.

Both disciplines are faced with unique challenges that have potential for improvement if both professions work collaboratively. In order to achieve meaningful collaborations, team participants should desire to work in partnerships, possess shared respect and trust and have an understanding of each other's roles.^{3,4} An important obstacle for both professions is their limited physical interaction with other professionals.

TABLE

The General Responsibilities of Dentists and Pharmacists According to the American Dental Association and the American Association of Colleges of Pharmacy^{10, 11}

Dentists' Responsibilities ¹⁰	Pharmacists' Responsibilities ¹¹	Pharmacists' Goals ¹¹
Diagnosing oral diseases.	Dispensing medications.	Cure disease.
Promoting oral health and disease prevention.	Monitoring patients' health and progress to maximize their response to the medication.	Eliminate or reduce symptoms.
Creating treatment plans to maintain or restore oral health.	Educating patients on the use of prescriptions and over-the-counter medications.	Arrest or slow a disease process.
Interpreting X-rays and diagnostic tests.	Advising physicians, nurses and other health professionals on drug decisions.	Prevent disease.
Ensuring the safe administration of anesthetics. Monitoring growth and development of teeth and jaws.		Recognize disease.
Performing surgical procedures on the teeth, bone and soft tissues of the oral cavity.		Alter physiological processes for desirable result in the patient's health.

Historically, dentistry's former "silo" training approach has resulted in isolated practitioners rather than fully integrated players in the interdisciplinary health care team.⁵ Similarly, community pharmacists who practice in independent or chain pharmacies tend to be physically isolated from other professionals, limiting interprofessional interaction to fax, phone calls or other electronic means of communication.⁶

Interestingly, dentistry and pharmacy share a common patient care approach, as they both focus on the physical body and are guided by evidence-based interventions.⁴ Discussions centered on patient cases between dentists and pharmacists provide an excellent opportunity for collaboration. A crucial distinction between these two disciplines lies in patients' accessibility to their services. While dentists are usually only available by appointment, the opposite is true of pharmacists. This is particularly significant for those patients who lack access to oral health providers and thus seek community pharmacists for concerns pertaining to oral health.^{7,8} Pharmacists may also assist in oral health preventive services such as oral cancer prevention

by providing counseling on tobacco cessation and offering therapeutic recommendations to aid in quitting.⁹

There is a great potential for improvement in patient-centered care with the development of new, closer and stronger interprofessional collaborations among the various health care professionals. The purpose of this article is to explore the current relationship between dentists and pharmacists and to propose new models of interprofessional collaboration that target improvements in patient care.

Dentist and Pharmacist: Complementary Roles and Responsibilities

The general responsibilities in the clinical practice of dentists and pharmacists may differ somewhat (TABLE),^{10,11} but provide many opportunities for collaboration to improve patient care and enhance efficiencies in providing care. The major responsibilities of dentists focus on the health of the oral cavity and the major responsibilities of pharmacists focus on the use of medications for overall health. However, both professions have responsibilities for the overall improvement of a patient's health, diagnosis or recognition of disease and disorders, promotion of health, prevention of disease, treatment and moni-

toring of diseases and disorders and the safe use of medications (TABLE).^{10,11}

Dentists and pharmacists also share responsibilities or have complementary responsibilities related to patient care within the specific components of the care they each provide. These shared and complementary responsibilities provide excellent areas for potential collaboration. They could result in improved and more efficient patient care with respect to medical and medication histories, pain management, prevention and management of infections and the management and referral of patients.

A patient's medical and medication history, including allergies and vaccinations, is very important to both the dentist and the pharmacist in the assessment of the patient. This information assures recognition of problems that may need to be treated and the appropriateness of therapies that may be needed or avoided. The dentist's patient chart and the pharmacist's patient-medication profile will likely complement each other, but are generally not a complete medical record based on the limitations within those records and the number of physicians, dentists and pharmacists that patients may see

for their care. Dentists and pharmacists are likely at a similar disadvantage, depending upon their practice site and affiliation, in having little or no access to a patient's full medical records and clinical laboratory studies and other tests and could therefore benefit through the sharing of clinical information that each has on a specific patient. Patients would need to be well-informed and would probably need to provide HIPAA consent for sharing of that information. Whether or not information from records is shared, the dentist and the pharmacist can also consult each other on the use of medications in patients with allergies, contraindications or other conditions that may be associated with adverse effects, drug interactions or other problems.

A clinical problem commonly addressed by both dentists and pharmacists is the management of pain due to oral conditions or procedures. The treatment of pain is complicated by the need to provide relief for mild to severe pain, but also being able to recognize and avoid the potential for drug abuse, addiction and diversion. The medical and medication history, as noted above, may be very useful in determining if a patient is at risk for addiction or abuse but may also be limited if a patient goes to a number of pharmacies for different prescriptions. The duration of pain before and following a dental procedure is usually short term, but a small number of patients in a dental practice may require chronic therapy for their dental condition. Management of chronic pain is much more complex than the management of acute pain, requiring long-term follow-up for efficacy, abuse, addiction and adverse effects. Additionally, a state bill was recently passed and guidelines are under development in California to allow a pharmacist to furnish naloxone for the prevention and treatment of opioid overdose.¹² A dentist-pharmacist collaboration in

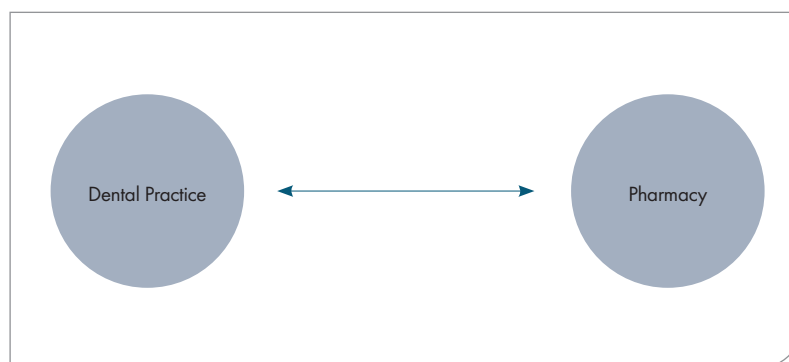


FIGURE 1. First model of interprofessional collaboration: Dentist and pharmacist collaborate in close proximity.

the management of chronic pain could be very useful in pain management, the selection and use of analgesics and referral for naloxone if needed.

The prevention and treatment of infection is also a common and complex clinical problem for dentists and pharmacists. The medical and medication history can be used to identify a patient who may be at high risk for infection, at high risk for endocarditis and therefore needs antibiotic prophylaxis for a dental procedure, has an allergy that may affect antibiotic selection and/or has the need for one or more vaccinations. The development of resistance is always a concern when considering which antibiotic to use. A collaborative arrangement between dentists and pharmacists could address many of these issues. Sharing information on medical and medication histories is noted above. Dentists and pharmacists could pool their resources and develop a shared understanding of up-to-date treatment guidelines for endocarditis prevention, the treatment and prevention of other infections and vaccinations. Current resistance patterns that have developed locally, regionally or nationally and are reported by health care agencies and hospitals could also be shared. Additionally, dentists could refer patients and staff to the pharmacist for evaluation and administration of vaccinations.¹² Patients could also be referred to the pharmacist for the purchase of any facemasks, gloves and

other products that may be needed in the prevention or management of infections.

Collaboration arrangements could also involve referral and consultation between dentists and pharmacists for other problems. Patients may seek a pharmacist for concerns related to tooth pain,^{7,13} therefore, a pharmacist could refer a patient with an oral problem to a specific dentist (his or her collaborative partner) for evaluation and possible care. Dentists may refer patients to a pharmacist for vaccinations, facemasks and gloves, as mentioned above, in addition to oral care products and smoking cessation products. Once additional regulations and guidelines are in place, dentists may also refer patients to pharmacists for naloxone, travel medicine, self-administered hormonal contraception and the ordering of routine laboratory studies to monitor diseases.¹² A consultation may be appropriate for managing patients with difficult situations, such as those patients on anticoagulants or antithrombotic agents or with a bleeding disorder who must undergo a dental procedure. Emergent medical situations may occur in the dentist's office or in the pharmacy and may be more readily resolved if resources and expertise are combined. For example, dentists' offices commonly have oxygen available for emergency use. Additionally, the dentist and pharmacist may consult with each other to discuss the appropriateness of referring a patient to a physician, emergency department or hospital.

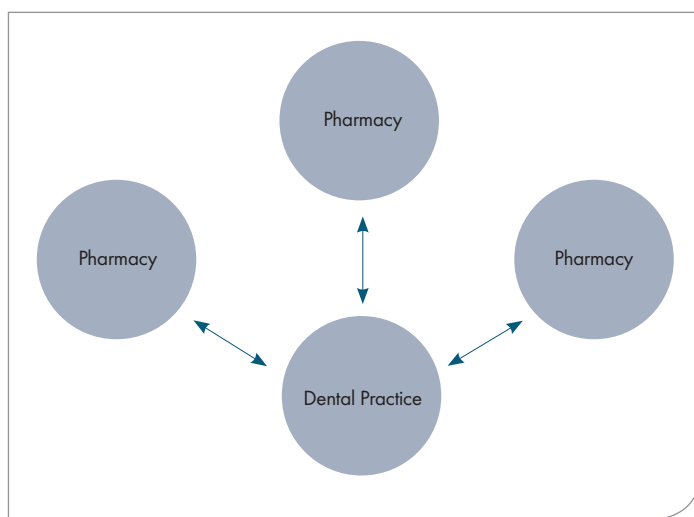


FIGURE 2. Second model of interprofessional collaboration: Dental clinic in collaborative agreements with multiple pharmacies.

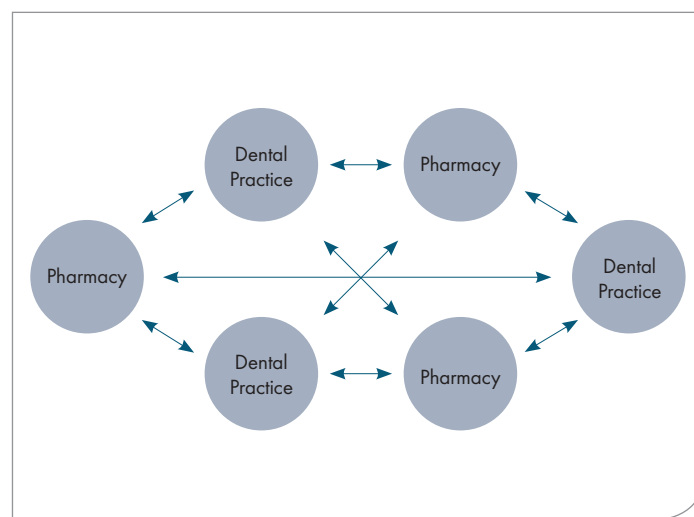


FIGURE 3. Third model of interprofessional collaboration: Network of preferred pharmacies and dental clinics.

Interprofessional Practice Models

The following collaborative interprofessional models have been developed with the goal of utilizing the above overlapping and complementary roles and responsibilities of dentists and pharmacists to enhance patient care. The major considerations used in developing these models include the physical proximity of the dental practice and the pharmacy, as well as the nature of the populations of patients each serves.

A strong interprofessional collaboration between a dental practice and a pharmacy could be developed if the two are in close proximity and provide care to a reasonable number of the same patients (**FIGURE 1**). This could result in an ongoing, highly interactive collaborative practice model referring patients back and forth and providing for consultation among the dentists and pharmacists in each practice. Each professional could be available “on call” to assist in the care of patients from the other partner.

A second model would involve a single dental practice that develops interprofessional collaborative arrangements with a number of local pharmacies (**FIGURE 2**). This would be particularly useful in areas where there are few shared patients between the dental practice and any specific

pharmacy. The network of pharmacies would become those that the dentist would preferentially refer patients to and would call for consultation. Those pharmacies, in return, would preferentially refer patients to that dental practice or other dental practices in which they had similar relationships.

A third model, the “in-network” model, would include a network of both dental practices and pharmacies, which would function very similarly to the second model (**FIGURE 3**). The network of pharmacies would become those that the dental practices preferentially refer patients to and would call for consultation. Those pharmacies in return would preferentially refer patients to those dental practices. The dentist network and pharmacy network should place into effect a triage protocol by which to identify cases that require a dentist’s expertise and classify the urgency of the situation. Then, the partnered pharmacists will be able to correctly identify and refer the appropriate cases to the dentist provider. Likewise, dental offices may rely on their partnered pharmacist network to refer patients who would benefit from comprehensive medication therapy management and therapy counseling. Furthermore, therapeutic recommendations could be made to the referring dentist when questions regarding therapy arise secondary

to drug-drug interactions, drug-disease interactions or medication allergies.

There are a number of factors to consider in developing these interprofessional collaborative practice models. The first major consideration will be the development of the agreements or documents that describe the roles and responsibilities of each partner. In the beginning, these agreements should be informal and nonbinding, but should provide specifics on potential interactions and collaborations. These agreements may then evolve into more formal and binding arrangements if deemed appropriate by all partners. This evolution may also include the development of protocols for patient care and/or referral. It would also be very important to monitor the progress of these arrangements, resolve any issues and make improvements where needed. Holding periodic meetings among the partners would be very beneficial in monitoring and enhancing the strength of the collaboration. Input from patients could also be sought on the benefits and any shortcomings of the interprofessional collaboration. Given that patient care is the primary concern of each professional, it is also important to recognize that patients may want to receive care from one partner, but not from the other partner of any dentist-pharmacist interprofessional

collaborative practice. Finally, these models could also serve as examples of interprofessional collaborative best-practice sites for the dental and pharmacy education and postgraduate training.

A fundamental challenge of these interprofessional collaborative practice models resides in the monetary costs for their development and identifying the specific groups that will be covering the costs. While an ideal model would be one that places dentists and pharmacists within the same physical location, this is not a model that is feasible for the majority of professionals. It is challenging to justify the added costs in salary that having a pharmacist in a general dentistry practice would accrue. However, formulating practice agreements between a dental office and a pharmacy or pharmacists' network would be a doable approach to begin active interprofessional collaboration among these professionals. Another challenge is that the creation of protocols and development of partnerships take time and it is important to remain invested in the process.

Conclusion

As we seek to eradicate gaps in medical care, it is imperative that collaborations be fostered and developed among all health care professionals. With the implementation of a seamless process that facilitates the treatment of oral conditions by dentists and pharmacists in a patient-centered approach, it would be expected to see an increase in patient safety, patient satisfaction and overall patient well-being. This collaboration would provide a more comprehensive care approach to patients, where both professions are able to draw from each other's expertise to provide optimal patient care. However, future studies need to be conducted on the implementation of the proposed models in order to determine the existence and the extent of these benefits. ■

REFERENCES

1. Institute of Medicine. Health Professions Education: A Bridge to Quality. The National Academies Press, Washington, D.C. (2003). www.nap.edu/openbook.php?record_id=10681. Accessed April 27, 2015.
2. Wilder RS, O'Donnell JA, Barry JM, Galli DM, Hakim FF, Holyfield LJ, Robbins MR. Is dentistry at risk? A case for interprofessional education. *J Dent Educ* 2008;72(11):1231-7.
3. Oandasan I, Reeves S. Key elements for interprofessional education. Part 1: The learner, the educator and the learning context. *J Interprof Care* 2005;(Suppl. 1): 21-38.
4. MacEntee MI. Muted dental voices on interprofessional health care teams. *J Dent* 2011; 39 (Suppl. 2): S34-40. doi:10.1016/j.jdent.2011.10.017.
5. DePaola DP. The Revitalization of U.S. Dental Education. *J Dent Educ* 2008;72(2 Suppl):28-42.
6. Herrier R, Brownlee M, Hubbard S. Improving Health Care Delivery Through Interprofessional Practice. *J Am Pharm Assoc* (2003) 2004;44:651-658. doi:10.1331/1544345042467245.
7. Cohen LA. Enhancing pharmacists' role as oral health advisors. *J Am Pharm Assoc* 2013;53:316-321. doi: 10.1331/JAPhA.2013.12017.
8. Priya S, Madan Kumar PD, Ramachandran S. Knowledge and attitudes of pharmacists regarding oral health care and oral hygiene products in Chennai city. *Indian J Dent Res* 2008;19:104-8.
9. Weinberg MA. Oral cancer risk factors and the pharmacist's role in intervention. www.uspharmacist.com/content/d/featured_articles/c/11583. Accessed April 15, 2015.
10. American Dental Association. www.ada.org/en/about-the-ada/dentists-doctors-of-oral-health. Accessed April 10, 2015.
11. American Association of Colleges of Pharmacy. www.aacp.org/resources/student/pharmacyforyou/Pages/roleofapharmacist.aspx. Accessed April 10, 2015.
12. California State Board of Pharmacy. 2015 Law Book for Pharmacy. www.pharmacy.ca.gov/laws_regs/lawbook.pdf. Accessed April 10, 2015.
13. Cohen LA, Bonito AJ, Akin DR, Manski RJ, Macek MD, Edwards RR, Cornelius LJ. Role of pharmacists in consulting with the underserved regarding toothache pain. *J Am Pharm Assoc* 2009;49:38-42. doi: 10.1331/JAPhA.2009.07149.

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Caring for Older Adults With Complex Needs: Drafting an Interdisciplinary Team

Elisa M. Chávez, DDS, and Amruta Hendre, DDS

ABSTRACT Providing dental care for seniors with complex medical and/or social needs can seem daunting. Many dental providers may question their resources to manage such patients. However, many of these patients have teams in place that can be accessed to improve the efficacy and satisfaction in providing care to them. Seeking out patients' other health care providers, and understanding how to work effectively with them, is important to improve total patient care, comfort, function and dignity.

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Disclosure: None reported.

Providing dental care for anyone with complex medical and/or social needs, but especially for people of advanced age, can seem daunting. Some dental practitioners may feel they have inadequate resources to manage these challenges. However, many of these patients already have teams of providers in place that may be partnered with to improve the safety, efficacy and satisfaction of managing their care. Understanding the roles of these partners, and how to work with them to the benefit of both patient and practice, is fundamental to managing patients with complex needs.¹ In turn, dental practitioners gain opportunities to educate other health care providers about how the dental team can be integrated into broader interprofessional care teams to improve total patient care, comfort, function and dignity.¹²

Begin With the Primary Care Provider

The general dentist coordinates the team with respect to dental treatment planning, provision and maintenance of oral health care. For patients with complex health and/or socioeconomic issues, it is important to engage the patient's primary care provider (PCP) who leads the patient's larger interdisciplinary team. The PCP may be a physician, nurse practitioner (NP) or in some cases, a physician's assistant (PA).³ If the primary provider is an NP or PA, medical consultations may be sent directly to them. They will likely be the most knowledgeable about the immediate needs of the mutual patient and will consult the physician or recommend the dentist speak directly with the physician, as needed.

When conducting consultations via secure email, consider directing the email to the NP or the PA and copying the associated physician. This will

help cultivate a relationship with the physician as well and create awareness of patient care progress and/or challenges. Electronic records can support these relationships. Follow Health Insurance Portability and Accountability Act (HIPAA) guidelines when exchanging protected health information with other practitioners. Working with other practitioners via email may seem more like correspondence than collaboration, but it is an important step to establishing these relationships.⁴ Prior to a phone consultation, prepare the written consultation that would otherwise be sent. Carefully document the provider's responses during the conversation so that the information is available to easily and accurately enter into the patient's treatment record. Be as specific as possible about questions and concerns. Avoid making a broad request for medical clearance.⁴ Rather, clearly state the dental procedure to be performed, the specific medication to be administered and/or the exact concern, question or potential complication(s) related to the treatment planned. For example:

"We will extract multiple teeth and remove a torus for this patient next Friday [date]. We understand this patient's last international normalized ratio (INR) was 3.5 but an INR of 3 or less will be necessary to complete this surgery. We will need the results of an INR, done within 24 to 48 hours of the appointment, available to us on the day of the surgery to confirm. We would appreciate your assistance to manage the reduction of the INR — if needed — at this time. Please contact us if you have any concerns, questions or are aware of a contraindication to an INR 3 or below for this patient."⁵

Consultation with the PCP about physical or cognitive issues relevant to treatment planning and care may

open the door to additional providers who can aid in planning and providing the most appropriate, customized and successful care for each patient. For instance, an inquiry directed to the PCP about the patient's cognitive ability to make medical decisions could lead to collaboration with a social worker or geriatric case manager who can be an important resource for both dentist and patient. Some patients will have multiple providers and caregivers participating in their care, in varying levels of communication. It is important

Some patients will have multiple providers and caregivers participating in their care, in varying levels of communication.

to know who these providers are in order to contact them as needed for their input and expertise. Admittedly, this may be time consuming, but developing these human resources in the community may open the door to improved patient care and even greater resources.

These relationships may increase patient referrals as collaborators become aware of the dental provider's interest and ability to manage older adults with complex needs. Many of these seniors may have been without regular care for some time and require substantial care. Older adults often neglect their oral health because of a lack of dental insurance and/or their systemic health needs increase or become chronic and require increased medical care and costs.⁴

Support Systems Where Patients Live

Understanding the environment in which a patient resides, especially for those who may require some level of assisted living, can be critical to treatment planning and implementation of orders as directed. The amount of assistance necessary to carry out activities of daily living (ADLs), such as bathing, eating, dressing, toileting, preparing meals, doing chores etc., not only may affect the patient's ability to live independently, but may also increase his or her risk for oral diseases.^{6,7} Most patients treated in private practice will be community dwelling elders in varying degrees of health and ability. Some may live in retirement communities and maintain a high level of independence, others may be homebound and unable to access care outside the home unless it is critical. Many seniors manage at home with some combination of family, hired caregivers and/or home health services. Often home caregivers are unlicensed. Caregivers, family members and other home health providers can be additional sources of support and encouragement and valuable team members. They may coordinate office visits for the patient, provide direct assistance during treatment (such as wheelchair transfers) and help carry out postoperative and oral hygiene instructions. Importantly, unless seniors have a significant cognitive impairment that prevents them from making informed choices, they retain their right to privacy and autonomous decision making. Before enlisting the help of family or other caregivers, the patient should agree that they may be present during appointments and/or involved in discussion of specific health issues. In the event the patient cannot make his or her own decisions, there should be a legally recognized surrogate decision maker (SDM) available. The primary

Diagnoses: _____**Prescription product orders: ^A**

_____ **Rx:** Brush daily using 1.1% neutral sodium fluoride toothpaste, in place of regular toothpaste as long as patient can spit out excess. If patient cannot spit out, use with suction toothbrush. Maintenance

_____ **Rx:** 0.12% Chlorhexidine gluconate oral rinse (note do not use within one hour of using topical fluorides.) swish with 5 ml for one minute bid for two weeks every three months. If the patient is not able to swish, wet a toothbrush with the rinse and brush it on the teeth and gums; use the suction toothbrush for patients with an aspiration risk. Maintenance

_____ **Other Rx:** _____e.g., Nystatin oral rinse 100,000 u/ml, remove dentures and swish with 5 ml for one minute and then spit out QID and after brushing dentures before bed, soak in the solution overnight, 7 days_____

Over-the-counter product orders: ^B

_____ **OTC:** Brush qmorning and qhs using fluoride toothpaste. Spit out excess. If patient cannot spit out, use with suction toothbrush. Maintenance

_____ **OTC:** Salivary substitute (specify), swish and spit 10 min prior to meals and before bed or prn discomfort from dry mouth. Maintenance

_____ **Other OTC:** _____e.g., chew two pieces of xylitol gum qmorning, qnoon, qevening and qhs. Maintenance

Level of oral hygiene assistance required: ^C

_____ Limited – set up and remind or cue patient to brush and floss or clean prostheses. Maintenance

_____ Moderate – observe and coach or use hand over hand to assist patient with daily brushing and flossing and cleaning of prostheses. Maintenance

_____ Advanced – brush and floss teeth and brush prostheses for patient once daily and set up and cue for them to do oral hygiene once on their own daily. Maintenance

_____ Total – brush and floss teeth and brush prostheses for patient qmorning and qhs – use suction toothbrush for patients with an aspiration risk maintenance. A mouth prop may be needed. Get consent from surrogate decision maker if a mouth prop is needed. Maintenance^D

Dietary orders:

_____ Notify dietitian to review diet for hidden or overt sources of sugar, which may be contributing to high caries rate and risk.

_____ **Other dietary order:** _____e.g., dentures were sent to laboratory for relines, provide dental soft diet or puree, as patient can tolerate, for 48 hours until the dentures are returned._____

Recommended assistive devices: ^E

____Electric toothbrush ____Floss holders ____Floss threaders ____Superfloss ____Tongue scraper ____Mouth prop

NOTES:

A – These prescriptions would be carried out by APRN or RN. APRN may change, refill or discontinue these orders.

B – These are orders that could be carried out by APRN, RN, LVN or CNA.

C – These would be verbal directives in most cases but in these settings require formal orders and are usually carried out by a CNA.

D – Maintenance is the language used in this case to denote ongoing orders unless specifically discontinued.

E – These are examples, not an exhaustive list. Occupational therapist could provide additional assistance with assistive devices depending upon the patient needs.

FIGURE 1. Limited examples of preventive oral hygiene orders for residents in long-term care and skilled nursing facilities settings.^{4,14-16}

care provider should be consulted if it is not clear whether a SDM is needed and if so, who has been designated.⁸

Residential care facilities for the elderly (RCFE) refer to nonhome facilities that provide care, supervision and assistance with ADLs. Some may also provide minor medical services. They often provide services for those older than 60 years of age but can also serve people younger than 60 who require comparable assistance. RCFEs may also be known as assisted living facilities, retirement homes and board and care homes. The facilities can range in size from six beds or less to more than 100 beds. For facilities commonly referred to as board and care, there are often up to six seniors living in a residential home with caregivers who are on site at all times but it is not a medical care facility. Seniors living in these settings may require some assistance with their ADLs but not routine nursing or medical care.⁹ Some people in assisted living may receive help with transportation to the dentist, but do not require other assistance in the receipt of dental care, following postappointment instructions or providing their own oral hygiene. Others may need assistance coordinating visits and following through with postoperative or oral hygiene instructions, in which case, both patient and caregivers should receive oral health education to reach the desired outcomes. Often, but not always, there is an option for health care or an increased level of care should it be needed.

Continuing care retirement communities are slightly different in that they provide a bridge from independent apartment living, through assisted living and into skilled nursing, usually all in one location, should the need arise. For those who require the most significant assistance with their ADLs and ongoing medical care, skilled nursing facilities

(SNFs) provide skilled nursing level of care for short- and long-term stays.¹⁰ Some patients who are otherwise community dwelling may be admitted for respite care for a limited period, during which their home caregivers have a chance to rest and attend to their own needs. Some people may be admitted after a hospital stay when they are no longer acute but not yet able to return home and some may be admitted for long-term care.

Intermediate care facilities (ICFs) provide inpatient care to people who do not require continuous nursing care,

Seniors living in these setting may require some assistance with their ADLs but not routine nursing or medical care.

but do need nursing supervision and supportive care.¹¹⁻¹³ For patients living in these facilities, commonly referred to as nursing homes (SNF and ICF), treatment planning should include careful evaluation of the level of assistance the patient will need in order to receive dental care (in office or on site) as well as his or her ability to understand and perform personal oral hygiene routines. The facility should provide a complete health history and current medication list at each patient appointment so that the dental team can consider the systemic conditions and associated medications and treatments needed to manage these chronic and/or acute conditions. The facility should also provide blank progress notes to enter oral health findings and recommendations for the dental provider

to complete, so that they can be entered as part of the patient's medical record. The facility should also send physician order sheets, if they use them as a part of their medical records, for prescriptions, postoperative instructions or directives for oral hygiene. For formal orders that are to be carried out daily and in an on-going way, such as assistance with oral hygiene, use the facilities' standard wording to clearly signal standing orders. Without documentation that the order should continue indefinitely, orders may be ceased after some time, such as seven days. The **FIGURE** provides an example of a preprinted order sheet for prescriptions, over-the-counter products (OTC), oral hygiene plans and other oral health orders. For the majority of patients, directives about OTC products and oral hygiene are sufficient. However, these facilities require formal orders for these recommendations to be carried out. Dentists who regularly provide services in a given facility may consider creating a preprinted version of routinely used orders, using language confirmed with medical records to be compatible, accepted and familiar to the facility staff. The use of such a sheet may also encourage familiarity among the staff with routine orders and expected protocols for oral hygiene.

The Nursing Team's Scope of Practice

Understanding the scope of nursing practices allows dentists to communicate effectively with the members of the nursing staff and may result in greater success of oral health care for their patients who reside in hospitals or long-term care facilities or who receive home health services.

Advanced practice registered nurses (APRN) are registered nurses with advanced education and a master's degree. This includes nurse practitioners (NP)

TABLE 1

Oral Health Care Within the Nursing Scope of Practice^{21,22}

Skills	Advanced Practice Registered Nurse	Registered Nurse	Licensed Vocational Nurse	Certified Nursing Assistant
Care planning	Collaborates with the dentist to develop appropriate treatment plan for the patient. Evaluates progress. Overlooks treatment in between dental visits and communicates with the dentist to give feedback and request changes. Delegates and assigns tasks.	Communicates with the dentist and patient to develop and implement treatment plan. Conveys findings to the dentist and can request evaluation for a treatment plan. Delegates and assigns tasks.	Provides input about problems encountered during implementation of treatment plan. Helps in strategic planning for oral care routines in order to achieve desired outcome.	Conveys problems encountered during implementation of treatment plan. Conveys patient's input.
Assessment	Performs direct intraoral and extraoral observation. Uses clinical judgment to determine the need for treatment and referral.	Performs direct intraoral and extraoral observation. Uses critical thinking and scientific knowledge to determine the need for referral.	Performs direct intraoral and extraoral observation. Reports findings to RN. Recognizes abnormal from normal. Determines if more information is needed.	Performs intraoral and extraoral observation only, may report concerns to supervisors.
Delivery of treatment/ Interventions	Delegates and assigns tasks and oversee treatment delivery according to treatment plan. Requests changes as required.	Delivers oral care and initiates changes as per treatment plan.	Provides oral hygiene care and denture care.	Provides oral hygiene care and denture care.
Medications	Requests, orders and administers prescription medications through all routes with a valid license or after dentists order.	Administers medication through all routes. Administers prescription medications including antibiotics, analgesics, antifungals, topical pain relievers, high fluoride toothpastes, prescription mouth rinses.	Administers medication but through limited route. Administers prescription medications including antibiotics, analgesics, antifungals, topical pain relievers, high fluoride toothpastes, prescription mouth rinses.	Administers nonprescription creams, gels, pastes and mouthwash.
Postoperative care	Oversees postoperative care.	Provides and assign certain tasks.	Provides care on assignment.	No.
Orders from dentist	Written. Verbal. Phone.	Written. Verbal. Phone.	Written. Verbal and phone if within scope of practice.	Written.
Patient education	Yes.	Yes.	Yes, if delegated.	No, only informs licensed nurse about observations during care and patients' expressed needs.

TABLE 2

Resources on Aging in California

Below is a selected listing of agencies that provide a variety of resources and information to seniors and their families from addressing housing issues, to home meals and home health care to legal assistance, social and other services.

California Department of Aging: aging.ca.gov

The California Department of Aging administers programs for older adults using funds that are allocated by the federal Older Americans Act, the Older Californians Act and Medi-Cal. They contract with the area agencies on aging as well as the multipurpose senior services program. They also certify adult day health centers for Medi-Cal.

California Association of Area Agencies on Aging (C4A): c4a.info

This nonprofit organization advocates for meeting the needs of seniors and adults with disabilities. Established by the federal Older Americans Act in 1965, 33 area agencies on aging in California receive federal, state and local funds and contract with local organizations to provide a wide variety of services to seniors to promote healthy aging and independence and to support the needs of those who care for this population.

California Department of Health Care Services (DHCS): www.dhcs.ca.gov/services/Pages/Seniors.aspx

DHCS represents the safety net serving Californians with disabilities and low incomes.

CalPACE – Program of all-inclusive care for seniors in California: www.calpace.org

Serves seniors 55 and older who live in PACE service areas and who are nursing home eligible but can safely live in the community at enrollment. They provide for preventive, acute, primary and long-term care needs while allowing participants to remain independent and in their homes as long as possible. There are 10 PACE programs in California with 29 sites.

Adult Protective Services (APS): www.cdss.ca.gov/agedblinddisabled/PG2300.htm

Serves dependent disabled adults aged 18–64 and older adults older than 65.

APS investigates reports of abuse in homes, hotels, hospital and clinics in regard to nonstaff allegations of abuse.

DHCS investigates allegations of abuse by staff members.

The Ombudsman's Office investigates allegations of abuse in long-term care, board and care, residential facilities and nursing homes.

The California Department of Developmental Services investigates abuse at state developmental centers.

The California Department of State Hospitals investigates allegations about state mental hospitals.

and clinical nurse specialists (CNS). They are trained to diagnose, provide care and prescribe medications and can perform these functions after a physician's approval. As an example, for a patient who needs multiple extractions, APRNs may work with the dentist to create a treatment plan that best suits the patient's health status. In preparation for the extractions, they could order bloodwork to monitor bleeding or immune status. Postextraction, they can monitor patient progress and assist in the management of postoperative complications should they occur. If the patient's status should change, they may use their clinical judgment to request that the dentist stop or change the planned treatment. If there is a need to change medication, APRNs can order and dispense

medication after the dentist approves.¹⁷

Registered nurses (RN) hold a bachelor's degree or an entry-level master's degree. They are involved with direct and indirect patient care services that ensure the safety, comfort, hygiene, protection of patients, disease prevention and restorative measures such as administration of medications, implementation of appropriate referrals based on observations or initiating emergency procedures. RNs can examine the oral cavity to determine the origin of pain and make an initial diagnosis to determine the need for referral. They may work with the dentist to develop and implement a treatment plan. They may perform oral exams and provide feedback on the progress of ongoing treatment and request additional evaluation if concerns

arise. They also may play an active role in patient and family education.¹⁸

Licensed vocational nurses (LVN) are licensed nurses who work under the written, verbal or telephone direction of a licensed physician or RN. If, for example, a patient reports dental pain, the LVN may collect subjective and objective data and report findings such as swellings, ulcers, mucosal color changes or gross decay. While developing patient care plans they can provide input about ease of use, or difficulties encountered, in the use of various oral hygiene products or aids. They can also report changes in oral health following treatment. Depending upon their specific license, they may or may not be able to administer prescription medications.¹⁹

Certified nursing assistants (CNA) and home health aides are assistive personnel who are trained and certified, but not licensed, to perform nursing tasks. They are assigned to medically stable patients who suffer from chronic illness. Within their scope of practice, they help patients with ADLs such as bathing, eating, dressing, toileting and transferring. RNs can assign them duties that do not require the use of professional judgment. CNAs are responsible for daily oral care and perform oral health home care such as toothbrushing, denture care and administration of nonprescription creams, gels, paste and mouthwash.²⁰

TABLE 1 reviews the scope of practice in nursing as it relates to oral health care. It is important to consider that individual training, interest and time to provide oral care can vary, as can patient ability or willingness to receive care. Additional instruction, training and/or encouragement from the dental team may be required in order to achieve the desired results.^{7,16}

Special Issues in Caring for Vulnerable Adults

Unfortunately, there may be instances where practitioners suspect that their patients are victims of abuse or neglect or are suffering from self-neglect. Dental professionals are mandated reporters of abuse and neglect. Practitioners need only suspect abuse or neglect in order to file a report so that the appropriate parties can investigate. Some signs of abuse may include findings such as various injuries, multiple bruises in varying states of healing, caregiver refusal to let the patient be apart from him or her during office visits, poor hygiene, unpaid bills despite adequate resources or a direct report of abuse from the individual.²³

Call 911 in emergency situations. For those living independently in the community, Adult Protective Services (APS) should be contacted. APS serves adults aged 65 and older and dependent adults aged 18 and older to protect their rights to safety and dignity. APS investigates elder and dependent adult physical, sexual and financial abuse, including cases of neglect and abandonment. Reporting should be made to APS in writing within two working days using Department of Social Services form SOC 341. For patients

Practitioners need only suspect abuse or neglect in order to file a report so that the appropriate parties can investigate.

living in a long-term care facility, the local ombudsman should be contacted. Facilities are required to post this contact information in a visible area. Report to the local ombudsman by phone first then submit form SOC 341. The Department of Aging 24-hour crisis hotline also takes reports at 800.231.4024. More information about elder abuse and county-specific information on reporting in California can be found at www.dss.cahwnet.gov/cdssweb/PG20.htm and www.cdss.ca.gov/agedblinddisabled/PG2300.htm.^{24,25} Individuals in these agencies are critical members of the extended team and available to all practitioners in California as a resource to help ensure and maintain the health and welfare of patients. **TABLE 2** has additional resources for California

seniors including not only protection from abuse and neglect, but also support for housing, meals, transportation, legal and other social issues.

More Opportunities for Interdisciplinary Practice

Although dental insurance is not included in long-term care insurance, individuals enrolled in a program of all-inclusive care for the elderly (PACE) are eligible to receive dental services. PACE was modeled after On Lok Senior Health Services, which originated in 1971 in San Francisco. William Gee, DDS, a public health dentist, in collaboration with social worker Marie-Louise Ansak, directed the development of this interdisciplinary team (IDT) model of care. The National PACE association was formed in 1994. There are now 106 PACE programs in 31 states. PACE is designed to allow nursing home eligible seniors older than age 55 to live independently in the community as long as possible by providing comprehensive services to participants.²⁴ PACE programs may contract with or employ private dentists to provide oral health care at a PACE site, in a living facility or, in some cases, in private offices. For dentists or hygienists interested in providing care for this population, PACE is a program rich with interdisciplinary resources ready to support and enhance the oral health care that general dentists and specialists can provide to this often underserved population.

In addition to core teams of primary care providers, nursing and social work, they also provide physical therapy, occupational therapy, dietary and recreational therapy as well as a wide variety of specialty medical and social services in order to address the total health needs of their participants. Oral health care providers working

with PACE are an integrated part of the interdisciplinary team. The PACE model facilitates collaborative treatment planning and the provision of the most appropriate care for each individual.²⁵ This is one example of an IDT model but many other day service and long-term care facilities may also offer a broad range of professionals available for collaboration and consultation.

While it can be initially challenging for private dental practitioners to learn about and access other health professionals who care for their mutual patients, those who develop these partnerships in the community, their patients' living facilities and other support organizations can benefit tremendously from their expertise and knowledge. There are many examples. Occupational therapy (OT) may provide guidance and recommendations to address dexterity issues that can prevent patients from maintaining their oral health. OT may have access to adaptive aids for oral hygiene not found in standard dental supply catalogs.^{4,26} Dieticians may assist patients with short- or long-term diet texture changes that can result from poor oral health or dental treatment, such as extractions, in order to maintain optimal intake and nutrition. They may also aid in identifying an individual's dietary risk factors for caries ⁴ (FIGURE 1). Social workers and geriatric case managers may help with the coordination of care, from financial issues to issues of consent and may facilitate care and communication between multiple providers.^{4,27} Pharmacists may be an important resource when managing patients with polypharmacy or history of multiple adverse drug reactions or allergies.^{4,28} Practitioners may access all the resources the patient already has to work in concert with the dental team

to provide exceptional, customized patient care with positive outcomes.

For the majority of dental patients, oral health focused teams of general and specialty dentists, dental hygienists and dental assistants provide excellent comprehensive oral health care. For some of our most frail and vulnerable patients however, a broader approach may be necessary. Practitioners should utilize each dental team member to his or her full scope of practice and educate other health care providers about how the dental team may be integrated into their respective settings. Oral health professionals have an important role to play in both traditional and nontraditional practice settings. Interdisciplinary care is critical to the success of geriatric health care and is an important aspect of care for all patients. Learning to navigate the resources in the community and creating an interdisciplinary team can enhance the oral health care experience and outcomes for practitioners and patients alike. ■

REFERENCES

1. Position statement on interdisciplinary team training in geriatrics: An essential component of quality health care for older adults. (review) *JAGS* 62(5):961-5, 2014.
2. Interdisciplinary care for older adults with complex needs. *JAGS* 54:849-852, 2006.
3. Dower C, Chapman S, Patton J, Dumlao A. Nurse Practitioners and Physician Assistants Providing Primary Care in California Community Clinics. Research Brief 2011 Center for the Health Professions at UCSF.
4. Johnson TE, Cernohous JE, Mulhausen P, Jacobi DA. Dental professionals as part of an interdisciplinary team. pp 268-295 in *Geriatric Dentistry: Caring for an Aging Population*. ed. Friedman PK, Wiley Blackwell. Ames, Iowa 2014.
5. Little JW, Falace DA, Miller CS, Rhodus NL. Acquired bleeding and hypercoagulable disorders pp 409-436 in *Dental Management of the Medically Compromised Patient*. 8th ed. Elsevier, St. Louis 2013.
6. Philip P, Rogers C, Kruger E, Tennant M. Caries experience of institutionalized elderly and its association with dementia and functional status. *Int J Dent Hyg* 10(2), 122-7. 2012.
7. Branson B, Simmer-Beck M. Addressing oral health needs of long-term care facility residents. *Dimens Dent Hyg* 11(8):31-35. August 2013.

8. Yellowitz J. Cognitive function, aging and ethical decisions: Recognizing change. *Dent Clin North Am* 49(2):389-410, April 2005.
9. www.cclid.ca.gov/PG543.htm. Accessed March 19, 2015.
10. Halligan TJ, Halligan KA. Living arrangements for the elderly: Independent living, shared housing, board and care facilities, assisted living, continuous care communities and nursing homes. pp 31-37 in *Geriatric Dentistry: Caring for an Aging Population*. ed. Friedman PK, Wiley Blackwell. Ames, Iowa 2014.
11. www.cclid.ca.gov/PG543.htm. Accessed March 19, 2015.
12. www.cdph.ca.gov/pubsforms/forms/Documents/SNF-ICF-AppRequestLtrChecklist.pdf. March 19, 2015.
13. www.ncsbn.org/ScopeofPractice_09.pdf. Accessed March 19, 2015.
14. Jacobsen PL. *The Little Dental Drug Booklet, Handbook of Commonly Used Dental Medications*, 20th ed. Lexicomp 2014-2015. www.lexi.com/dentistry.
15. Hurlbutt M, Young DA. A best practices approach to caries management. *J Evid Base Dent Prac* 14S, 77-86, 2014.
16. Wener ME, Yakiwchuk CA, Bertone M. Promoting Oral Care in Long-Term Care Facilities pp 236-267 in *Geriatric Dentistry: Caring for an Aging Population*. ed. Friedman PK, Wiley Blackwell. Ames, Iowa 2014.
17. www.rn.ca.gov/pdfs/regulations/npr-b-23.pdf. Accessed March 19, 2015.
18. www.rn.ca.gov/pdfs/regulations/npr-b-03.pdf. Accessed March 19, 2015.
19. www.cphcs.ca.gov/docs/imspp/imspp-v05-ch05.pdf. Accessed March 19, 2015.
20. nursing.uclahealth.org/workfiles/orientation/BRN-UnlicensedAssistivePersonnel.pdf. Accessed March 19, 2015.
21. Hill SS, Howlett HS, eds. Chapter 12: The Practical/Vocational Nurse's Role in the Nursing Process pp. 189-205 in *Success in Practical/Vocational Nursing*. Saunders Philadelphia, 2001.
22. www.bvnp.ca.gov/about_us/history.shtml. Accessed April 28, 2015.
23. www.justice.gov/elderjustice/support/faq.html#warning-signs. Accessed April 28, 2015.
24. www.npaonline.org/website/article.asp?id=12&title=Who,_What_and_Where_Is_PACE? Accessed March 19, 2015.
25. Lee W, Eng C, Fox N, Etienne M. PACE: A model for integrated care of frail older patients. Program of All-inclusive Care for the Elderly. *Geriatrics* 53(6):62, 65-6, 69, 73; quiz 74, 1998 Jun.
26. Bellomo F, DePreux F, Müller F. The advantages of occupational therapy in oral hygiene measures for institutionalized elderly adults. *Gerodontology* 22, 24-31. 2005.
27. Wideman M. Geriatric care management: Role, need benefits. *Home Healthc Nurse* October;30(9):553-9. 2012.
28. Jacobsen PL, Chávez EM. Clinical Management of the Dental Patient Taking Multiple Drugs. *J Contemp Dent Pract* November;(6)4:144-151. 2005.

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CDA Practice Support: We're on Your Team

Compiled by CDA Practice Support

CDA Practice Support is designed to help member dentists navigate the business side of dentistry with ease. The resources available are vital to dentists in any phase of their career. Listed here are the 10 most frequently accessed resources with a brief description of each. In this sampling you will notice the scope and diversity of helpful information at your fingertips. All of these materials and more can be accessed at cda.org/practicesupport.

Sample Employee Manual

This Employee Manual template has been updated to reflect new 2015 laws. Additionally, the new manual provides more assistance in the areas of social media, vacation accrual, sick leave and pregnancy leave. The manual was developed by an attorney to be used specifically in a dental office. An employee manual is one of the most important reference and communication tools between an employer and employees. It clearly describes expectations and office policies.

New Employee Checklist

This checklist provides an overview of the required and suggested forms that should be provided once you have hired a new employee in your practice.

Starting a Dental Practice Checklist

This checklist provides an overview of the items that should be addressed once you have decided to start your own dental practice.

Guidelines for Informed Consent

Sample informed consent forms to aid in the face-to-face informed consent discussion between the dentist and patient. This discussion involves providing the patient with information about the nature of the proposed treatment, the benefits and alternatives of the proposed treatment, the risks of treatment, as well as any other information specific to the patient's unique condition. Patients who refuse treatment must be informed of the potential consequences of their decision. The informed consent discussion should be documented in the patient record. *Used with permission from TDIC.*

Sample Notice of Privacy Practice

A HIPAA-covered entity is required to provide patients with its Notice of Privacy Practices. The notice must include descriptions of the types of uses and disclosures of protected health information (PHI) that the covered entity is permitted to make without the individual's written authorization, including for each of the following purposes: treatment, payment and health care operations. The notice also must include a statement about the other uses and disclosures for which the practice uses an individual's PHI, a statement on the individual's rights with respect to the information and description of procedures followed when a patient chooses to exercise those rights.

New Patient Health History Forms for Adult Patients

The New Patient Forms for Adult Patients are provided as comprehensive resources pertaining to the gathering of information from the new patient. The forms can be implemented collectively or may be utilized in an a la carte fashion for the practice that may have some, but not all, of the forms already in place.

HIPAA Business Associate Agreement

HIPAA requires a covered entity to have a business associate agreement with any entity, individual or organization that creates, receives, maintains or transmits patient health information to perform nonclinical functions, such as claims processing or

information systems management, on behalf of a covered entity. A dental practice that is a covered entity must have a business associate agreement with each entity that uses its patients' information for nonclinical functions.

Guide to Dental Practice Act Compliance

The California Dental Association is pleased to provide a guide that is intended for use by dentists and allied dental health professionals to assist them in complying with the California Dental Practice Act. This guide summarizes portions of the Dental Practice Act and organizes information in alphabetical order by subject. Citations are provided to the appropriate Business & Professions Code (B&P), Health & Safety Code (H&S) and to the California Code of Regulations Title 16 (CCR 16) sections. For details on license and permit requirements, educational requirements, fees, timelines, citations, license suspension or revocations, disciplinary guidelines, descriptions of disciplinary actions, appeals process and exact language of the law, please refer to the website of the Dental Board of California (dbc.ca.gov) and the Dental Hygiene Committee of California (dhcc.ca.gov).

Dental Benefit Plan Handbook

In order to help a patient maximize his dental plan benefits, both the practice and the patient should understand the type of services covered by the plan, specifically, the plan's limitations and exclusions. This handbook covers the entire dental benefit plan process.

Legal Reference Guide

This guide explains laws that apply to dentistry and how they work.

We are here to assist dentists and their teams in any way we can. If you have questions about practice management, regulatory compliance, employment practices or dental benefit plans, contact a CDA Practice Support analyst today. ■

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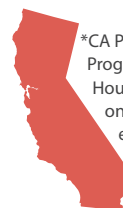
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CANOGA PARK (GP) - **Price Reduced!!** Turn-key practice w/ 2 equipped operatories, 1 x-ray room w/ chair in a 3 story medical dental building. Grossed approx. \$147K in 2014. **Property ID #4237.**

CHATSWORTH (GP) - **Price Reduced!!** 5 equipped operatories. Grossed \$918K in 2013. Projecting approx. \$948K for 2014. Buyer's net of \$398K. **Property ID #4537.**

DUARTE—Turn-Key general practice in busy shopping center. 2 eq ops / 1 plmbd not eq. PPO/Cash/Denti-cal/Cap. **Property ID #5048.**

HUNTINGTON PARK (GP) - 30 years of goodwill located in strip shopping center. 3 equipped ops. Some Denti-cal. Buyer's Net of \$104K. **Property ID #5054.**

LAWDALE— Turn key general practice in a 2 story bldg with large signage. Has over 45 years of goodwill. Consists of 4 eq ops and 2 plumbed not eq. Has digital x-ray. Long term lease. Great opportunity. **Property ID #5051.**

LOS ANGELES - 3 equipped operatories in 1,100 sq ft office with over 36 years of goodwill. Buyer's net of \$149K. **Property ID #5040.**

LOS ANGELES (GP/Perio/Implants) - Beautiful practice. 5 equipped operatories w/ amazing views to the city. Buyer's net of \$146K. In the Miracle Mile. **Property ID #4489.**

NORWALK— General practice w/ over 65 yrs of goodwill located in a well know community. 3 ops / 1 plmbd not eq. NET \$95K. **Property ID #5026.**

RESEDA - 3 equipped operatories (stand up dentistry). Projecting approximately \$292,796 for 2014 with monthly revenues of \$23K. **Property ID #5017.**

TORRANCE (GP) 30 years of goodwill in a 3 story medical/dental bldg. 5 equipped operatories. Grossed \$495K in 2014. Net \$149K. **Property ID #5036.**

WEST COVINA —Leasehold Improvement and Equipment Only! Brand new built out practice located in a new community near the Foothill Mountain. 7 ops / 1 plmbd not eq. **Great opportunity. Property ID #5077.**

WHITTIER - Price Reduced!! Leasehold Improvements & Equipment Only! Modern designed office in 4 story professional building. 5 eq ops. Has long term lease. **Property ID #5053.**

ORANGE COUNTY

ALISO VIEJO (Pedo) - 20 years of goodwill. 3 chairs in open bay 1 plumbed not equipped op, Grossed approximately \$340K in 2014. **Property ID #5031.**

IRVINE—GP with **SOLD** of goodwill in 2 story professional bldg w/ 4 eq ops. NET \$128K. **Property ID # 5055.**

LAGUNA HILLS Price Reduced!! Modern designed GP. 15 years goodwill. 2 equipped ops. Private office plumbed. Buyer's net of \$110K. **Property ID #5033.**

ORANGE - GP with over 40 yrs of goodwill located in a free standing bldg on a major Ave of Orange with plenty of heavy traffic. Net of \$258K. **Property ID #5059.**

SAN JUAN CAPISTRANO (GP) - Well established Turn-key practice. 4 equipped operatories, 3 plumbed not equipped in 1,947 sq ft suite. Grossed ~\$241K in 2014. **Property ID #5052.**

SANTA ANA Leasehold Improvement and Equipment Only + **Bldg for sale.** Modern designed office in a free standing bldg with 5 equipped operatories. Heavy traffic flow. Has digital x-ray. **Property ID #5062**

SANTA ANA - This GP is located in a 2 story strip mall with ample parking. Consists 4 eq ops. NO HMO. Proj. \$513K for 2015. **Property ID #5075.**

KERN, VENTURA, COUNTY & SAN LUIS OBISPO

BAKERSFIELD (GP) This office offers 18 yrs of goodwill. Consists of 6 eq ops, 1 plmbd not eq in a 1,800 sq ft suite. Proj. \$358K for 2015. **Property ID #5060.**

SAN LUIS OBISPO COUNTY - Beautiful well established practice w / 6 equipped operatories in a 2,626 sq ft suite. Net \$323K. **Property ID #5037.**

SIMI VALLEY (GP + Bldg for sale) Great opportunity to invest in a general practice and real estate. Established in 1964, 4 equipped operatories, 2 plumbed not equipped. Net \$124K. **Property ID #5027.**

SAN DIEGO COUNTY

EL CENTRO (GP) - This practice is located in a single story building. **Building is for sale.** 5 equipped operatories. Grossed approximately \$304K for 2014. Buyer's net of \$87K. **Property ID #5023.**

Oceanside (GP) - Estab. In 1998 this practice is located in prof. med dent bldg. 5 ops computerized with digital laser x-ray. PPO/Cash/HMO. Projecting \$355K for 2015. **Property ID #5069.**

San Diego - GP located in a 3 story prof. bldg. 7 ops in a 2,980 sq ft ste. Proj. \$1.9M for 2015. NET \$454K. **Property ID #5072.**

RIVERSIDE & SAN BERNARDINO COUNTY

APPLE VALLEY - 3 equipped operatories. Seller is working 4 days/wk and sees ~15-20 patients/mo. Monthly revenues of \$44K. Net of \$119K. **Property ID #5009.**

CHINO HILLS - Leasehold Improvement and Equipment Only! 3 equipped ops 2 plumbed not equipped. New built out. Restaurants and Retails stores surround the practice. **Property ID #4501.**

INDIAN WELLS (GP) Modern designed practice with 4 equipped operatories in a 2,850 sq ft office. In shopping plaza. **Property ID #5041.**

MURRIETA - Well established general practice with 4 eq ops in a 2 story medical dental bldg. PPO & Cash only. BUYER'S NET OF \$186K. **Property ID #5061.**

PALM DESERT—Well established practice in a free standing bldg. This modern designed practice consists of 5 eq ops in a 2,350 sq ft office. 100% patient referral. Insurance and Cash only. Does 8 days of hygiene. NET OF \$361K. **Property ID #5058.**

PALM SPRINGS - General practice with 3 equipped ops located in a free standing bldg. Established in 2005. Suite is approx. 1,200. PPO/Cash /Denti-cal. Seller work 5 days/wk. Great opportunity. BUYER'S NET OF \$181K. **Property ID #4487.**

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Dentists and the Virtual Dental Home: What You Should Know

TDIC Risk Management Staff

In recent months, several policyholders have called the TDIC Advice line asking about the virtual dental home (VDH) model and the risks associated with participating in one. The following information may be helpful if you are considering practicing in such a model.

The term “virtual dental home” describes a dental care model in which a dentist utilizes teledentistry by connecting electronically to specially trained allied dental team members to deliver dental care to underserved populations.

The VDH was authorized in California in 2015 after a large-scale demonstration project proved successful at safely and effectively providing diagnostic, preventive and early intervention services in community-based sites (e.g., schools, Head Start sites and nursing homes) by allied dental team members who are connected to a dentist at an off-site location (e.g., office or clinic) using teledentistry.

Within the VDH model, a specially trained registered dental assistant in extended function (RDAEF), registered dental hygienist (RDH) or registered dental hygienist in alternative practice (RDHAP) collects electronic dental records such as radiographs, photographs, charts of dental findings, dental and medical histories with portable imaging equipment and an Internet-based dental record system. He or she then uploads the information to a secure Internet website where a supervising dentist reviews and establishes a diagnosis and treatment plan for the hygienist or assistant to carry out. Patients who need care that is more complex are referred to the

dentist to provide those services.

TDIC recognizes emerging trends in dental care delivery and recommends dentists use specific protocols if they want to participate in a VDH program. If a dentist employs a dental team member to work in a VDH community setting, that dentist is subject to the same requirements and regulations as a practice owner who employs dental team members to work in a traditional practice setting. This includes adding

the auxiliary to your payroll reporting for workers’ compensation insurance coverage. Similar to a traditional setting, TDIC’s professional liability policy may extend to dental auxiliary staff. As with any coverage interpretation, the scope of coverage is subject to the policy provisions. If you have questions about your policy with TDIC, please contact your agent at 800.733.0633.

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of care regardless of the setting,” said a senior risk management analyst with TDIC. “Informed consent, record collection, diagnosis, care, documentation, referral and follow-up are all essential to providing appropriate care in a traditional practice as well as the VDH setting.” Additionally, if the dentist is working with an RDHAP, there is an option to establish a working relationship other than employer-employee because of the RDHAP’s license statutes, which allows this opportunity. “If a California dentist is working with an RDHAP in a VDH under a contracted arrangement, a written agreement with the RDHAP that addresses the items listed above, as well as the RDHAP’s proof of separate liability coverage is a must,” said the analyst.

As of publication date, the VDH model is legal in California only. If you practice in California and are interested in participating in such a delivery model, or if you are in another state and the VDH model becomes a practice option for you, please consider the following recommendations:

1. Know the dental team you are working with before entering any VDH agreement. Make sure these employees are skilled individuals with similar treatment philosophies to yours. Whenever possible, work with auxiliary team members directly before remotely. Trust and good communication are vital to successful patient care. The dentist is responsible to ensure all participating dental professionals have a current license in good standing with the state licensing agency.
2. The location your staff person uses must have the appropriate dental equipment for the services being offered and abide by CalOSHA standards for employees.

3. Establish clear parameters for your VDH working arrangements. You likely will need to speak with a labor attorney who is familiar with dental practices and specifically the VDH delivery model. At a minimum, your employment arrangement should address:

- Method(s), timeliness and expectations for communication.
- Quality assurance requirements.
- Equipment (ownership, maintenance, property insurance).
- Use of electronic records system and documentation expectations.
- Radiographic protocol.

Establish clear parameters for your VDH working arrangements. You likely will need to speak with a labor attorney.

- Emergency management.
- Compensation method.

Dentists, who are accustomed to making diagnoses during in-person visits using an explorer, often ask about the accuracy of making diagnoses from records alone. The VDH demonstration project investigated this and found:

“Based on patient information collected in the field that includes intra- and extraoral radiographs, photographs and charting collected by an [allied dental team member], a dentist can, with a great degree of certainty, decide on the best next action for that patient. In this study, individual dentists were consistent in their decisions about a specific patient whether the examination was in person or virtual.”

Another common inquiry relates

to interim therapeutic restorations (ITRs), one of the new duties that hygienists and RDAEFs who complete the required training program can perform in a VDH. California law specifies that ITRs can be placed after the diagnosis and direction of the supervising dentist to stabilize a tooth with a cavitated lesion until the dentist determines that additional treatment is required. ITRs provided by allied dental professionals must be completed with hand instrumentation only and must not require dental anesthesia to complete. For more information about the virtual dental home or interim therapeutic restorations, see the July 2012 and October 2013 issues of the *Journal of the California Dental Association* at cda.org/member-resources/journal.

A decision to participate in this type of practice model is one that each dentist should make on his or her own. Participating in the VDH model can be rewarding and provides a different vantage point not offered by the traditional practice model. Prior to starting such an arrangement, please notify your professional liability carrier. ■

For more information about this and other nontraditional practice models, contact Gayle Mathe, CDA director of community programs at Gayle.Mathe@cda.org.

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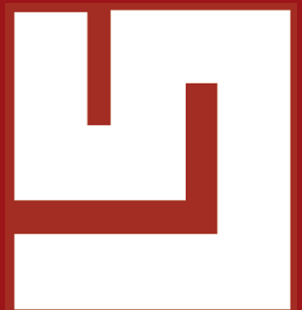
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NORTHERN CALIFORNIA

CASTRO VALLEY: Practice & Bldg. 1,800 sq. ft, 3 Ops, 1 add'l Plumbed. 2014 GR \$373K, 4 day week. #CA251

FOLSOM: FACILITY ONLY 1,200 sq. ft. w/3 Ops, Digital & Pano, new compressor #CA209

GREATER SACRAMENTO: General Practice. 7 Ops, 3,079 Sq. ft. (Shared w/2nd DDS - Separate Practices), 2013 GR \$974K. #CA140

GREATER SAN JOSE: Perio Practice. Fiscal-year GR \$1.3MM. 5 Ops, 2 add'l Plumbed, in same loc. 28 yrs. #CA219

MARIN COUNTY: Mill Valley 1,260 sq. ft, 3 Ops, 1 add'l Plumbed. Dentrux, Digital, Intra-Oral. #CA224

MARIN COUNTY: 3 Op practice w/views of Corte Madera Creek. 2014 GR\$315K. Paperless charts, Schick, Eaglesoft. #CA286

MILLBRAE: 1,500 sq. ft. leased office with 5 Ops, 1 add'l Plumbed, state-of-the-art equipment. 2014 GR \$670K. #CA262

N. COAST: Endo Practice. 6 Ops, 5 Plumbed 3,300 sq. ft. Digital, Microscopes, EndoVision. #CA214

N. EAST BAY: PRICE REDUCED \$77K! General Practice + Bldg. 7 Ops. 2,324 sq. ft. 2012 GR \$885K. #CA108

NORTHERN CALIFORNIA: Endo Practice. 3 Ops, 1 Plumbed, 1,200 sq. ft. 2 Microscopes, Digital. 2013 GR \$319K+ #CA158

N. OF SACRAMENTO: 1,750 sq. ft. w/4 Ops. Intra-Oral, Digital, Pano, Laser, CAD-CAM, Dentrux. 2014 GR \$1M. #CA260

N. OF SACRAMENTO: 1,324 sq. ft. office w/4 Ops, Dentrux, Pano. Owner worked 39 weeks in 2014. #CA267

NORTH SACRAMENTO: 3 Ops in a leased space with <1,000 sq. ft., PPO, 2 days hygiene, Digital, Easy Dental. #CA266

PINOLE: 4 Op Endo office w/Digital X-ray, Microscopes, and PBS Endo in approx. 1,200 sq. ft. 2014 GR \$672K. #CA284

PLEASANTON: Facility Only, Former Endo Office, Good GP Startup. 2 Ops, 1 Plumbed & Partially Eq. 975 sq. ft. #CA195

SACRAMENTO: 7 Equip Ops in 2,400 sq. ft., 1 add'l Op Plumbed. Pano, Softdent, Digital. 2014 GR \$626K+. #CA250

SACRAMENTO: Practice and Condo. 1,300 sq. ft. office, 4 Ops. Eaglesoft. 2014 GR \$650K. #CA261

SACRAMENTO: 1,684 sq. ft., 6 Equip. stations in bay, 2 add'l Plumbed. 2014 GR \$590K. #CA269

SAN FRANCISCO: 780 sq. ft., 3 Ops (2 fully Equipped) near Union Square. 2013 GR of \$854K, 55% overhead. #CA191

SAN FRANCISCO: Periodontal Practice & Condo Unit. 1,160 sq. ft. w/4 Op, 2014 GR \$714K w/\$363K adj. net. #CA274

SANTA ROSA: General Dentistry & Building. 3 Ops. 2013 GR \$542K w/adj. net \$182K. #CA200

SONOMA: Stand-alone 2,000 sq. ft. office w/4 Ops. Digital X-rays, Lasers, CAD/CAM. 2014 GR \$675K on 3 day/week. #CA270

CENTRAL CALIFORNIA

CENTRAL COAST: General Dentistry. 6 Ops, 8 days Hygiene/wk. GR over \$2M for last 3 yrs. Est. 30+ yrs. #CA208

FRESNO: General Dentistry Partnership. 2013 Partnership GR \$4.7M. Selling Partner 2013 Net Inc \$368K. #CA196

KINGS COUNTY: NEW LISTING: 4 Ops, Pano, established for 50+ yrs. GR of \$246K in 2014. #CA265

PASO ROBLES: Modern 4 Ops, 1,998 sq. ft. office with Digital X-ray, Sofident. 2014 GR \$573K+. #CA275

PORTERVILLE: General Dentistry, 6 Ops. 2014 GR \$555K, 7-year old equipment, retail center. #CA223

TULARE: 2,300 sq. ft. Free-standing office w/5 Ops. 2014 GR \$1.7M. 10 days hygiene. Owner moving out of state. #CA273

SOUTHERN CALIFORNIA

ANAHEIM: 4 Ops, 5 add'l available, SoftDent, Digital X-Rays and Digital Pano. 2013 GR 237K. #CA207

ANAHEIM HILLS: NEW LISTING! General Practice with 4 Ops, est. for 34 yrs. Dentrux, 6 days Hygiene per week. #CA279

BALDWIN PARK: General Practice. 5 Ops, 4 Equipped. 2014 GR \$276K. #CA176

BANNING: General Practice. 6+ Ops. Paperless, Digital, EagleSoft. 8 Days Hyg/Week. 2014 GR \$1.4MM+. #CA183

BEVERLY HILLS: Small boutique practice, 2 Ops, 1 Equipped, Open Dental, Digital, 2014 GR \$120K on 3 days/wk.. #CA215

BEVERLY HILLS: 5 Ops, EagleSoft, Digital, CEREC. Long-term staff, newer equipment. 2014 GR 1.07MM, adj. net of \$406K. #CA210

CARSON: NEW LISTING! 3 Op General Practice. Paperless, EagleSoft, Digital, Pano. All equip. <3 yrs. old. 2014 GR \$143K. #CA280

CYPRESS: NEW LISTING! General Practice, 5 Ops, 35 yrs. of Goodwill. 7 days Hygiene per week. \$948K GR. #CA257

GREATER LOS ANGELES: Perio Practice. 5 Ops. 34 Yrs. of Goodwill. Dentrux, Digital, Laser, great referral base. #CA173

HUNTINGTON BEACH: NEW LISTING! General Practice. 4 Ops, Digital, Pano. Nice Prof. bldg location. 2014 GR \$534K. #CA285

HUNTINGTON BEACH: NEW LISTING! 5 Ops, 28 yrs. of Goodwill, Digital, Pano, Laser, 12 days of hyg./wk. GR of \$1.1MM+. #CA263

INLAND EMPIRE: NEW LISTING! Endo Practice. 4 Ops, 3 yr. new equip., Digital, Cone Beam CT. 2014 GR \$739K with low overhead. #CA281

INLAND EMPIRE: NEW LISTING! General Practice 7 Ops, Dentrux, Digital, Pano, 30 yrs. goodwill. 4 1/2 days of hygiene. #CA283

INLAND EMPIRE: NEW LISTING! General Dentistry, 4 Ops, Camera, Digital, Pano, 2014 GR \$534K, adj. net 4196K. #CA285

LOS ANGELES: General Dentistry, 6 Ops, 5 Equipped, Est. 50+ yrs., SoftDent, Digital. 2014 GR \$591K. #CA255

LOS ANGELES: NEW LISTING! Endo practice, 4 Ops, Cone Beam, 2014 GR of \$360K on 21 hours/week. #CA259

N. ORANGE COUNTY: General Practice. 7 Ops, 6 Equipped, EagleSoft, Digital, Seller works 2 1/2 days with GR of \$542K. #CA248

ORANGE: General Dentistry. 4 Ops, Great location near Orange Circle. Est. 56 yrs. Digital. 2014 GR over \$429K. #CA256

PALM DESERT: Prosth/Implant Practice. 6 Ops, 5 Equipped, Dentrux, Digital, Pano, 20+ yrs. goodwill. 2014 GR \$805K, \$386K adj. net #CA242

PALM DESERT: General Practice, 5 Ops, Est. for 32 yrs., 6 days of hygiene/week/ GR of \$824K and \$339K adj. net. #CA245

PASADENA AREA: NEW LISTING! General Dentistry. 3 Ops, Dentrux, Dexis, CEREC, established for 50+ yrs. #CA283

PICO RIVERA: General Dentistry, 6 Ops, Est. in 1960. DentiSoft, Pano, 4 1/2 days of hygiene per week. 2014 GR of \$690K. #CA258

S. ORANGE COUNTY: Pedit Practice with 4 Ops, 1 year new equipment, Digital, Pano/ \$236K GR with room to grow. #CA222

SOUTH PASADENA: General Dentistry. 4 Ops, 3 Equipped, Paperless, Digital, est. 37 yrs. 2014 GR \$856K with \$271K adj. net. #CA244

UPLAND: General Practice. 4 Ops, 3 Equipped. 25+ yrs. of Goodwill. 2014 GR of \$221K with room to grow. #CA254

VICTORVILLE: General Practice. 3 Ops, 3 Plumbed, 2,150 sq. ft. Est. 34 yrs., SoftDent. 2014 GR \$273K. #CA149

WEST LOS ANGELES: General Practice, 4 Ops, newly built-out suite, desirable high rise. 50+ yrs. goodwill. FFS. 2014 GR \$651K. #CA226

WEST HOLLYWOOD: General Practice, 4 Ops, Intra-Oral Camera, Digital, Laser, 5 yr. old equip. 2014 GR of \$613K. #CA212 **IN ESCROW!**

WHITTIER: NEW LISTING! General Dentistry. 4 Ops, 3 Equipped. Dentrux, Dexis. Est for 50+ yrs. on Main street. 2014 GR \$217K. #CA276

SAN DIEGO

CHULA VISTA: General Practice, est. 50+ yrs. 4 Ops, 3 1/2 days of Hygiene, Dentrux. \$493K GR in 2013. #CA109

COLLEGE AREA, SAN DIEGO: Very busy 6 Op General Practice with room to expand to 9 Ops. PPO, Dentrux, Digital. 2014 GR 1.7M. #CA231

DOWNTOWN: Leasehold sale. Modern and chic downtown office in prime location. 3 Ops + room to expand. #CA232

LA JOLLA: NEW LISTING! General Practice, 3 Ops, FFS and Delta Premier. 2014 GR of \$559K. Owner retiring. #CA278

LA MESA: General Practice. 4 Ops. 3 Equipped, FFS/PPO, Dentrux, Digital. 2014 GR \$340K. #CA227 **IN ESCROW!**

N. COUNTY INLAND: NEW LISTING! Highly regarded GP. FFS/PPO. 6 Ops. Free-standing building. #CA271

SAN DIEGO: General Practice. 3 Ops. FFS, PracticeWorks. Located in Central San Diego. 2014 GR \$187K. #CA161 **IN ESCROW!**

SANTEE: General FFS/PPO Practice, 6 Ops, retail center, Dentrux, Digital, \$780K GR in 2014. 7 days of hyg/week. #CA228 **IN ESCROW!**

S. BAY AREA, SAN DIEGO: General Dentistry, 3 Ops, 4 days hyg/wk. Retail center, Dentrux, Digital Pano, PPO & FFS. GR 2014 \$524K. #CA206

UPCOMING LISTING: ESCONDIDO 4 Ops, 3 Chairs, Central Escondido, Doctor Retiring Excellent Opportunity to merge/grow.

OUT OF CALIFORNIA

UPCOMING LISTINGS: MAUI, HAWAII and OAHU, HAWAII!

Mandated Reporting

CDA Practice Support

Under California law, each person licensed by the Dental Board of California is a “mandated reporter” for known or suspected abuse or neglect of a child, elder or dependent adult, and incidents of violence. Mandated reporters must report known or suspected cases to the county department for child protective services or for adult protective services, or to local law enforcement. Neither the Health Insurance Portability and Accountability Act (HIPAA) nor state privacy laws prevent a dental professional from following this obligation.

All mandated reporters must sign a statement acknowledging this responsibility. The statement and a copy of Penal Code sections 11165.7, 11166 and 11167 are to be provided by the employer. Employers are strongly encouraged, but not required, to provide employees with training associated with the responsibility of being a mandated reporter. Whether or not employers provide employees with training, the lack of training does not excuse a mandated reporter from his or her responsibility to report. No supervisor or administrator may impede or inhibit an individual’s reporting duties or subject the mandated reporter to any sanction for making the report. The law, however, allows for establishment of internal procedures to facilitate reporting.

A mandated reporter who fails to make a report may be found guilty of a misdemeanor. A mandated reporter who makes a report in accordance with the law has protection from liability. Under certain circumstances, mandated reporters may seek reimbursement from the state crime victims’ fund for legal expenses.

A report first must be made by telephone to local law enforcement or to the county department responsible for child protective services and/or adult protective services. The telephone call

RADAR — A domestic violence intervention for health care providers

- R** Recognize signs and symptoms of abuse/neglect; routinely screen.
- A** Ask direct, nonjudgmental questions with compassion.
 - “Please tell me about _____ (injury).”
 - “Have you been hit, kicked, punched or otherwise hurt by someone within the past year? If so, by whom?”
 - “Do you feel safe in your current relationship?”
 - “Does a partner from a previous relationship make you feel unsafe now?”
- D** Document your findings.
 - The dental chart is a legal document.
- A** Assess patient safety.
 - Is there a weapon involved? Is the patient in immediate danger?
- R** Review, refer, report.
 - County Adult Protective Services phone number _____
 - County Child Protective Services phone number _____

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ARCADIA – (4) op comput G.P. Located in a well known Prof. Bldg. on a main thoroughfare. Cash/Ins/PPO pt base. Annual Gross Collect \$300K+ on a (3) day week.

BAKERSFIELD #29 - (4) op comput G.P. (3) ops eqt'd, (1) add. plumbed. Located in a free stand bldg. Cash/Ins/PPO. Digital x-rays. Annual Gross Collect \$300K+ p.t. Seller moving.

GROVER BEACH – (3) op Turnkey Office w included charts (included, but not guaranteed). (2) ops eqt'd w newer eqt. 3rd plmbd. Networked, digital Pano & x-ray. Dentrrix. In a strip ctr. **NEW**

MONTEREY PARK – (6) op comput G.P. located in a street front suite on a main thoroughfare w exposure & visibility. Cash/Ins/PPO & small % Denti-Cal. Annual Gross Collect \$250K+ p.t. Seller retiring but will assist with Transition. **REDUCED**

OXNARD – (4) op comput. G.P. in a prof. bldg. 2014 Gross Collect \$264K+ on (3) days. Digital x-rays. Dentrrix. Cash/Ins/PPO/HMO/Denti-Cal. Refers diff Endo/O.S./Perio & Ortho. **NEW**

RANCHO CUCAMONGA - (4) op comput. G.P. in a shopping ctr. w excellent exposure, visibility, signage & parking. Collect \$580K+ in last 12 mos. Cash/Ins/PPO/Denti-Cal pts. Modern eqt. & digital x-rays. Low Overhead. Seller retiring, but will assist w transition. **NEW**

SANTA BARBARA COUNTY – (3) op comput G.P. & a 1,900 sq ft Bldg. that houses the practice & a residential unit that can be rented or lived in. "Fee For Service." No PPO, HMO or Denti-Cal. 2015 Projected Gross Collections \$275K+ on a relaxed 3½ day week. Seller refers all O.S., Perio, Ortho, Endo & implant placement. Seller retiring but will assist w transition. **NEW**

SHERMAN OAKS – (3) op comput G.P. in a well known Med/Dental bldg. "Fee for Service." Annual Gross Collect \$170K+ p.t. Great Starter or Satellite. Seller retiring. **REDUCED**

So. KERN COUNTY – (6) op comput. G.P. located in a Bakersfield suburb in a small strip ctr. w exposure/visibility. Pano eqt'd. Limited competition. Cash/Ins/PPO pts. Annual Gross Collect. Approx. \$350K p.t. Seller is moving and is motivated. **REDUCED**

SANTA ANA - absentee owned (6) op fully eqt'd G.P. First floor street front location on a main thoroughfare. Exposure/visibility/signage. Cash/Ins/PPO. No HMO & No Denti-Cal. Pano eqt'd & Computerized. 2014 Gross Collect. of \$526K+ on a (3½) to (4) day Associate run week.

SOUTHWEST RIVERSIDE COUNTY - (5) op comput. G.P. (4) ops eqt'd/5th plumbed. 2015 Project Gross Collect \$400K+. Cash/PPO. Located in a smaller prof. bldg. in a condo which can be purchased or leased. Seller giving up private pract. to accept institutional position.

TUSTIN - (4) op comput. G.P. (3) ops eqt'd/4th plumbed. Located in a busy shop ctr. on a main thoroughfare. Excellent exposure, visibility, signage & parking. Digital x-rays. "Turnkey Office" w some pt. charts included but not guaranteed. **NEW**

WEST SAN FERNANDO VALLEY - (4) op comput. G.P. w modern eqt. Located in a smaller prof. bldg. on a main thoroughfare. Cash/Ins/PPO pts. Annual Gross Collect \$750K+ on a (4) day week. Excell. long term lease, outstanding signage, & great off street parking. **SOLD**

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reporting known or suspected child abuse or neglect must be followed within 36 hours by the submission of a completed form to the reporting agency. Suspected Child Abuse Report form SS 8572 may be available on county child protection agency websites. Following the initial telephoned report of known or suspected injury of an adult or child, a mandated reporter must submit a report on a form, Mandated Suspicious Injury Report CalEMA form 2–290, to the agency within two days. Both of these forms are on the state Department of Justice website, oag.ca.gov/childabuse/forms. Forms can also be found at the following:

- Elder Abuse — ag.ca.gov/bmfea/reporting.php.
- Suspected Child Abuse Report — ag.ca.gov/childabuse/forms.php.
- Suspicious Injury Report — ag.ca.gov/childabuse/forms.php.

"California State Mandated Reporting" is a CDA Practice Support resource that includes a form that employers can provide to licensed staff for signed acknowledgment of the reporting obligation. The resource also includes a copy of Penal Code sections 11165.7, 11166 and 11167.

The state Department of Social Services has an online directory of county adult protective services offices at www.cdss.ca.gov/agedblinddisabled/PG2300.htm. The agency also maintains an online directory of county emergency response child abuse reporting here, www.childsworld.ca.gov/res/pdf/CPSEmergNumbers.pdf. ■

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Periscope offers synopses of current findings in dental research, technology and related fields

PEDIATRICS

Clinical performance and parental satisfaction with posterior veneered crowns

O'Connell A, Kratunova E, Leith R. Posterior Veneered Stainless Steel Crowns: Clinical Performance After Three Years. *Pediatr Dent* 2014 May-Jun;36(3):254-8.

Purpose: The purpose of this study is to evaluate the clinical performance and parental satisfaction of two commercially available posterior veneered crowns (PVSSC), NuSmile and Kinder Krowns, after three years.

Methods and materials: A prospective clinical split-mouth study was designed to test NuSmile and Kinder Krowns PVSSCs. Pair matched molars were randomly assigned to receive either crowns. Full-coverage veneer crowns were used for primary first molars while buccal-only veneer crowns were used for second molars. Subjects were examined every six months for 36 months. Clinical and radiographic criteria were assessed by two blinded and calibrated examiners (kappa score = 0.8 to 1). Crown retention, gingival health, facing fracture location, fracture extent and wear, gingival margin extension, occlusion, crown alignment, staining of the veneer, radiographic bony changes and presence of horizontal overextension and esthetics (using visual analog scale) were measured.

Results: A total of 54 (27 pairs) crowns were placed. The average age of the subjects is 5.4 years old. After 36 months, the remaining 34 crowns in 14 subjects were statistically compared to the same crowns at 12 months.

There was no statistically significant difference in plaque retention or gingival health. There were no radiographic changes and the presence of overhang margins did not influence gingival health. Wear on facings and facing fractures increased with time but this was not statistically significant. Parental satisfaction with esthetics decreased as more metal was exposed due to facing fractures but parents expressed preference for white crowns versus stainless steel crowns (SSCs).

Conclusion: The clinical performance of both crowns was comparable for a minimum of three years. PVSSC provided a better alternative to traditional SSC but facing fracture occurred overtime. Parents were satisfied with the esthetics of the crowns.

Clinical relevance: Veneered SSCs are a good alternative for esthetic full-coverage restorations on posterior primary teeth. It provides

esthetics and durability as shown in this study. However, there is a high probability of facing fractures that will expose the metal surface over time. This has to be disclosed to the parents. Manufacturers currently suggest replacement of the crown when esthetics are compromised, which may pose a challenge to the dentist and the patient and may compromise the tooth. Zirconia crowns maybe an alternative in the future. Clinical trials need to be conducted to substantiate this.

— Thomas S. Tanbonliong Jr., DDS

TMD

TMD and upper cervical spine impairment

Grondin F, Hall T, et al. Upper Cervical Range of Motion Is Impaired in Patients With Temporomandibular Disorders. *Cranio* print ISSN: 0886-9634, online ISSN: 2151-0903 vol. 33, issue 2 (April 2015), pp. 91-99.

Purpose: While many clinicians treating temporomandibular dysfunction (TMD) assess and treat the cervical spine of TMD patients, there are few studies regarding verification of this connection. This study investigated a possible TMD connection, with or without headaches, with upper cervical spine impairment compared to asymptomatic subjects.

Materials and methods: A single-blind examiner evaluated cervical range of motion (ROM) with flexion-rotation test (FRT) on 20 asymptomatic subjects and 37 subjects diagnosed with TMD pain confirmed by the Revised Research Diagnostic Criteria. Subjects with TMD were further divided according to having headaches (11) and without headaches (26). One-way analysis of variance and planned orthogonal comparisons variance and planned orthogonal comparisons were used to determine differences in cervical mobility between groups.

Results: The analysis of variance revealed significant differences between groups for the FRT $F(2,54)=57.96$, $P<0.001$ and for sagittal ROM $[F(2,54)=5.69$, $P=0.006]$. Findings show that the TMD with headache group had less axial rotation than TMD nonheadache group, and both TMD groups had less ROM than controls.

Clinical relevance: This study verifies a connection between patients meeting the Revised Research Diagnostic Criteria for having TMD and upper cervical spine impairment. The significance for the practitioner is it justifies evaluation of a patient for upper cervical spine limitations along with TMD signs and symptoms.

— Daniel N. Jenkins, DDS, CDE



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Well established and respected, quality general practice located in desirable Marin County location. Gross receipts average \$1.2M annually with less than 4 doctor days/week. Adjusted net averaging ~\$400K for last 2 years. Doctor has experienced many gratifying years treating exemplary patients and requires an experienced G.P. with minimum of 2-5 years of experience.

4019 SAN JOSE GP

West San Jose practice in a mix of residential and commercial properties close to Westfield Valley Fair. Approx. 1,798 sq. ft. in a single level professional building. 2 fully-equipped ops setup for left handed delivery. Avg. GR \$226K+ 56% overhead & 3 doctor-days. Seller transitioning to retirement. Great upside potential. Asking 135K.

4082 SF GP

Well-established general practice located in quaint neighborhood of the Sunset District on a major thoroughfare. Beautiful turn-key office with lots of natural light. Seller is retiring but is willing to help Buyer with a smooth transition. 3 fully-equipped ops with room for additional op(s) in 1,440 sq. foot facility. 4 year average GR of \$628K+ with average net of \$250K+. All-fee-for-service. Not a Delta Dental provider. Asking \$432K.

4075 PETALUMA GP

Established GP located in Petaluma in stunning 1,856 sq. ft. seller owned facility in class A, 10 year-old professional building. State-of-the-art office w/6 ops. 4 doctor-days & 4 hygiene days/wk. Avg. GR \$640K. Asking \$440K.

4051 CENTRAL COAST PROSTHO

Well-established practice located in California's gorgeous Central Coast area. Beautifully appointed, spacious 1,568 sq.ft. office with 4 fully equipped ops, pros lab and other amenities. Situated just minutes from the ocean and <5 miles away from one of California's historic Mission Cities, this practice is nestled in a highly desirable community. 2013 gross receipts were \$1.2M+ and 2014 is annualized at \$1.3M+ on a 4 day doctor workweek, w/4 days of hygiene/week. Approx. 15 new patients a month and ~1,500 active patients (all fee-for-service). Owner/doctor is willing to help Buyer for smooth transition.

4069 SOUTH BAY PERIO

Well established Perio practice in desirable South Bay location. Approx. 1,700 sq. ft. facility w/4 fully-equipped ops. in a professional dental building. 2014 GR \$800K+. 3 doctor days per week. Practice sees 30-40 new pts. per month. Cone beam scanner & panoramic x-ray purchased recently. Seller willing to help in the transition. Asking \$460K.

4071 SAN MATEO GP

Well-est. GP in single story professional dental building located on a heavily traveled main artery between downtown San Mateo and downtown Burlingame. Fully equipped ops in modern office w/digital x-ray, inter-oral camera, laser & Cerec. 2014 GR \$673K+ w/adjusted net of \$232K+. Asking \$459K.

4081 HAYWARD GP

Seller retiring from successful GP with well-trained, seasoned staff. 4 fully-equipped ops. in seller owned building. Practice averages over \$1M/year. All fee-for-service. Asking price for practice only \$732K. Building is also available for purchase.

SOUTH SF SPACE FOR LEASE

Prominent dental building located in South San Francisco is looking for a general dentist and/or specialist to start a practice or merge an existing practice into a 920-1000 square foot space. Owners of the building are open to discuss assisting in tenant improvement costs/build out. Please inquire about this opportunity to begin your state-of-the-art practice today! Please email valalos@msn.com or call 650.867.5959.



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www.PPSDental.com
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6092 ROSEVILLE Great foundation to build upon. 2015 trending \$350,000 in collections. 3-ops with 4th available.

6091 MODESTO 3-day per week practice collected \$450,000 in 2014. Collections through July 23rd for 2015 were \$256,000. Practice has 3-days of Hygiene. Great rent of \$2,085 for 1,763 sq.ft. 5-op suite. Centrally located off Briggsmore Avenue. Hands-on Successor shall do very well here.

6089 MOUNT SHASTA Small town living renowned for mountain recreation, lakes & streams, fishing, golfing and abundant culture. Perfect escape from the Rat Race and corporate intrusion. On 3-day week revenues topped \$800,000 in 2014. 2015 trending \$850,000 with \$450,000 in Profits.

6088 SANTA CRUZ Well established, lots of patients. Strong Hygiene Department with 6.5 days of hygiene per week. Collected \$600,000 in 2014. 2015 trending \$675,000+. Full Price \$375,000.

6087 LAKE TAHOE - NEVADA'S STATELINE Located adjacent to California's South Lake Tahoe. Fee for service as practice is "Out-of-Network" with insurance companies. Collections last year topped \$600,000 with Available Profits of \$220,000. 3.5 days of hygiene per week. Escape California income taxes! Nevada State Board of Dental Examiners accepts the Western Boards.

6085 PERIO PRACTICE – SAN FRANCISCO BAY AREA 2014 collected \$1.98 Million. Collections for first 7-months of 2015 totaled \$1.29 Million has practice trending \$2.2 Million. 7 Doctor days per week. Seller can work back. Beautiful 8-Op office.

6081 SANTA CLARA El Camino Real location. 2014 collected \$687,000. Available Profits of \$305,000. 2015 on pace to collect \$750,000. 2-days of Hygiene. Management is on cruise control. New Doc who is ambitious and extends hours shall push practice over \$1 Million. 5-ops in 1,700 sq.ft.

6080 SAN RAMON 8+ days of Hygiene per week. \$450,000 invested in 6-Op office. Consistent \$900,000+ per year performer. Attractive transition arrangements available.

6079 BERKELEY'S ALTA BATES MEDICAL VILLAGE - "SOLD" Strong performer on Owner's 24 hour week. 2014 collected \$676,500. Patient foundation anchored by 4-days of Hygiene. Endo and OS referred. Renowned Medical Village has regional draw.

6077 PERIO PRACTICE – SAN FRANCISCO'S NORTH BAY Highly regarded and located in desirable family area. On 3.5 day week, revenues were \$1 Million in 2014 with profits of \$400,000. Collections for first 7-months of 2015 topped \$635,000. Beautiful facility with 4-Ops.

6071 CHICO Strength is 4-day Hygiene schedule. Retiring DDS focuses on restorative. Endo, OS, Perio & Pedo referred. 2014 collected \$450,000. Beautiful 4-Op office. Full Price \$150,000.

6070 VISALIA Strong foundation and well-positioned for ambitious successor. Strong Hygiene Department, beautiful facility, well equipped. Digital throughout. Not a Delta Premiere practice. Revenues trending \$700,000 for 2015 on part-time schedule. Extend hours and be busier. Best location!

ANAHEIM HILLS Group member wanted. Hi identity. GP has space to share with Specialist. Pedo, Ortho or ?

ARROWHEAD Great mountain practice. Hi identity location. Conservative part-time owner with Associate grosses \$4250,000. 3,000 patients. 4-ops. Digital x-rays. Practice \$350K and RE \$250K.

BAKERSFIELD AREA Small town. 4-op practice with building. Full Price \$350,000 includes real estate. Renovations make property look new.

BAKERSFIELD Lady DDS grosses \$800,000. Low overhead. Full Price \$550,000.

CLAREMONT-UPLAND Gross \$500,000+. Refers \$250,000 in Ortho, OS, Endo. Hi identity. Seller can work back if acquired by Specialist.

DENTAL LOCATIONS Bell and Bell Gardens.

DENTURE PRACTICE Sees 30 denture patients per day. Perfect for Prosthodontist.

DIAMOND BAR Part-time practice. Grosses \$400,000. Great opportunity. Full Price \$360,000.

HAWTHORNE Located in strip center at busy intersection. 6-ops, 2 equipped in 1,600 sq.ft. suite. Full Price \$95,000.

IRVINE Part-time practice is grossing \$400,000. Beautiful office. Full price \$360,000.

LAKE FOREST 7 ops across street from major employer in Orange County.

LOS ANGELES HMO practice doing \$4.15 Million. \$33,000 per month in cap checks. Includes real property.

MISSION HILLS Grossed \$350,000, nets 50%. Senior DDS wants to work-back 2.5 days. Seller will finance.

REDLANDS Full price \$35,000. 25-year phone number and fictitious business name. Great rehab opportunity which will grow with TLC.

REDLANDS Low overhead. 5- Ops. Should do \$300-to-\$400K first year with little marketing. Great Lease at \$1.00 sq. ft. FP \$250,000.

RIALTO Dental building on 2.3 acres. Land shall soon have \$8,000/month in rental income.

RIVERSIDE Walmart Location.

SAN DIMAS HMO \$8,000 month in cap checks. Hi Identity shopping center. Refers a lot. Specialist OK.

TORRANCE Grosses \$300,000 with older DDS. 3-ops plumbed, 2 equipped. Beautiful A Class building. Full Price \$250,000.

TUSTIN Free standing dental building with 5 ops. Full Price \$1.4 Million.

TUSTIN Best Location in city Hi identity corner. Double your volume.

VICTORVILLE "Coming Up"

WEST LA Grosses \$1.2 Million. Seeks Korean Lady DDS for specialty team. Plan to grow to \$2 Million per year. Quality office. Full Price for 1/3 of goodwill \$350,000.

YUCCA VALLEY Hi identity location. Small office. Used to do \$500,000. Needs TLC. Full Price \$150,000 includes building.

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AC-335 SAN FRANCISCO: Two great practices for the price of one! **Now Only \$475!**

AG-053 SAN FRANCISCO: 3,000 sf w/ 9 ops + 1 add'l. PRIME LOCATION! **\$475k**

BN-183 HAYWARD: *Kick it up a notch by increasing the current very relaxed work schedule!* 1,300 sf w/ 3 ops **\$150k**

BN-279 CONTRA COSTA CO.: Excellent Merger Opportunity! 2-story. 1,350 sf w/ 3 ops +1 add'l **\$60k**

BC-361 OAKLAND: Established for over 23+ years! 2,200 sf w/ 7 ops. **Now Only: \$385k**

BC-381 PLEASANT HILL Facility: Open Floor Plan! 1,852 sf w/ 6 equipped ops! Move in Ready! **\$80k**

BG-407 SAN LEANDRO: Prof bldg. Great signage! 1200 sf w/ 3 ops **\$125k**

BN-426 BERKELEY: 1,384 sf w/ 3 ops. **\$495k**

BC-432 PITTSBURG: Own this family-oriented Practice! 1,640 sf w/ 6 ops. **\$350k**

BN-452 CONCORD: Rare opportunity! 1,951 sf w/ 4ops. **\$525k**

BN-463 FREMONT: Gross Revenues Exceeded \$590k in 2014 on 4 day work week! 1,720sf w/ 3op + 4 add'l. **\$485k**

CC-390 SOLANO COUNTY: Near Travis AFB! Highly visible location! 950 sf w/ 3 ops **Seller Motivated! REDUCED! \$145k**

CC-456 SOLANO COUNTY: Highly visible location! 2,997 sf w/ 6 Dr ops + 2 Hyg ops +1 add'l **\$850k**

CG-366 SONOMA CO.: Vibrant, growing community! 1,300+ sf w/ 4 ops. Over \$760k in collections! **\$420k**

DC-370 SAN JOSE: Facility Only. 1,600 sf w/ 3ops. Real Estate also available for purchase **\$120k (Real Estate \$1.5M)**

DC-476 DUBLIN: Shared Facility. Great for Specialist - Endo, Pedo or Ortho. 1100 sf w/ 2 ops+1 add'l **\$125k**

DN-312 LIVERMORE Facility: Don't miss out on this one! 1,070 sf w/ 3 ops. **\$95k**

DC-419 NEWARK Facility: Location, Location, Location! 1,400 sf w/ 4 op. **\$140k**

DC-406 SAN JOSE: Amazing opportunity in Westgate Shopping Center. 6 ops + 80 mall hours per week **\$400k**

DN-447 SUNNYVALE: Quality, family-oriented opportunity awaits your talent and skill. 1,200 sf w/ 3 ops + 1 add'l. **\$395k**

DN-467 GILROY Facility: This traditionally styled practice is perfectly situated! 1,325 sf w/ 3 ops + 1 add'l. **\$75k**

NORTHERN CALIFORNIA

EN-340 SACRAMENTO: Large HMO practice! 3,400 sf w/ 10 ops and Plumbed for 1 add'l **\$950k**

NORTHERN CALIFORNIA CONTINUED

EN-464 ROCKLIN Facility: Don't miss out on this remarkable opportunity! 2,150 sf w/ 4 ops. **\$150k**

EN-475 ROSEVILLE Facility: Hesitate and you might miss out on this opportunity! 875 sf w/ 2 ops + 2 add'l. **\$49.5k**

EG-479 FOLSOM: History is alive here with tributes to the past! 1,600 sf w/ 3ops. **\$225k**

FN-299 FERNDALE: Live and practice on the beautiful North Coast! 1,300 sf w/ 3 ops **\$195k (Real Estate: \$309k)**

FC-334 NORTHERN CA: Emphasis on prevention. 1,200 sf w/ 4 ops **\$480k / Real Estate Also Available!**

FC-343 NORTHERN CA: Quality & location are the keys to success! 1,200 sf w/ 3 ops + 1 add'l & 1 hyg. Op. **\$500k (Real Estate \$375k)**

FC-415 FT. BRAGG: An excellent practice, located in a peaceful, family-oriented community! 1,800 sf w/ 5 ops + 1 hyg. Op. **\$425k**

GC-472 ORLAND: Live & Practice in charming small town community. 1,000 sf w/ 2ops. Seller Retiring. **\$160k**

GG-386 REDDING: Amazing Practice. Lease or Buy Real Estate! 2,860 sf w/ 4 ops. Plumbed for 2 add'l! **ONLY \$295k**

GG-453 CHICO: 5,000 sf 7 ops Perfect for 1 or more dentists! **ONLY \$450k**

GG-454 PARADISE: ~2,550 sf w 9 ops. 40 yrs goodwill! Amazing Opportunity! **\$650k**

GN-201 CHICO: Beautiful practice, major thoroughfare, stellar reputation! 1,400 sf w/ 4 ops & room for another **\$425k**

GN-244 OROVILLE: Must See! Gorgeous, Spacious. 2,500 sf w/5 ops! Collections over \$450k in 2013. **Only \$315k**

GN-258 REDDING: Pristine and attractive! Conveniently located! 2,100 sf w/ 3 ops + 2 add'l. **\$300k**

GN-399 REDDING: Loyal patient base and relaxed workweek schedule. 1,440 sf w/3 ops. **\$150k**

GN-418 REDDING: Goodwill Galore! Established for ~37 years and the seller is retiring! 3,200 sf w/6 ops +2 add'l. **\$495k**

HG-298 REDDING FOOTHILLS: HEALTH FORCES SALE! Includes Cerec! 2,000 sf w/ 5 ops. **Practice \$100k / Real Estate \$250k**

HN-213 ALTURAS: Close to Oregon Border. FFS practice is 2,200 sf w/ 3ops +1 add'l **\$115k**

HN-280 NORTHEASTERN CA: "Only Practice in Town" 900 sf w/ 2 ops **\$110k**

HN-290 PLACERVILLE: Excellent Merger Op! Embrace the lifestyle and build your success story here! FFS. 1,400 sf w/ 4 ops **\$210k**

HG-448 LAKE TAHOE AREA: Call for Details! Upscale Family Practice. 3400sf w 6 ops **\$725k**

SALES

CENTRAL VALLEY

IG-367 MERCED: Newly Remodeled, Paperless. 1,550 sf w/4 ops **REDUCED! \$325k**

IG-470 TRACY: Amazing opportunity. 1300 sf w/ 4 ops **\$280k**

IN-345 MODESTO: Long-standing tradition of quality care. 3016 sf w/ 5ops + 1 add'l. **\$495k**

IN-358 MODESTO: Practice nets over 50%! 1,200 sf, 3 ops+1 add'l. **\$275k**

IN-397 FRESNO/MADERA: "the Perfect Location"! 2,000 sf w/5ops. **NOW ONLY: \$440k**

IN-429 TRACY Facility: "Move-in ready" Hesitate and you might miss out! 2,488 sf, 5 ops **\$245k/RE: \$650k**

IN-474 STOCKTON: Too good to be true? Absolutely not! 1,600 sf w/ 3 ops. **\$95k**

IC-468 SAN JOAQUIN VALLEY: High-End Restorative Practice! Don't miss out! 2,500 sf w/ 6ops. **\$425k**

JC-349 FRESNO Facility: Doctor is retiring and is motivated! Step right in and make yours! **Call for Details!**

SPECIALTY PRACTICES

CG-431 FAIRFIELD Perio: Priced to sell due to military obligation! 1400 sf w/ 3 ops. Plumbed for 2 add'l **\$60k**

I-7861 CENTRAL VALLEY Ortho: 2,000 sf, open bay w/ 8 chairs. Fee-for-Service. **\$370k**

I-9461 CENTRAL VALLEY Ortho: 1,650 sf w/5 chairs/bays & plumbed for 2 add'l **\$180k**

DG-264 SAN JOSE Ortho: \$300-400k in build-outs alone! 1800 sf w/ 5 chairs. **REDUCED! \$195k**

CC-346 SO MARIN CO Perio: 1,142 sf w/ 3 ops. Meticulously maintained! **REDUCED! \$199k**

BN-393 PINOLE Pedo: Streamlined practice, where every child counts themselves lucky to be a patient here! 2,000 sf w/ 5 ops. **\$1.2m**

CG-424 NAPA Prosthodontist: Ready for Experienced, high-end Prosthodontist! One track to collect just under \$1m **\$725k**

CC-405 SOLANO CO. Endo: Endodontic Practice in a vibrant community! 1,250 sf w/ 4 ops. **\$485k**

DC-459 SF PENINSULA (Perio): 50% Partnership Buy In! **Call for Details! \$580k**

ASK THE BROKER



Timothy G. Giroux, DDS is currently the Owner & Broker at **Western Practice Sales** and a member of the nationally recognized dental organization, ADS Transitions.

You may contact **Dr Giroux** at: **wps@succeed.net** or **800.641.4179**

Corporate Dentistry is here to stay!

In full disclosure, I started my dental career in corporate dentistry. It was a great experience for me as I was exposed to more dentistry in those two years than any of my classmates who worked at traditional positions. That was 1983.

Almost everyone in my graduating class dreamed of owning their own practice. I believe that percentage is drastically lower today for various reasons. Why and how can that be?

1. **There is a generational difference.** The new graduates are happy just "working for the man" and getting their paid holidays. They value their time off and do not dream of creating their "empire".
2. **My class was less than 10% female. Now the classes are over 50% female.** Most of the buyers I deal with now are female and are extremely capable. However, there seems to be a higher percentage of female dentists who desire to work part-time for family reasons as compared to their male counterparts.
3. **The debt load of the current graduates is more than \$300,000 compared to only \$30,000 when I graduated.** The new graduate is concerned about taking on additional debt with a practice start-up or a purchase.

When I graduated, the biggest problem for Corporate Dentistry was the revolving door of dentists who would come to work for a few years and then leave to pursue and establish their own practices. For the three reasons above, this is no longer an issue. Many of the corporate players are offering different financial packages and continuing education opportunities. They are finding ways to reduce the staff and doctor turnover that plagued the industry in the past. Corporate Dentistry will continue to grow over the next several years, but I believe that their growth will be limited. I will explain why in next month's article...to be continued...stay tuned...



Jon B. Noble, MBA



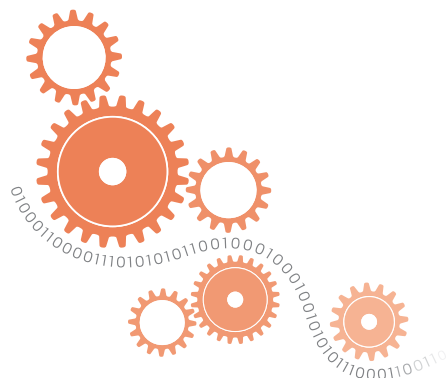
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A look into the latest dental and general technology on the market

More Than Half of American Adults on Facebook

The Pew Research Center has found that 72 percent of online adults are Facebook users. Facebook users are highly engaged, with 70 percent saying they log on daily. The recent study also found that 31 percent of online adults use Pinterest and 28 percent use Instagram. Across the board, 59 percent of Instagram users, 27 percent of Pinterest users and 22 percent of LinkedIn users visit their respective platforms on a daily basis. The Pew study was based on telephone interviews conducted between March 17, 2015, and April 12, 2015. In total, 1,907 adults, 18 years of age or older nationwide, were sampled. Messaging apps are increasingly popular among young adults, according to the study. Specifically, 49 percent of smartphone users aged 18 to 29 utilize a messaging app. In addition, 15 percent of Internet users utilize discussion forums such as reddit, Digg or Slashdot, while 10 percent use Tumblr.

— Blake Ellington, *Tech Trends* editor

Vurb (Verbify Inc., Free)

Searching on the Internet for a place to eat or popular sights to see can be quite an ordeal. People most frequently go to their preferred website or app to start their search. Upon typing in what they want to look for, users often have to sift through results that have links to other websites or apps to find more information. Sharing these results with friends can also be challenging. Vurb seeks to make this experience more tightly integrated by combining all the popular search sites and apps into one place. The app requires users to sign up for an account with their email address or use their Facebook account to sign in. A single search field graces the home page, where users can enter anything they want to look for. Popular quick choices include searches for things such as nearby restaurants or coffee shops. Search results come in the form of cards, which are compiled from different apps or websites such as Yelp, Foursquare, Google Maps, Uber and the home page for the business or location. Users are able to obtain all the information they need from the card, including calling or getting directions to the location, looking at reviews and requesting a ride from Uber. Users can save their cards and organize collections of cards into labeled decks for future easy access. Cards or decks can be shared with other Vurb

friends. Group chats and collaborations on decks with Vurb friends make it easy to plan gatherings or events. Searches are not limited to only restaurants but can include almost anything else, such as places, movies, TV, music, videos and events. With the power of the most popular search apps all in one location, Vurb provides an energizing new way to search, whether it is a place to eat or simply a movie to watch.

— Hubert Chan, *DDS*

DriveSafe Mode (Text Safe Teens, Free)

DriveSafe Mode allows parents to monitor and control their kids' mobile devices to ensure they are not using them while driving. DriveSafe Mode notifies parents if their teen is texting, using Facebook, Twitter, Snapchat or any other app while in motion. The app also allows parents to block phone use based on speeds above 5 miles per hour, notify them of any attempts to disable DriveSafe Mode and allow 911 calls or calls to preset numbers in any circumstance. The app is compatible with both Android and iOS devices. Getting started includes creating an account, downloading the app and syncing devices to the account. According to the app's developers, 10 percent of drivers under the age of 20 involved in fatal crashes were reported to be distracted at the time of the crash, the largest proportion of any age group. In addition, one in four teens responds to a text message once or more every time they drive.

— Blake Ellington, *Tech Trends* editor

Would you like to write about new technology?

Dentists interested in contributing to this section should contact Tech Trends Editor Blake Ellington at blake.ellington@cda.org.

Once there was an empty space. And every day was rather dark and lonely. One day, the space was filled with two new front teeth. Because of that, there was a smile. Because of that, there was a job offer. Because of that, there was a home to live in and groceries to fill it. Until, finally, every day was brighter than the last.



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of the story.

The CDA Foundation provides access to dental care to the Californians who need it most. Put your compassion into action as a Friend of the Foundation. Discover the CDA Cares story and ways to contribute at cdafoundation.org.



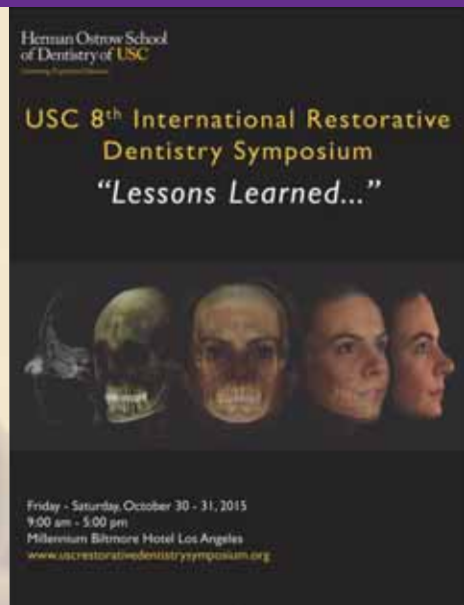
Oct
2015

The USC 8th International Restorative Dentistry Symposium

Friday - Saturday, October 30 - 31, 2015

Speakers: Dr. Alexander-Amir Aalam, Dr. John O. Burgess, Dr. Gerard Chiche, Dr. Lyndon Cooper, Dr. Aldo Leopardi, Dr. Baldwin Marchack, Dr. Neimar Sartori, Dr. Gary S. Solnit, Dr. Richard Young, Dr. Abdi Sameni (Symposium Chair)

Join us at our new venue, the historic and beautiful Millennium Biltmore Hotel in Downtown Los Angeles. Albert Einstein eloquently said: "Truth is what stands the test of experience," and this year's symposium is dedicated to the search of the truth amidst all the hype and marketing that exist in restorative dentistry.



Nov
2015

The USC 14th International Endodontic Symposium

Friday - Saturday, November 20 - 21, 2015

Speakers: Dr. Leif Bakland (USA), Dr. Craig Baumgartner (USA), Dr. Anibal Diogenes (USA), Dr. Kishor Gulabivala (England), Dr. Bernadette Jaeger (USA), Dr. Pierre Machtou (France), Dr. Robert Roda (USA), Dr. Ziv Simon (USA), Dr. Rafael Roges (USA), Dr. Ilan Rotstein (USA - Symposium Chair)

Join us at this traditional annual event featuring speakers from around the world. Also celebrate together with Dr. John Ingle the upcoming 7th edition of Ingle's ENDODONTICS. It will mark the 50th anniversary of the first edition of this classic and authoritative textbook.



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the mouth



UltraFit tray after
just 10 minutes
in the mouth