Part Four
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Lindsey A. Robinson, DDS
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DEPARTMENTS

149  The Editor/The Five Stages of Grief: Coming to Terms With the New Sick Leave Regulations

151  Letter

153  Impressions

191  RM Matters/Taking Protected Health Information Precautions With Third Parties

195  Regulatory Compliance/Required Employee Training

199  Periscope

202  Tech Trends

FEATURES

160  Interprofessional Education and Practice ... Dentistry in an Integrated Health Care System
An introduction to the issue, the fourth in a series.
Lindsey A. Robinson, DDS

163  Can Health Care Reform Connect Mouth and Body?
A commentary on the major transformational change of the U.S. health care system.
Marko Vujicic, PhD

165  Innovations in Oral Health Education and Practice
In order to integrate oral health and primary care, resources must be allocated that promote integration, support an interprofessional approach to oral health and encourage innovation in the education of dental providers.
Marcia K. Brand, PhD, and Rebecca Slifkin, PhD

167  A Population Health Management Approach to Oral Health
The population health management approach offers a promising new vision for addressing oral disease as a chronic illness through a collaborative partnership between primary care teams and dental professionals.
Jeff Hummel, MD, MPH, and Kathryn E. Phillips, MPH

173  Permanente Dental Associates P.C.: Integrated Care Case Study
John J. Snyder, DMD

177  Marshfield Clinic Health System: Integrated Care Case Study
Amit Acharya, BDS, MS, PhD

182  Health Partners of Western Ohio: Integrated Care Case Study
Kimberly Taflinger, BS; Elizabeth West, LISW, DBH; Janis Sunderhaus, RN, MSN-RC; and Irene V. Hilton, DDS, MPH

186  HealthPartners: Integrated Care Case Study
David S. Gesko, DDS
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The Five Stages of Grief: Coming to Terms With the New Sick Leave Regulations

Kerry K. Carney, DDS, CDE

ew regulations. I do not know anyone who loves new regulations, except maybe those individuals whose income is tied to the implementation of those regulations. New regulations demand attention and require action. They must be dealt with. They are a disturbance in the force.

Last year the state of California instituted sick leave regulations that require that every full- or part-time employee receive up to 24 hours of sick leave a year. Seems simple enough. Then why did I and most other dentist employers go through the same five stages of grief in response to this new regulation?

Stage one: denial. These regulations should have no impact on my practice or me (wrong). My full-time employees already have sick leave. It cannot mean it applies to part-time employees (but it does.) Legislation frequently applies only if the employees number more than 50 (but not this time). I am sure that my employee benefits comply with the new state regulations (but they do not).

Then I start reading more about the specifics of this new regulation in the CDA Update. Wait, this regulation covers ALL employees, even those who work only one day a week in my office, even if I have only five employees. This cannot be correct. (But it is.)

Now I am ready for stage two: anger. How can this be happening? Everything was fine. My employee manual was up to date. Now I have to do something. I will have to change my policies, modify my manual and inform my staff. When will I have time to do this? How am I supposed to get any clinical work done? (The forces of nature are conspiring against me.)

Stage three: bargaining. Will I have to change the leave benefits for all my employees? If I just add the three days for my part-time employees, will I be in compliance? I call CDA Practice Support, a member benefit available to all CDA members, and ask for advice on how to comply with the regulation with the least editing to my employee manual. Maybe I can streamline the changes necessary by using language Practice Support suggests. Could this cut down on the computer time necessary?

CDA Practice Support was ready for all my questions. Practice analysts fielded more than 24,000 calls in 2015, including a tremendous volume of calls regarding sick leave. They had plenty of information to help dentist employers adapt and comply with the new regulations. There were monthly articles in the CDA Update, as well as information in the email biweekly newsletter and on cda.org. There were links to the Practice Support resources covering what the dentist employer needed to do to comply with the law.

Practice Support staff was very helpful but I was quickly slipping into the fourth stage of grief: depression. It is just another part of being an employer. Another burden to add to the daily Sisyphian task of making a dental practice work. (Just get over it.)

That led to the final stage: acceptance. New sick leave policy in place. All employees returned their signed notification of sick leave benefits. In my practice, each eligible full- and part-time employee begins each year with three sick days. They may use these days without need of a doctor’s order. It may be used for wellness checks/screenings, preventative care and care for family. Because we chose to front-load the three sick days at the beginning of the year, unused sick leave may not roll over succeeding years.

This is not the only formula that provides sick leave in compliance with the new regulations. If you choose to accrue sick leave, there are details that may work better for your office. It is important to select the formula that fits your practice and your employees’ needs.

We tend to think that the good employee is the one who, despite feeling sick, comes to work and soldiers on. That employee “displays a strong work ethic, job dedication and loyalty. But research generally finds health consequences for present-but-ill employees, with higher medical costs
and greater reductions in productivity than absenteeism would cause.”

Present-but-ill employees “… are contaminating the place or are affecting their own health downstream … [They] make more mistakes and communicate less effectively and produce lower quality work … there’s considerable agreement across studies that presenteeism accounts for more aggregate productivity loss than absenteeism.”

In the fall of 2014, the governor signed the bill requiring businesses to offer paid sick leave to employees by mid-2015. It applied to all businesses, large and small. Today’s dental practice models are varied, encompassing corporate, large and small group practices, DSOs and IPOs as well as traditional solo practices. Due to economies of scale, some dental practices were hardly aware of the energy or efforts required to comply with the new requirements.

However, for some of us, it is a real benefit to have the professional resources of CDA at hand during a trying example of change and adaptation. After experiencing all five emotional stages dealing with the loss of the “way things were,” it is nice to be able to get back to work knowing we have a partner ready to help the next time a new regulation makes us hold our heads in our hands and exclaim like Charlie Brown, “Good grief.”

To learn more about the hundreds of resources available from CDA Practice Support, visit cda.org/practicesupport.

REFERENCES
Silver Diamine Fluoride: It’s About Time!

Congratulations on presenting your very well done and comprehensive article in the January 2016 Journal introducing American dentistry to silver diamine fluoride (SDF). I am proud of the University of California, San Francisco, for incorporating it into its clinical protocol.

I have used SDF since 1970 when I learned of Saforide, the Japanese brand of SDF, while lecturing in Japan and can attest to its efficacy.

I have two clinical comments:

■ Decalcified white areas of surrounding facial caries can also be stained black by the SDF.
■ Saliva in contact with SDF turns milky white, which can stain lips, cheeks and clothing.

Your protocol of minimal use with careful isolation effectively addresses this hazard. Especially significant during “knee-to-knee” or “protective restraint” treatment of resistant infants, toddlers, medically compromised and/or special needs patients.

I agree that a huge negative of SDF is the black staining. As the child ages and becomes somewhat more manageable, yet still too young for definite restoration, subsequent treatment with glass ionomer (GI) can mask the black staining.

“Scoopy poo and white out” was the expression used to mitigate the black staining. After disrupting the tooth surface biofilm (plaque) with a toothbrush, the lesion was minimally debrided with a spoon followed by white flowable light cured GI coving the lesion and surrounding enamel. GI bonds to tooth structure via its covalent calcium chemical bond. With improved behavior, the additional step of etching prior to placement of the resin modified GI adds to the material’s retention.

On a side note, silver nitrate was used as early as 1914 in the Forsyth Dental Clinic to seal and/or arrest questionable occlusal caries on permanent molars. This was way before gloves and the chief complaint of the dentists was the staining of their fingers. The use of silver nitrate was commonly used through 1950s in cavity preparations prior to restorative placement, as a way of ensuring any active caries remaining would be arrested. This, coupled with amalgam staining, accounts for much of the black staining seen on removal of very old amalgam restorations.

I also have experience with SDF treating geriatric patients, often with cognitive and/or physical disabilities. It is a quick and very effective way of arresting root and cervical lesions often seen in these populations. Black staining in these posterior areas was not as much of a concern.

The authors were right; this caries arrestment treatment greatly reduces the need for sedations, oral, IV or general anesthesia. SDF is a strong adjunct to minimally invasive treatment of caries.

Silver diamine fluoride works and should be part of every dentist’s armamentarium.

The authors are to be congratulated. It is a significant addition to dentistry.

PHILIP A. TRASK, DDS, MS
Faculty, University of California, Los Angeles, Pediatric Dentistry

REFERENCE
You are the protector of the smile. You prevent the cavities, ease the pain, straighten the wayward. In doing so, you give your patients a world of possibility filled with happiness and laughter. That gift is why CDA passionately supports and protects your profession. Because the world is a better place when people are smiling, and that’s thanks to you.
Impressions

Kahe

David W. Chambers, EdM, MBA, PhD

As with all Hawaiian words, *kahe* is rich with overlapping meanings. The root idea is “flow,” but the term also means water in a stream or the changing tide. It means almost any mass noun composed of parts whose movement conforms to the contour of the land. Continuous, natural motion and progress are also part of the concept.

*Kahe* is an excellent strategy for ethics. We seek to be where we should be and we flow around the obstacles to getting there.

Too often, the conflict is framed as either “smash the evil” or walk away. Insurance refuses to cover what you know is the optimal care, so condemn it. A colleague starts running ads belittling all other dentists because they have not had the “advanced training” she claims, so complain. Poor children are not receiving the oral health care they need because Denti-Cal reimbursements are “unethically” low, so we stomp our feet.

The face of ethical challenges is constantly changing. If we keep staring at them from the same perspective, their features will only become more intractable. But if we work around them, they begin to look different. This is *kahe*. Morality is a process not an event.

*Kahe* may sound soft, like passive council for quietism and turning one’s back on vigorous ethical action. Not so. Energy spent being upset is not the same as energy spent getting to where we need to be.

It is a nasty trick we play on ourselves when we exaggerate the magnitude of an issue in order to give ourselves a reason for not trying to fix it. And here is the surprising thing: any action taken is likely to change the nature of the problem. Sometimes two or three partial actions are necessary. Remember it is a stream of life, a constantly emerging new set of opportunities where each step one takes changes the prospects. The boulder in the middle of the road may look entirely different as we pass it by on the side.

There is also an internal psychological dimension to *kahe*. The pop psychologist with the impossible name of Mihaly Csikszenmihalyi has amassed convincing evidence that professionals and other masters of their craft experience a transcendent state when they are effortlessly performing at peak levels. He calls it “flow.” Some people have never experienced ethical flow.

The dominant view is too often one of ethics as a struggle to impose our concepts of right and wrong on a world we see as evil. A fitting term for this might be the “ethics of righteousness.” We “fight the good fight,” “work to uphold standards” and “decry corruption, abuse, selfishness, mendacity, deceit, greed and anything else that benefits others by means we would not use.”

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The nub:

1. Do the best possible every day in ethics; the best possible is the most ethical.
2. Flowing toward the best possible may open a clearer understanding of better opportunities.
3. Solve the problem you are given or reframe it; don’t let the problem define you.

David W. Chambers, EdM, MBA, PhD, is professor of dental education at the University of the Pacific, Arthur A. Dugoni School of Dentistry, San Francisco, and editor of the Journal of the American College of Dentists.
Adult Smokers Who Use E-Cigarettes Less Likely to Quit

New analysis by the University of California, San Francisco, has found that e-cigarettes, as currently used, aren’t helping smokers quit. In fact, the recent study, published in The Lancet Respiratory Medicine, found that adult smokers who use e-cigarettes are actually 28 percent less likely to quit.

According to the report, the team of researchers evaluated the association between e-cigarette use and cigarette smoking cessation among adult cigarette smokers, regardless of their motivation for using e-cigarettes. Smokers increasingly use e-cigarettes for many reasons, including attempts to quit combustible cigarettes and to use nicotine where smoking is prohibited, the authors wrote.

To conduct their analysis, the UCSF team reviewed 38 studies assessing the association between e-cigarette use and cigarette cessation among adult smokers. They then combined the results of the 20 studies that had control groups of smokers not using e-cigarettes in a meta-analysis that concluded that the odds of quitting smoking were 28 percent lower in smokers who used e-cigarettes compared to those who did not.

“The irony is that quitting smoking is one of the main reasons both adults and kids use e-cigarettes, but the overall effect is less, not more, quitting,” said co-author Stanton A. Glantz, PhD, UCSF professor of medicine and director of the UCSF Center for Tobacco Control Research and Education, in a news release. “While there is no question that a puff on an e-cigarette is less dangerous than a puff on a conventional cigarette, the most dangerous thing about e-cigarettes is that they keep people smoking conventional cigarettes.”

“As currently being used, e-cigarettes are associated with significantly less quitting among smokers,” concluded first author Sara Kalkhoran, MD, who was a clinical fellow at the UCSF School of Medicine when the research was conducted. “E-cigarettes should not be recommended as effective smoking cessation aids until there is evidence that, as promoted and used, they assist smoking cessation,” Kalkhoran wrote.

For more, see the study in The Lancet Respiratory Medicine, published online Jan. 14, 2016.

Thin-Film Bond Strength and Indentation Hardness for Bonding Agents

Authors of a new study published in the journal Dental Materials aimed to evaluate thin-film bond strength between a bonding agent and human dentin, using a scratch test, and the characteristics and accuracy of measurement. To do this, the team of researchers compared one-step and two-step bonding agents using flat dentin surfaces prepared for extracted human molars. The dentin surfaces were ground and bonding agents were applied and light-cured. The thin-film bond strength test of the specimens was evaluated by the critical load at which the coated bonding agent failed and dentin appeared. The scratch mark sections were then observed under a scanning electron microscope.

“The thin-film bond strength test of the specimens was evaluated by the critical load at which the coated bonding agent failed and dentin appeared,” the authors wrote. “Indentation hardness was evaluated by the variation in depth under an applied load of 10 gf.”

The researchers found that the thin-film bond strength of the two-step bonding agents were “significantly higher” than the one-step bonding agents, with “small standard deviations.” Adhesive failure in the vicinity of the bonding agent/dentin interface was shown repeatedly by the scratch marks and the indentation hardness showed a trend that two-step bonding agents have greater hardness than one-step bonding agents. The authors noted that a “moderately significant correlation” was found between thin-film bond strength and indentation hardness.

For details on their research, see the study in the journal Dental Materials published online Jan. 14, 2016.
Blood Test May Determine Infection From Virus or Bacteria

A research team made up of infectious disease and genomics experts from Duke Health recently took a significant step closer to developing a rapid blood test that could be used in clinics to distinguish whether a respiratory illness is caused by infection from a virus or bacteria.

The researchers are “fine-tuning” the test. They have developed what they call gene signatures, patterns that reflect which of a patient’s genes are turned on or off, thereby indicating a viral or bacterial infection. The signatures were tested in an observational study and were found to be 87 percent accurate in classifying more than 300 patients with flu viruses, rhinovirus, several strep bacteria and other common infections, as well as showing when no infection was present. Results can be derived from a small sample of the patient’s blood and the authors report that the technique is more accurate than other tests that look for the presence of specific microbes.

“A respiratory infection is one of the most common reasons people come to the doctor,” said lead author Ephraim L. Tsalik, MD, PhD, assistant professor of medicine at Duke and emergency medicine provider at the Durham VA Medical Center. “We use a lot of information to make a diagnosis, but there’s not an efficient or highly accurate way to determine whether the infection is bacterial or viral. About three out of four patients end up on antibiotics to treat a bacterial infection despite the fact that the majority have viral infections. There are risks to excess antibiotic use, both to the patient and to public health.”

More precise ways of distinguishing infections could not only reduce unnecessary use of antibiotics, but also lead to more precise treatments of viruses, said senior author Geoffrey S. Ginsburg, MD, PhD, director of Duke’s Center for Applied Genomics and Precision Medicine.

For more, see the study in the journal Science Translational Medicine, vol. 8, issue 322, pp. 322ra11.
Was I supposed to learn about _________ in dental school?

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800.232.7645 or cda.org/practicesupport
Electric Current Administers Anesthetic in the Mouth

Researchers recently revealed a new way to administer anesthetic in the mouth using a tiny electric current instead of a needle, which could help improve dental procedures and bring relief to millions of people who are scared of needles. It would also save money and avoid contamination and infection, according to the researchers.

“Needle-free administration could save costs, improve patient compliance, facilitate application and decrease the risks of intoxication and contamination,” explained Professor Renata Fonseca Vianna Lopez, one of the authors of the study from the University of Sao Paulo in Brazil. “This may facilitate access to more effective and safe dental treatments for thousands of people around the world.”

In the new study, the researchers investigated how to get these topical anesthetics into the body more effectively, and to see if they could replace needles altogether. They found that the process of iontophoresis, applying a tiny electric current, made the anesthetics more effective.

The researchers first prepared the anesthetic hydrogels with a polymer to help it stick to the lining of the mouth. They added two anesthetic drugs, prilocaine hydrochloride (PCL) and lidocaine hydrochloride (LCL), and tested the gel on the mouth lining of a pig by applying a tiny electric current to determine if it made the anesthetics more effective. They found that the anesthesia was fast acting and long lasting, and the electric current made the prilocaine hydrochloride enter the body more effectively. In fact, according to the study, the permeation of the anesthetic through the mouth lining increased twelvefold.

“Over the last few years, our research group has been working on the development of novel drug delivery systems for the treatment of several skin and eye diseases,” said Lopez. “The skin and eyes pose challenges for drug delivery, so we have focused on improving drug delivery in these organs using nanotechnology, iontophoresis and sonophoresis, which is permeation using sound waves.”

For more, see the study published in the Journal of Applied Microbiology, published online ahead of print Dec. 18, 2015.

Food Preservative Kills Cancer Cells, Superbugs

Nisin, a colorless, tasteless, naturally occurring food preservative that grows on dairy products, has been found to kill deadly, antibiotic-resistant bacteria as well as cancer cells.

A new study from the University of Michigan found that feeding rats a “nisin milkshake” killed 70-80 percent of head and neck tumor cells after nine weeks and extended survival, according to Yvonne Kapila, DDS, PhD, a professor at the University of Michigan School of Dentistry. Kapila has studied nisin in cancerous tumors and as an antimicrobial to combat diseases of the mouth and found that after nine weeks of nisin treatment, tumors were comparable to tumors at three weeks. She and her team of researchers have published positive results with less potent nisin, but the highly purified nisin ZP used in this particular study nearly doubled its effectiveness. While nisin is typically added to food at the rate of 0.25 to 37.5 mg/kg, the authors reported 800 mg/kg is needed to kill cancer cells.

Nisin is lethal to bacteria because it binds to a static area of bacteria, which gives nisin the opportunity to work before bacteria changes into an antibiotic-resistant superbug, and because it kills biofilms, which are bacteria that group together to thwart antibiotics.

“To date, nobody had found bacteria from humans or living animals that is resistant to nisin,” Kapila said in a news release. She noted though, that although the results are promising, they are also small and only in mice, so it’s too early to say if nisin will act the same way in humans.

“The application of nisin has advanced beyond its role as a food biopreservative,” Kapila said. “Current findings and other published data support nisin’s potential use to treat antibiotic resistant infections, periodontal disease and cancer.”

For more, see the study in the Journal of Applied Microbiology, published online ahead of print Dec. 18, 2015.
Nano-Shells Deliver Molecules to Regenerate Bone Defects

Scientists at the University of Michigan have developed a polymer sphere that delivers a molecule to bone wounds that tells cells already at the injury site to repair the damage. Using the polymer sphere to introduce the microRNA molecule into cells elevates the job of existing cells to that of injury repair by instructing the cells’ healing and bone-building mechanisms to switch on, said Peter Ma, lead researcher on the project, in a news release. It’s similar to a new supervisor ordering an office cleaning crew to start constructing an addition to the building, he said.

Using existing cells to repair wounds reduces the need to introduce foreign cells — a very difficult therapy because cells have their own personalities, which can result in the host rejecting the foreign cells or tumors. The microRNA is time-released, which allows for therapy that lasts for up to a month or longer, said Ma.

The technology can help grow bone in people with conditions like oral implants, those undergoing bone surgery or joint repair or people with tooth decay.

“The new technology we have been working on opens doors for new therapies using DNA and RNA in regenerative medicine and boosts the possibility of dealing with other challenging human diseases,” Ma said.

It’s typically very difficult for microRNA to breach the fortress of the cell wall, Ma said. The polymer sphere developed by Ma’s lab easily enters the cell and delivers the microRNA.

Bone repair is especially challenging in patients with healing problems, but Ma’s lab was able to heal bone wounds in osteoporotic mice, he said. Millions of patients worldwide suffer from bone loss and associated functional problems, but growing and regenerating high-quality bone for specific applications is still very difficult with current technology. The next step is to study the technology in large animals and evaluate it for use in humans.

See the study in the journal *Nature Communications*, 7, article number:10376, published Jan. 14, 2016.

ADA Says No Compelling Evidence Associating Fluoride, Bone Cancer

The American Dental Association recently told the National Toxicology Program there is no compelling evidence that fluoride is associated with osteosarcoma.

“For the last 70 years, people have raised well-meaning questions about the safety and effectiveness of fluoride, including whether fluoride is somehow associated with cancer,” wrote ADA President Carol Gomez Summerhays, DDS, and ADA Executive Director Kathleen O’Loughlin, DDS, in a letter to National Toxicology Program director Ruth Lunn, DrPH. “However, we are not convinced a sufficient number of new high-quality studies are currently available to produce a high-quality systematic review at this time.”

The National Toxicology Program published a Federal Register notice requesting preliminary information about whether six substances, including fluoride, could possibly pose a cancer risk. Several members of the public petitioned the agency to profile fluoride in future editions of its annual Report on Carcinogens.

The U.S. Public Health Service (USPHS) recently noted the available literature does not support classifying fluoride as a carcinogen, according to guidelines published in the July-August 2015 edition of the journal *Public Health Reports*.

“In the nine months since the USPHS announced there was no compelling evidence that fluoride is associated with osteosarcoma, we are not convinced a sufficient number of new high-quality studies have been published to generate a high-quality systematic review,” wrote Summerhays and O’Loughlin.

The ADA officials suggested the public would benefit from further study about the therapeutic range of water fluoridation up to limits set by the Environmental Protection Agency. Source: ADA News, Jan. 15, 2016.
The commentary by Marko Vujicic, PhD, director of the ADA Health Policy Institute, sets the stage by discussing how health care reform’s goal to improve health systems performance is a main driver toward integration. The three strategies embedded in the Affordable Care Act aim to accomplish this through better health outcomes for individuals and populations, cost containment and improved patient satisfaction with care. Collectively, they are called the “Triple Aim” and their success will largely depend on collaboration among health care providers with dentists as part of the health care team and the compensation methodology moving from procedures performed to payment for outcomes.

There is increasing appreciation across the health care continuum that dental providers are key members of the multidisciplinary health care team and important for the delivery of primary care. Evidence is emerging that dentists can play a major role in medical screening, physician referrals and monitoring of...
chronic diseases like diabetes, hypertension and hypercholesterolemia. Together, these activities have potential to lower costs and improve overall health outcomes.4,5

Medical providers can play a parallel role to promote oral health in the primary care setting by screening for oral diseases, applying fluoride varnish, messaging the importance of good self-care and referral to a dentist when needed. The article by Marcia K. Brand, PhD, and Rebecca Slifkin, PhD, former colleagues at the Health Resources and Services Administration (HRSA), describes the role the federal agency has played in funding activities that promote the development of oral health competencies for medical providers and the integration of oral health in primary care with an emphasis on safety net settings. HRSA continues to apply resources to support workforce development meant to expand the capacity of the health center system to meet the needs of the underserved.

The article by the team from Qualis Health presents an actionable model for population health management that includes oral health as a fundamental component of overall health and treats oral disease as a chronic disease, similar to diabetes. The implementation will require fundamental changes to health care delivery in primary care settings and the patient-centered medical home where clinical care is delivered using a coordinated team approach based upon individual patient needs.

Finally, four examples are presented from across the country, which are variations on the theme of medical-dental integration. An integrated approach provides advantages to the overall health system as well as to patients served in an environment where technology allows for enhanced care coordination by sharing of health information across providers. Additionally, health systems have the ability to conduct quality improvement activities and health care research, incorporate evidence-based guidelines into clinical practice and better manage chronic diseases to improve overall health outcomes.

I would like to thank the many leaders in the field for generously sharing their knowledge and experience as authors for these four Journal issues. Collectively, they provide much food for thought on why and how dentists will need to adapt to take on new roles as health care in the U.S. evolves toward an approach that emphasizes coordinated, patient-centered care delivered in new integrated systems of practice. Organized dentistry has a critical role to play in our profession’s ability to remain relevant as both clinicians and scientists in this new world and to advance the oral health of the public within the larger health care system.

REFERENCES
2. www.ihi.org/engage/initiatives/tripleaim/Pages/default.aspx.

To see how you can get involved, go to cdafoundation.org/cdacares
The U.S. health care system is going through a major transformational change. The U.S. has lagged behind most developed countries in many aspects of health systems performance. Health care spending in the U.S. is far higher than any other developed country with little measurable benefit in terms of health outcomes, access to care, affordability or patient satisfaction. Enter the Affordable Care Act (ACA), which attempts to address many of these issues — not through a small “tweak,” but by fundamentally changing how health care is delivered and paid for. The ACA is a multipronged, complex reform, but I want to highlight three aspects that are important to keep in mind for health care providers, dentists included.

First, health care reform is not going away. More precisely, the major underlying changes the ACA aims to put in place will move forward, in some form or another, regardless of the political environment and, in my view, the presidential election. This is due, in large part, to the fiscal sustainability issue. Economic problems cannot be outrun. It is also increasingly due to the early success the ACA is showing. Through the first quarter of 2015, the ACA had a significant impact on insurance coverage, access to care and self-reported health status. Compared to pre-ACA trends, the uninsured rate dropped by 7.9 percentage points. The proportion who lacked a personal physician dropped by 3.5 percentage points and the proportion who did not have easy access to medicine or were unable to afford care dropped as well. States that have expanded Medicaid eligibility have seen the largest gains.

Second, implementation of the ACA thus far has focused on expanding coverage to the uninsured. This has been happening — to varying degrees across states — via new health insurance marketplaces and expanded Medicaid enrollment. In terms of dental care, up to 8.3 million adults could be gaining some form of dental benefits via Medicaid expansion in states that provide either limited or extensive dental benefits to adults in their Medicaid programs. In California, this could be approximately 2.5 million adults. The dental benefits coverage expansion via health insurance marketplaces is much smaller, even for children who are subject to the individual mandate when it comes to dental benefits. For example, approximately 73,234 children obtained private dental benefits through Covered California in 2015.

The big picture, though, is that while expanding health insurance coverage is a critical step in the implementation of the ACA, it is in the “more of the same” phase: getting more people access to the existing models of care delivery and financing.

Third, the real transformational change and the one with the most significant implications for health care providers will come in the next phase of ACA implementation. This is when the focus

Can Health Care Reform Connect Mouth and Body?

Marko Vujicic, PhD
will shift to designing and implementing new care delivery models and provider payment mechanisms that emphasize value over volume and strongly incentivize collaboration between various types of health care professionals. It is exactly in this area that the dental profession could be seeing some new major opportunities. In fact, some have argued that tomorrow’s health care environment will provide a chance to re-examine the role of dentists within the health care system.

There is general consensus that the largely siloed systems of primary care, specialty care, long-term care, behavioral health and even dental care are among the key drivers of wasteful health care spending and less-than-optimal health outcomes and patient experiences. The ACA envisions that these silos be replaced with coordinated care models such as accountable care organizations (ACOs) where one entity is responsible for managing the health care needs of some population of beneficiaries. On the reimbursement side, the ACA has built-in incentive mechanisms to reward ACOs that improve outcomes and manage costs. In a nutshell, the world of fee-for-service payment that is not linked to outcomes will slowly be replaced by other payment mechanisms that essentially pay for “health.”

Accompanying this transformation in how health care services are delivered are radical changes in how health care providers are trained. Interprofessional education is not just a catchy buzzword. Health sciences campuses are moving toward much more collaboration and exposure to different health professions at the education stage in order to better prepare graduates for tomorrow’s new environment. The vast majority of dental schools are adopting some form of interprofessional education.

So what does all of this mean for dentistry?

There are new opportunities for dental care providers in this changing health care system. There are several segments of the U.S. population that place a high value on dental care but are experiencing access issues. There is emerging evidence that improved oral health can improve broader health outcomes and even reduce health care spending. As medical care providers and ACOs are increasingly rewarded for health outcomes, there could be increased interest in collaborating with dentists. One recent analysis found that if physicians were to increase the rate at which they refer patients who are not using dental care into a dental home, this would result in up to 50 new patients per dentist. A recent analysis found that 15.9 percent of ACOs in the U.S. include dental care within their basket of services, and while this proportion is rising, the collaboration is focused around children and the Medicaid population.

There is also an opportunity to rethink the role of dentists within health care teams. About 9 percent of the U.S. population visits a dentist but not a physician in a given year. Economic analysis shows that if dentists were to systematically screen for conditions such as hypertension, obesity and cholesterol, this would actually save the health care system money.

These opportunities, however, entail very different thinking. For all intents and purposes, the oral cavity is separated from the body when it comes to health care delivery. While some see this as a positive, others see it as a negative aspect of how the dental care system in the U.S. has evolved. The current wave of health care reform provides an opportunity to reconnect mouth and body. The fact that Congress has said adult dental benefits are not “essential” under the ACA makes this reconnection a bit more challenging. Nevertheless, tomorrow’s health care environment provides increased opportunities for collaboration between dentists and other health care providers.
Innovations in Oral Health Education and Practice

Marcia K. Brand, PhD, and Rebecca Slifkin, PhD

The Affordable Care Act is largely known for the expansion of medical health insurance coverage. However, health reform is also driving new models of care delivery, such as patient-centered medical homes, which have the potential to improve oral health care through the integration of oral health and primary care. For this to be realized, resources must be allocated that promote such integration, support an interprofessional approach to oral health and encourage innovation in the education of dental providers.

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is unique in its ability to address both current health services delivery and the education of the health workforce of the future. HRSA is the primary federal agency responsible for “improving access to health care by strengthening the health care workforce, building healthy communities and achieving health equity.” HRSA’s commitment to this mission includes improving oral health, as evidenced by its support for research and analysis to inform oral health policymakers, oral health workforce development, expansion of direct access to oral health care through 1,300 community health centers and promotion of a population health approach.

In 2011, the Institute of Medicine published Advancing Oral Health in America1 and Improving Access to Oral Health Care for Vulnerable and Underserved Populations,2 studies commissioned by HRSA. Both studies called for increased integration of oral health into primary care as a way to improve access and reduce oral health disparities, and both described the need for nondental providers to develop oral health competencies. Subsequently, HRSA supported the development of these competencies and in 2014 published The Integration of Oral Health and Primary Care Practice,3 a set of core oral health competencies for primary care providers, with a focus on the practice of safety net providers.

HRSA has engaged in other activities to drive innovation and an interprofessional approach in the education of dental providers. The Title VII oral health training programs prepare predoctoral dental students, dental hygiene students and dental hygienists to practice in new and emerging models of care. In making its fiscal year 2015 awards, HRSA awarded grants to organizations that focused on enhancing training to support the integration of oral health within the broader health care delivery system or training to support oral health providers practicing in advanced roles, both to improve access to vulnerable, underserved or rural communities. HRSA awarded grants to postdoctoral dental training programs that prepare dentists to practice...
in and lead new and innovative models of oral health care delivery to underserved and vulnerable groups, including programs that focus their activities at the population level, in partnership with primary care and community-based organizations.

Through the health center program, HRSA can promote innovations in care delivery that integrate oral health and primary care and promote the patient-centered medical home approach. Federally qualified health centers (FQHCs) include all organizations receiving grants from HRSA under Section 330 of the Public Health Service Act. Health centers provide access to primary care to individuals, regardless of their ability to pay. In 2014, HRSA-supported health centers provided primary care services to more than 23 million patients and oral health care to more than 4.8 million patients. FQHCs provide preventive and restorative dental services on site or by referral arrangements. Health centers provide care for large numbers of patients and serve as the nation’s safety net, and because many primary care and dental services are collocated, they provide opportunities for models and practices that integrate oral health and primary care.

A detailed description of HRSA’s oral health activities can be found in the latest brief, HRSA Oral Health Across the Agency, which was released in November 2015, at hrsa.gov/publichealth/clinical/oralhealth/oralhealthfactsheet.pdf.

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A Population Health Management Approach to Oral Health

Jeff Hummel, MD, MPH, and Kathryn E. Phillips, MPH

ABSTRACT Clinical outcomes have been shown to be better, and total costs lower, when patients with chronic illness such as diabetes are managed using a population health strategy in a primary care setting that includes structured coordination of care with specialty services. This “population health management approach” offers a promising new vision for addressing oral disease as a chronic illness through a collaborative partnership between primary care teams and dental professionals.

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For centuries, the practice of medicine focused on the diagnosis and treatment of acute medical problems from which patients either died or recovered. As such, most physicians viewed their responsibility as caring for individual patients with specific, and often discrete, medical problems. The relatively recent availability of effective treatment for previously fatal conditions has been accompanied by a dramatic rise in the prevalence of chronic disease. Today, approximately half of all adults in the U.S. (117 million) have one or more chronic conditions from which patients either died or recovered.1 By the end of this decade (2020), 157 million Americans will have at least one chronic condition and 87 million will have two or more chronic conditions.2

The management of chronic disease has become a major component of modern medicine. Unlike acute episodic care, which emphasizes the unique features of each individual patient, chronic disease care focuses on evidence-based protocols to monitor for the early detection of complications and adherence to evidence-based treatment guidelines. The clinical course of chronic illness is heavily dependent on patient behavior, including diet, exercise and self-managing medication use, as well as the ability of patients to correctly interpret symptoms.

Chronic disease care requires a shift in thinking from a focus on individual patients to a lens that includes the entire patient population for which a provider is responsible, commonly termed a panel.3 Although the term “population health” has been used to denote the “health of the population of a geographical area,” increasingly it is defined as the “health of the attributed population” for a given organization or health care provider; and it is used in that sense here because the frame of reference is a primary care team and their patients.3

^ Although the term “population health” has been used to denote the “health of the population of a geographical area,” increasingly it is defined as the “health of the attributed population” for a given organization or health care provider; and it is used in that sense here because the frame of reference is a primary care team and their patients.3
Diabetes is a well-defined chronic condition with a major impact on patients’ quality of life and total health care costs. There are well-established, evidence-based guidelines for chronic diseases such as diabetes, asthma, and ischemic vascular disease. Early recognition and treatment of complications have a measurable impact on quality of life, survival, and cost. Self-management techniques have been shown to play an important role in clinical outcomes. Other conditions for which population management tools are now being applied on a more limited scale include depression, hypertension, and asthma, among others.

An important determinant of a care team’s ability to simultaneously manage multiple chronic illnesses is the availability of an electronic health record (EHR) capable of collecting clinical information as structured data so it can be used for reporting and clinical decision support. Most of the information required to identify patients with a chronic illness can be found within the EHR in demographic tables and the problem list. Successful care teams also use a variety of effective coaching techniques, such as goal setting and motivational interviewing, to support patients in behavior change for exercise, diet or tobacco cessation. In addition to traditional office visits, these interventions may take place in patient-led support groups, through linkages to community organizations or through the use of electronic media for communication between patients and the care team.

Diabetes is the chronic illness with which primary care practices have developed many of the skills of population health management. This is because:

- Diabetes is a well-defined common condition with a major impact on patients’ quality of life and total health care costs.
- There are well-established, evidence-based guidelines for interventions that significantly slow disease progression.
- Early recognition and treatment of complications have a measurable impact on quality of life, survival and cost.
- Self-management techniques have been shown to play an important role in clinical outcomes.

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management goals have data definitions located in provider order entry, laboratory or imaging results and in medication lists.

Providing population health in the primary care setting requires several capacities, examples of which are described here for diabetes, although they are equally important in other chronic conditions.

Data management: Analytic tools are required to maintain an up-to-date list of the patients in the panel with the target clinical condition, to create action reports to identify patients overdue for guideline-based interventions, such as monitoring glycemic control or screening for urine protein and to measure clinical outcomes.

Workflow optimization and decision support: Process measures need to be established and used to monitor goals, such as assuring that no patient with diabetes leaves an office visit without gaps in his or her care being addressed. This requires office workflow optimization. Workflows must also be set up to review action reports on a regular basis and reach out to patients overdue for guideline-based interventions. These changes usually require configuring the EHR to place information, organized to assist complex pattern recognition, at the fingertips of those making decisions.11

Patient education and self-management support: The care team must also develop self-management support interventions that are responsive to the needs and abilities of their patient populations. This often requires expanding the primary care team to include a nurse educator with the skills to address the special needs of high-risk or complex patients.

Care coordination: Primary care teams need processes to know when their patients are seen in emergency departments, and/or admitted and discharged from the hospital, so they can coordinate transitions in care. The optimal use of specialty resources can often be achieved using a strategy of “stepped care,” in which the primary care team uses interventions that cause the least disruption in the patient’s life, are the least intensive necessary to produce a desired result and provide a positive outcome at the lowest overall cost.12 Close communication between primary care and specialty providers facilitates stepping up the intensity of treatment through a shared understanding of how clinical decision making and information exchange is to be managed during a handoff. In settings where the

![Population health is widely accepted as an essential component of a high-performing primary care delivery system.](image)

incentives of both primary care and specialty providers are aligned to achieve the best possible clinical outcomes and highest quality patient experience at the lowest total cost, the role of a specialist increasingly becomes one of collaborating with and supporting care delivered in the primary care setting.

Although primary care settings in which all of the population health management activities described here have been mastered are still rare, population health is widely accepted as an essential component of a high-performing primary care delivery system. Primary care practices across the country are developing these capacities as part of clinical transformation efforts fueled by a growing body of evidence demonstrating the value of this approach with regard to quality and cost.13

Practical Example: Population Health Management Inclusive of Oral Health

Ms. G. is a 69-year-old woman suffering from obesity, diabetes, hypertension and asthma. She has arthritis in her knees that prevents her from walking and she takes medication for depression.

Her medical care is managed largely in a primary care clinic, which monitors her blood sugar and blood pressure every three months and adjusts her medications accordingly. At a yearly visit, special attention is given to testing for kidney disease and loss of sensation in her feet. She is seen by an optometrist for a detailed eye exam. Her asthma severity is briefly assessed at each visit, and every autumn (before influenza season), her care team reviews her lung function, adjusts her medicines if necessary and makes sure she receives her flu shot. Her depression is also assessed briefly at each clinic visit with a Patient Health Questionnaire (PHQ-9) test, and if there is a change in her score, treatment options are discussed.

Ms. G.’s primary care team adopted this proactive monitoring approach for populations with chronic illness two years ago. Since that time, Ms. G.’s use of the emergency department for symptoms related to low blood sugar and poorly controlled asthma, which previously averaged four visits a year, has dropped to zero.

A year ago, her care team began screening for oral disease while assessing her eyes, feet and kidney function. The initial oral health assessment showed moderate to severe periodontal disease and several root caries.

The care team trained her in optimal oral hygiene and helped her identify ways she could reduce the sugar content in her diet. Ms. G.’s primary care provider also referred her to a dentist with a formal request to evaluate and manage her periodontal disease and root caries.
The referral included a copy of Ms. G.’s problem list, medication list and allergy list. The dentist returned a consultation note to the referring provider in which the dentist noted her impression, described the intervention taken and outlined a care plan.

Including Oral Health in Population Health

Despite significant advances in both the prevention and treatment of other infectious and chronic conditions, the U.S. has seen little recent improvement in oral health status, especially among the nation’s most vulnerable populations. Dental caries remains the most common chronic disease of childhood — more common than asthma. The picture is no better for adults. One quarter of adults have untreated dental caries and 20 percent have destructive periodontal disease, often resulting in pain, tooth loss and systemic infection.

The impact of oral disease in childhood includes significant school absence, poor academic performance and increased risk for dental disease in adulthood. Among adults, oral disease is responsible for more than 164 million lost work hours yearly and poor oral health can be a significant barrier to employability. Further, there is a growing body of evidence pointing to the negative impact that chronic periodontal infection has on clinical outcomes for health conditions (including pregnancy, diabetes and cardiovascular disease) and the bidirectional link between poor oral health and poor overall health.

Oral disease is a growing cost concern for dental and medical insurers alike. The total cost of dental care in the U.S. exceeded $111 billion in 2013, with much of the expense for restorative interventions that could have been avoided with adequate prevention and/or early detection and intervention. In 2013, approximately $2.1 billion was spent on emergency department services for oral complaints, consisting of prescribing pain medication and antibiotics that fail to address the underlying problem.

A population health management approach offers a promising new vision for addressing oral disease as a chronic illness. Caries and periodontal disease are common chronic infections with long lead times, during which preventive and restorative interventions can slow, arrest or even reverse progression. Many of the factors placing patients at risk for these infections are strongly influenced by modifiable behaviors, including diet and oral hygiene.

Dental caries remains the most common chronic disease of childhood — more common than asthma. The picture is no better for adults. When caries develops, early recognition and referral for appropriate treatment often makes the difference between a minor restorative procedure and serious disease requiring extensive, invasive intervention.

Viewed in this way, caries and periodontal disease are prime chronic illness candidates for a population health approach. The goals are to:

- Reduce oral health risk factors through education, dietary counseling and oral hygiene training.
- Monitor all individuals in the population for caries and periodontal disease.
- Assure that appropriate stepped therapy takes place for mild, moderate and severe caries and periodontal disease.
- For primary care, this entails a minor expansion of preventive care visit workflows to include oral health risk assessment and screening consisting of a limited set of questions about dry mouth, sugar exposure, oral hygiene and dental pain, as well as a look in the mouth for signs of poor oral hygiene, caries and periodontal disease. Access to treatment would be enhanced by structured consulting relationships with dentists able to provide restorative care and actively manage dental disease. Dental professionals would need to assess and document the severity of both caries and periodontal disease on referred patients at least yearly. Communicating the status of oral disease to primary care providers would allow them to monitor and identify trends in the oral health of their population.

The framework for this approach can be broken into these steps: ask, look, decide, act and document. The ask and look portions of the framework comprise the primary care oral health screening assessment. The decisions resulting from the screening assessment fall into two categories: 1) Is the person at risk for oral disease because of salivary dysfunction, poor oral hygiene or excessive exposure to sugary snacks and drinks? and 2) Is there anything to suggest early or advanced caries or periodontal disease?

These decisions are followed by actions. In the case of risk factors, the actions would be reviewing the medication list to look for an iatrogenic cause of salivary dysfunction, coaching to help the patient begin to practice recommended oral hygiene and counseling to reduce dietary sugar exposure. These activities fit into work that primary care teams already do. If a patient has signs or symptoms of caries or periodontal disease, or has not
seen a dentist in the past year, the action would be giving a referral to dentistry. In all cases, the framework includes documentation of each step as structured data in the electronic health record (EHR) through template modifications, orders and diagnostic codes.

Implementing the oral health delivery framework (FIGURE) will entail adding a few steps to preventive care visits, many of which can be performed by a nonprovider member of the care team, for example, a medical assistant. It will also require minor modifications to the electronic health record to capture information from the oral health screening assessment and make it available for clinical reporting. The goal is to extend preventive oral health care to all patients as part of primary care, facilitate stepped care for those requiring specialized services only a dentist can provide and create an information-sharing framework that allows providers to monitor the oral health of their patient panels.

Applying a population health approach to oral disease can be expected to benefit dentists and other dental professionals. Risk factor reduction and patient education conducted in the primary care setting should reduce the burden of oral disease, making the dental care provider’s job easier. Clear protocols and pathways for structured referrals from primary care to dentistry should increase referrals overall, particularly for patients in greatest need of restorative care. There may be additional advantages for dentists who become part of a primary care referral network. These include a more predictable stream of patients, better information accompanying referrals, potentially improving efficiency in scheduling and evaluation, and a closer working relationship with primary care teams able to provide valuable medical consultation.

Supporting Actions
The oral health delivery framework described in this paper and elsewhere delineates the oral health activities for which a primary care team can take accountability, and offers a clear pathway for applying the principles of chronic illness care to oral disease. For this model to have maximum impact, primary care providers will need formal relationships with dental professionals willing to receive structured referrals for primary care patients of mixed insurance status. To support the tracking of patient risk and oral health status over time, dentists will need to use at least a limited set of diagnostic codes to document the absence, presence and severity of both caries and periodontal disease. Validated dental quality measures will also need to be developed and adopted. Furthermore, for the widespread implementation of a population health approach inclusive of oral health, these and other changes will need to be supported by payers. Dental care reimbursement models should incent dentists to coordinate care with primary care providers and teams and address early-stage dental disease, for example, arresting early caries.

Value-Oriented Reimbursement
The evolution to value-oriented reimbursement provides a new impetus for a population health approach inclusive of oral health, particularly under risk-bearing models such as accountable care organizations (ACOs). In an ACO, medical providers (primary and specialty) would have an incentive to offer services that could improve oral health status and avoid complications from untreated or undertreated oral disease. Dentists would have a financial incentive to support the prevention and early treatment of oral conditions using the least invasive and least expensive options available, and would share in the savings generated by avoiding oral complications. Dental visits could provide an additional opportunity to monitor such parameters as blood pressure, blood sugar and medication adherence; and messages supporting self-management of chronic conditions could be synchronized across all providers.

As population health approaches — and supporting payment models — continue to mature, dentists and medical specialists need to consider how to remain competitive in an environment in which value, rather than volume, is the measure of productivity. While value-oriented reimbursement is rare in dentistry today, such models are becoming increasingly common across a variety of health care settings and disciplines. In 2014, 40 percent of all commercial in-network payments were tied to performance or waste reduction, including 38 percent of
hospital payments, 24 percent of primary care outpatient payments and 10 percent of outpatient specialist payments. An independent review of 2013 Medicare payments found that 42 percent of fee-for-service reimbursements were value oriented, including 13.7 percent paid through shared-risk or shared-saving programs.

Medicare has set the goal of increasing this amount to 50 percent by 2018. It would be unrealistic to assume that similar trends are not in store for dentistry. Moreover, Medicaid has created value-based purchasing tools for state programs and several states are testing alternative payment methodologies with value-oriented elements. Many include efforts to integrate care delivery and payment. This includes the state of Oregon, which has required its community care organizations (equivalent to ACOS) to coordinate physical, behavioral and oral health care for Medicaid and dual-eligible patients.

**Conclusion**

Most of the components of a viable solution to the oral health crisis in the U.S. currently exist, but they are scattered on both sides of the medical-dental divide. The job at hand is to bring them together by forging a meaningful alliance between primary care and dentistry. The time to do this is now. Value-based reimbursement models are driving the integration of orphan disciplines into the primary care setting where care can be organized and delivered more efficiently using the paradigm of patient-centered, comprehensive care. Efforts to integrate behavioral health services in the primary care setting have gained traction with clear evidence that integrated care produces better outcomes at lower costs. Achieving these same gains for oral health will require dismantling the artificial silos that have divided medicine from dentistry for generations, including reliance on procedure codes in dentistry as the sole mechanism to document presence of disease. This reconstruction will require changes in practice, policy and payment, as well as shifts in cultural and educational orientation. The barriers, while significant, are not insurmountable.

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Permanente Dental Associates P.C.: Integrated Care Case Study

John J. Snyder, DMD

Permanente Dental Associates P.C. (PDA), is a professional corporation owned, governed and managed by general dentists and specialists. Since 1974, PDA has contracted exclusively with Kaiser Foundation Health Plan (KFHP) to operate and jointly manage the Kaiser Permanente Dental Care Program, unique to Kaiser’s Northwest Region encompassing Oregon and Washington. The Kaiser Permanente (KP) brand is comprised of a partnership between the KFHP insurance company and independent Permanente physician groups or the Permanente dentist group.

History

Kaiser Permanente Dental (KPD) was founded in 1969 in partnership with the Kaiser Permanente Center for Health Research (CHR) as a federally funded demonstration project designed to provide dental care and service to a targeted low-income, inner-city population. The CHR was founded in 1964 with the mission to serve the community by conducting research aimed at improving health outcomes and the delivery of care. Oral health has been included in the research agenda since 1969. Currently 91 PDA dentists are contributing investigators to the National Dental Practice Based Research Network.

In 1974, the pending loss of federal funding and the success of service to the original membership group prompted a redesign of the program. PDA was formed as an independent corporation to co-manage KPD. Membership opened to KP employee groups and to the greater community the following year. Over the subsequent years, membership has grown consistently. To date, KPD care services are offered exclusively in the Northwest region from Salem, Ore. to Longview, Wash., with 17 dental offices mainly located in or adjacent to Kaiser Permanente’s medical facilities and serving 245,000 dental patients.

Governance, Payment and Risk Sharing

PDA is a for-profit professional corporation that contracts exclusively to provide oral health care services to Kaiser Foundation Health Plan members in KP’s Northwest service area. PDA is governed by a board of directors and led by a dental director elected by shareholder dentists of

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PDA. The relationship between Kaiser Foundation Health Plan of the Northwest and PDA is defined by the original dental services agreement (DSA). Global capitated payments to PDA are negotiated annually in a memorandum of understanding (MOU). These payments are determined by an agreed upon per-member per-month fee for each Kaiser Permanente Dental member’s coverage.

**Philosophy of Care**

PDA’s philosophy of care is evidence based and data driven. The ADA defines evidence-based care as, “An approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient’s oral and medical condition and history, with the dentist’s clinical expertise and the patient’s treatment needs and preferences.” In PDA’s evidence-based dental practice, dentists and specialists provide treatment based on scientific research that demonstrates that the treatment prescribed will provide the best outcome for the patient. The goal is to shift dental services away from treating the effects of disease and toward prevention, monitoring and reversal of disease (FIGURE 1). Because of the original partnership with the CHR and proximity to medical facilities, PDA was an early adopter of the total health philosophy that encompasses health care integration, disease prevention and patient and community empowerment. Strides in strengthening the bonds between oral and medical care affirms PDA’s commitment to being the model of integrated, coordinated care.

**Dentist Compensation**

PDA dentists are the clinical leaders in the Kaiser Permanente Dental offices and make all of the decisions on patient care. A highly competitive salary is offered based on comparable national and local data on group practices and ADA analysis on dentist compensation. The benefit package for full-time dentists is comprehensive and includes full medical and dental coverage through Kaiser Permanente, life insurance and professional liability insurance. PDA provides an employer-paid 401(k) defined benefit contribution plan with a matching opportunity. Dentists may earn a quarterly bonus through adherence to quality metrics developed in concert with the PDA board of directors and the dentists themselves: caries prevention for moderate and high-risk caries patients, sealants (on first and second permanent molars), recall exams by personal dentist, patient access to care, patient satisfaction and integrating care. Dentists who join PDA actively seek out a group practice environment that allows them to develop relationships with other health care professionals who share their philosophy of care. There is high job satisfaction as the average PDA dentist has been working there 11 years (FIGURE 2).

**Measuring Quality**

PDA’s partnership with Kaiser Permanente offers several points of merger in care philosophy. The quality assurance/improvement committee is jointly attended by PDA and KFHP dental administration leaders. Quality and outcomes are monitored in four main categories:

- **KP Experience/Patient Experience.** Patient satisfaction surveys administered by Press Ganey describe how care is perceived by our members. “Top box” scores (“very good” only) are captured to assess patient satisfaction with dentist concern for comfort, time between call and being seen, overall satisfaction, likelihood of recommending their dentist and the dental care teams concern for overall health.

- **Patient Safety.** Patient safety measures track adherence to procedural safeguards in place to eliminate avoidable errors. Personal dentists are the leaders of the care team, but the entire care team is empowered to speak up about near misses (at times referred to also as “close calls” or “good catches”) and to self-report errors. In the rare event an actual error occurs, a root cause analysis ensues and system issues are investigated for their
role in leading to the error. Once system problems are identified, they are corrected and a program-wide communication is shared for everyone’s benefit. Regular and focused chart audits identify the percentage of patients who had a recall visit with their personal dentist, and if the dentist of record was informed of the visit and if a care plan is in place in the event the patient did not see his or her personal dentist. Promoting a nonpunitive culture of safety is key to fostering an environment where safe and effective patient care is the center of daily practice.

Resource stewardship. Resource stewardship is defined by adequate clinical support to provide care to a growing membership. Providers are expected to utilize their full licensure capabilities so that each clinic offers a full scope of practice across all the dentists in their office.

Clinical effectiveness. Evidence-based guidelines are monitored by tracking the completion of planned treatment. Treatment plans for patients in the most need of intervention are tracked (i.e., sealant rates within a targeted age range, endodontic therapy completion and subsequent restoration, periodontal care completion or tobacco cessation). The overarching goal is to help patients achieve optimal oral health.

The Model of Integrated Care
Facilitating improvements in oral health is the primary focus for PDA, but opportunities to assist in overall health improvements were identified with advances in electronic health record technology. PDA is uniquely positioned, leveraging a common informatics system with the medical care team, to play a role in the conversation occurring around wellness and total health. PDA dentists utilize the dental visit as a way to notify members of “care gaps” by accessing members’ medical records to determine whether routine medical screenings or vaccinations are pending (e.g., influenza immunization, mammogram, colorectal screen and annual HbA1c for diabetic patients represent a few of the screening reminders). The patient support tool is a simple, personalized report offering reminders for care prescribed by the patient’s personal physician. When screenings or immunizations are overdue, they are identified as a care gap in the patient support tool. The dental care team encourages patients to schedule preventive care or to visit adjacent or nearby Kaiser medical facilities to close care gaps the same day. The dental visit has proven to be a valuable touch point within the KP system. Dental is routinely the number one or number two “department” in the volume of patients touching the health care system that have a care gap, and trails behind only family medicine and internal medicine in successfully closing care gaps (FIGURE 3).

Through the partnership with the KP Center for Health Research, PDA has also shown that its integrated care model is resulting in higher adherence on multiple Healthcare Effectiveness Data and Information Set (HEDIS) measures. HEDIS is widely used in the U.S. to measure aspects of performance throughout the health care system. The patients with both KP medical/dental coverage had higher adherence on all four HEDIS prevention measures and higher adherence on seven of 10 HEDIS chronic illness measures when compared to KP medical only members.

PDA’s vision of total health that includes the “smile” is the unique value proposition of our integrated care model.

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National health care access and delivery of oral and medical services continue to be operationalized separately across all aspects of the U.S. health care system, resulting in disconnected health care delivery and financial reimbursement models.\(^1\) Further, overt dental access disparities persist, impacting the most vulnerable populations.\(^1,2\) Despite higher prevalence of chronic disease exacerbated by underlying oral disease among the elderly, dental insurance coverage is lowest for this subpopulation.\(^1\) Whereas children below the poverty level on Medicaid/Children’s Health Insurance Program (CHIP) have public dental insurance, low reimbursement rates severely limit providers who offer access for annual oral health services.\(^1\) Compelling evidence has demonstrated links between oral-systemic disease underscorng that siloed medical-dental health care delivery models cannot adequately support holistic health care and the legitimacy of adopting integrated, patient-centric medical-dental integrated care models.

Marshfield Clinic Health System (MCHS), a large regional, integrated health system in rural Wisconsin, has been working toward establishing effective alternative integrated care models (ICMs). MCHS’s mission aspires to provide high-quality patient care, conduct research and educate next-generation health care providers. The success of medical-dental ICMs is contingent on collaboration among entities comprising their well-integrated infrastructure (Table 1), including Marshfield Clinic (MC), MC Research (MCRF) and MC Education Foundations (MCEF), Security Health Plan (SHP), its health maintenance organization (HMO) and Family Health Center (FHC) of Marshfield, its partnering federally qualified health center (FQHC).

**Innovation in the Integrated Medical-Dental Care Delivery**

MC positioned itself as an accountable care organization (ACO) in 2013, embracing the evidence-based “medical care team” and “medical home” models to achieve managed care.

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Selected among the 106 new ACOs for the fee-for-service Medicare population, MCHS had moved toward the Shared Savings Program for more than a decade. MCHS ranked as the top achiever in the CMS Physician Group Practice Demonstration project, showing that quality improvement (QI) and cost reduction could successfully be linked. Recognizing that oral health is fundamental to overall health, achieving high-quality care and reducing overall health care cost, MCHS leaders posed the following key questions: If the future is medical health homes and ACOs, where is oral health in that equation, and why isn’t focus on oral health more prominent when evidence exists to support its inclusion in these new models/systems? In advancing its strategic vision, MCHS has already embarked on several key initiatives to address ICM adoption as discussed below.

**Creating Dental Access**

Notably, 86 percent of MCHS’s service area is federally designated as a medically underserved area (MUA) and/or as a medical, dental or mental health professional shortage area. FHC works to address access to care barriers, eliminate health disparities and advance the goals of Wisconsin and the national Healthy People 2020 plans.

### TABLE 2

**Overview of MCHS Components Central to Its Integrated Medical-Dental Care Model**

<table>
<thead>
<tr>
<th>Component</th>
<th>Established</th>
<th>Overview to Integrated Medical-Dental Health Care Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marshfield Clinic (MC)</td>
<td>1916</td>
<td>One of the largest private, nonprofit, multispecialty (n=86) integrated health care systems in the U.S., with 8,000+ employees including 700+ physicians offering medical health care in 50 regional medical clinics and 40+ dentists and staff in 10 dental clinics across largely rural central and northern Wisconsin, with 86 percent of its service area federally designated and medically underserved. MC annually engages ~1.2 million patient encounters.</td>
</tr>
<tr>
<td>Marshfield Clinic Research Foundation (MCRF)</td>
<td>1959</td>
<td>MCRF consists of a research infrastructure that supports five research centers engaged in research spanning clinical, epidemiological, genetic, bioinformatics (BIRC), agricultural health and safety and the Institute for Oral and Systemic Health (IOSH). Development of the dental electronic health record (EHR) and informatics research including development of clinical decision support (CDS) tools are facilitated through BIRC and IOSH staff and through appropriate collaborations with other MCRF centers or external experts. MCRF holds one of the only three postdoctoral fellowships in oral health informatics research training programs funded by the National Library of Medicine.</td>
</tr>
<tr>
<td>Marshfield Clinic Education Foundation (MCEF)</td>
<td>2002</td>
<td>MCEF annually provides more than 900 students with nearly 1,500 educational experiences. Residency programs include internal medicine, advanced education in general dentistry, pediatrics, medicine and pediatrics, dermatology, surgery, pharmacy palliative care, nonoperative spine and postdoctoral psychology. As an academic campus of the University of Wisconsin, Madison, School of Medicine at Public Health, MCHS provides clinical and educational experiences for students of every level.</td>
</tr>
<tr>
<td>Security Health Plan (SHP)</td>
<td>1986</td>
<td>SHP, MCHS-owned HMO, insures more than 210,000 individual across 32 Wisconsin counties, (excluding dental insurance), including Advocare (Medicare Advantage), n = 33,000 and BadgerCare Plus (Medicaid), n = 57,000. SHP serves a network of affiliated providers (n = 4,400), hospitals (n = 43) and pharmacies (n = 55,000).</td>
</tr>
<tr>
<td>Family Health Center of Marshfield (FHC)</td>
<td>1974</td>
<td>An FQHC, FHC’s principal population subgroups served include Medicaid/BadgerCare Plus; limited-income, Medicare enrollees lacking dental care access; and low-income under- or uninsured populations with limited health care access supported via innovative insurance-like prepaid sliding-fee program. Care access provided by FHC spans medical, behavioral health, dental, pharmaceutical, diagnostic and laboratory testing, hospital inpatient professional services, emergency room and selected outpatient hospital and ambulatory surgical procedures.</td>
</tr>
<tr>
<td>Integrated Enterprise Data Warehouse (IEDW)</td>
<td>2002</td>
<td>Dental services have become available through an expanding dental clinic infrastructure established by FHC, which currently includes 10 dental clinics offering care to more than 50,000 unique patients annually.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The iEDW is a high-quality data repository with all data available at point of care in real time, that has been optimized for data analysis and reporting to support quality assurance, quality improvement and decision support initiatives and research activities at MCHS. Date frames for which data are available include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1962 Electronic storage of patient diagnostic codes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1985 Coded and digital data.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2009 Medical-dental EHR integration.</td>
</tr>
</tbody>
</table>
service provision in Wisconsin became compelling in 2000 when agreements with dental providers who had been treating FHC patients began to unravel, leaving thousands of low-income and uninsured residents without access to care. In partnership with MC, FHC worked with local communities to build 10 dental clinics across its service area to create dental care access. Since the inception of dental services in fall 2002 through 2014, FHC has provided dental care for more than 113,000 patients (FIGURE). Approximately 90 percent of these patients also sought medical care at MCHS. Each community-based FHC dental center employs approximately 35 staff members, including up to five dentists and five dental hygienists. These dental centers have been designed with operatories and conference rooms designated for training medical and dental residents. FHC was formally recognized by the federal government as a Model Rural Program during the Clinton administration.6

Financing Dental Care Coverage
Integration of an FQHC model within MCHS allows FHC to target all individuals living at or below 200 percent of the federal poverty level who experience health care access, geographic and/or cultural/linguistic barriers. FHC’s principal population subgroups are defined in TABLE 1. In 2014, about 63 percent of the people treated in FHC dental centers were on Medicaid and about 13 percent were uninsured. TABLE 2 shows the total number of unique patients by billing type by dental center for the 2014 fiscal year. To rally support for ICMs, FHC has established solid working relationships with social service agencies, public health and other community-based services and systems. With federal and state support, FHC and MC have accomplished expanded access to dental services. FHC maintains contractual arrangements with regional hospitals, physicians and dentists to further expand access for uninsured/underinsured low-income residents through its innovative prepaid sliding-fee program, leveraging access to needed care with minimal or no out-of-pocket service costs. This approach has doubled historic utilization rates and eliminated differences in utilization between low-income uninsured and well-insured populations.

SHP is accredited by the National Committee for Quality Assurance (NCQA). In 2015, SHP was among the nation’s highest-rated health insurance plans by the NCQA for its Medicaid, Medicare and private plans for the 11th consecutive year. SHP was among only three plans to achieve the highest possible rating from the Centers for Medicare and Medicaid Services (CMS) for its Medicare Advantage plans, which feature interventions incorporating care integration. SHP is cognizant of emerging paradigm shifts being pioneered within leading health insurance companies7-10 and is exploring opportunities to integrate medical-dental insurance models.

Integrated Medical-Dental Electronic Health Record (iEHR) Environment
Among the oldest and most comprehensive in the nation, MCHS’s internally developed, proprietary electronic health record (EHR) system was expanded to include a dental record module based on an open-source dental software platform (Open Dental,
Salem, Ore.) in 2009. With medical/dental diagnoses, hospital information, imaging, prescription information and potential for drug interactions accessible in real time, MCHS providers have excellent clinical decision support (CDS) available. The integrated EHR (iEHR) was specifically designed to support shared access to patient health information by medical/dental providers. The dental module provides access to a centralized observation/vitals/findings list, family history, medications, allergies/special conditions, problems list, demographics, tooth and periodontal charting, treatment planning, medical appointing to support care coordination and highly secure remote access support. An integrated e-prescribing and medication inventory system allows dental/medical providers access to real-time changes in medications, irrespective of where they occurred. The medical team has access to all centralized dental data, including dental appointments. The iEHR is certified for the EHR meaningful use (MU) incentive program and MCHS dentists are eligible for EHR adoption incentives while caring for their high volume of Medicaid patients. An integrated enterprise data warehouse stores medical/dental data captured in the iEHR as the sole repository for high-quality, integrated patient care-, research- and operations-related data and is optimized to facilitate data analysis and reporting to support research activities, QI and CDS. Tracking of oral health measures as a component of QI is being initiated, inclusive of routine oral examinations for diabetic patients, well-child visits focused on oral health, annual sealant placement and retention checks, frequencies of dental emergency appointments at dental and urgent care centers and tracking of no-shows.

**Integrated Care Models**

MCHS is exploring evidence-based models of oral health integration into primary care settings to develop interprofessional education, primary care workflow redesign and QI while simultaneously working with dental professionals to capture vital signs, blood pressure, blood glucose levels and conduct medication reconciliation during patient encounters. Feasibility of integrating an oral health screening for diabetic patients by primary care providers (PCPs) was recently piloted at select medical centers, providing an opportunity to understand local barriers/gaps in care delivery. MCHS has launched a systemwide effort to optimize oral health and systemic chronic disease management. Core efforts focus on:

- Outreach/education for targeted diabetic SHP members regarding the importance of oral health and follow-up with their dental providers.
- Implementation of Smiles for Life curriculum for PCPs.
- Integration of oral health screenings and dental referrals by PCPs.
- Chairside screening for blood glucose and appropriate medical referrals by dental providers.
- Health information technology (HIT) adaptation to support changes within the iEHR environment by developing clinical alerts, reminders and referral facilitation.
- Interdisciplinary care coordination through Clinical Referral Manager (CRM), an electronic infrastructure to facilitate interdisciplinary provider referrals. CRM replaces staff-to-staff phone calls with electronic documentation and tracking of patient referral requests throughout the EHR environment, providing transparency for providers.

**Patient Engagement**

Changes to health care strategies include casting patients and health care consumers as key players in influencing health care quality and costs. Critical elements in the chronic illness care model are initiatives, such as the Patient Activation Measure, which endow patients with skills, knowledge and motivation...
to participate as effective care team members. MCHS is focused on engaging patients and community members in their own oral health by emphasizing education and implementing functionalities within patient portals. These include specific oral health reminders, secure messaging with medical/dental providers, reporting oral health findings and test results, requesting e-appointments, on-demand patient education curriculum and after-visit summaries (AVS). For every medical and dental visit, patients receive the AVS electronically via the patient portal and in hard copy. A combined AVS is being explored for patients with same-day medical and dental visits to promote integrated health system reporting.

**Next Steps in ICM Initiatives**

To further advance ICMs, MCHS is focusing on gaining insight into current system challenges that are barriers to health care integration. These include assessing knowledge attitude and practice behavior of medical/dental providers around holistic care delivery throughout MCHS, and developing and testing methodologies for:

- Early recognition of disease, risk assessment, prevention/curtailment of associated comorbid disease development, decline in health and quality of life and collateral health care cost escalation.
- Provision of evidence-based provider and patient education.
- Appropriate electronic CDS tools for practitioners in a variety of settings.
- Assessing QI, health efficacy and cost associated with oral-systemic conditions.
- Assessing quality of care, patient and provider satisfaction and effectiveness of implementation of ICMs at MCHS.

**ACKNOWLEDGMENT**

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Health Partners of Western Ohio: Integrated Care Case Study

Kimberly Taflinger, BS; Elizabeth West, LISW, DBH; Janis Sunderhaus, RN, MSN-RC; and Irene V. Hilton, DDS, MPH

ABSTRACT Health centers are unique health care delivery organizations in which multiple disciplines, such as primary care, dental, behavioral health, pharmacy, podiatry, optometry and alternative medicine, are often located at the same site. Because of this characteristic, many health centers have developed systems of integrated care. This paper describes the characteristics of health centers and highlights the integrated health care delivery system of one early adopter health center, Health Partners of Western Ohio.

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Health Partners of Western Ohio: Integrated Care Case Study

Health centers are community-based and patient-directed organizations that serve populations with limited access to health care. Health centers were first developed and funded in the mid-1960s as part of President Lyndon Johnson’s war on poverty. Section 330 of the Public Health Service Act consolidated and defined the characteristics of health centers. From an initial group of two demonstration sites, the number of health centers has grown to 1,278 organizations across the U.S. and its territories, providing care to 22.8 million individuals in 2014.

One out of 14 individuals in the U.S. receives care at a health center. Most health centers provide multiple health care services beyond medical care. Additional services can include dental, behavioral health, pharmacy, podiatry, optometry, laboratory, imaging, alternative medicine and enabling services that facilitate access to care such as case management and transportation assistance. Health Services Resources Administration (HRSA) data show that in 2014, health centers provided medical services to almost 19.5 million people and dental services to almost 4.8 million people. Seventy-two percent of health centers had at least one dental clinic site. Health centers also provided behavioral health services to 1.25 million individuals and optometry services to more than 400,000 people in 2014.

Ownership/Governance Structure

Health centers are nonprofit private or public entities. Health centers have governing boards that maintain appropriate authority to oversee the operations of the center. There are specific criteria for board composition delineated in the HRSA program expectations. A majority of members of the board (at least 51 percent) must be individuals who are...
served by the health center. Patient board members must be a current registered patient of the health center and must have accessed the health center in the past 24 months to receive at least one or more in-scope service(s) that generated a health center visit. As a group, patient members of the board must reasonably represent the individuals who are served by the health center in terms of race, ethnicity and sex.

The rest of the health center board must be comprised of members with a broad range of skills, expertise and perspectives. Such areas include but are not limited to finance, legal affairs, business, health, managed care, social services, labor relations and government.6

Financing

A health center has systems in place to maximize collections and reimbursement for its costs in providing health services. Health centers generally accept many types of insurance plans including public insurances such as Medicaid/Children’s Health Insurance Program (CHIP), Medicare and local public insurance plans, as well as commercial insurance plans.

The unique feature of health centers is that they are mandated by statute to offer a sliding-scale fee. Health centers are required to have a system in place to determine eligibility for patient discounts adjusted based on the patient’s ability to pay. This system must provide a full discount to individuals and families with annual incomes at or below 100 percent of the federal poverty guidelines (only a nominal fee may be charged) and for those with incomes between 100 percent and 200 percent of poverty, fees must be charged in accordance with a sliding discount policy based on family size and income. Patients of the health center are made aware of the sliding fee schedule with signage and written materials. Each new patient meets with a financial counselor to review charges and the sliding fee schedule.

The 330 grant funding that health centers receive in order to be able to offer a sliding scale is administered through the Bureau of Primary Health Care (BPHC), which is part of the Health Services Resources Administration that is part of the U.S. Department of Health and Human Services. On average, 330 grant funding comprises only about 18 percent of a health center’s total revenues. More than two-thirds of health center revenues are derived from patient revenues including Medicaid, Medicare, private insurance and self-pay fees.5

Another unique aspect of the financial structure of health center grantees is that health centers that apply and are designated as federal qualified health centers (FQHCs) can be reimbursed for Medicare and Medicaid visits differently, on an encounter or capitation basis instead of a fee for service. This is called the prospective payment system or PPS. The process for calculating a health center PPS rate is determined at the state level and can differ by state. Rates differ based on variables such as the scope of health center services and the local cost of living. The PPS base rate is readjusted yearly based on cost of living and if new services are added to the health center’s scope of service.

History of Integrated Care

HRSA has engaged in various initiatives that drive integration of care in health centers including supporting patient-centered medical home recognition for health centers,7 the integration of behavioral health into primary care practice,8 and most recently, the Integration of Oral Health into Primary Care Practice (IOHPCP) initiative launched in February 2014.9

Because most health centers provide multiple health services, they have had opportunity to develop and innovate models of integrated care. Each health center can develop the health care delivery model that best suits the community served, within the general HRSA program expectations for health centers.10 The service delivery infrastructure that one health center, Health Partners of Western Ohio, has developed to provide sustainable, quality, integrated health care for the population it serves is described below (FIGURE).
Health Partners of Western Ohio

Health Partners of Western Ohio (hereafter Health Partners) is a nonprofit, community-based, patient-directed organization that provides comprehensive, integrated primary care services in six communities in northwestern Ohio. Health Partners has grown significantly since its inception in 2003 and now provides services at eight service delivery sites. In 2014, a total of 83,939 primary care visits were provided to 21,392 patients of all ages. Services include medical, dental, behavioral health, substance abuse, clinical and dispensing pharmacy, case management and chiropractic services. Health Partners employs 16.61 full-time equivalent (FTE) primary care providers and 10.51 FTE dental providers, a 0.63 ratio of dental to primary care providers. This is much higher than the national average ratio of 0.27 dental to primary care providers. Health Partners holds patient-centered medical home designations from the National Committee for Quality Assurance and is accredited by the Accreditation Association for Ambulatory Health Care.

As a federally qualified health center, all patients are considered patients of the health center, not of individual providers working at the health center. Each provider is responsible for making clinical decisions related to patient care on a day-to-day basis. However, clinical protocols, formularies and policies are in place to assist with decision making. Health Partners’ providers are actively involved in committees including the quality improvement, risk management, pharmacy and therapeutics, and EHR committees.

Operational Approaches

Health Partners uses an integrated model of care, which puts the patient at the center of its interprofessional health care team. The interprofessional health care team includes physicians, nurse practitioners, dentists, dental hygienists, licensed independent social workers, chemical dependency counselors, pharmacists, chiropractors, women’s health registered nurses, health educators and other allied health professionals. Information flows among members of the care team as well as between the patient and members of the care team. This model of care includes the patient as an active participant in his or her health care.

Integration began at Health Partners in 2006 between medical and behavioral health services. Behavioral health providers work side by side with the medical providers providing patients with screenings (depression, anxiety, substance abuse, etc.) and counseling. Medical and behavioral health services are provided to patients in the same exam room during the same visit, allowing providers to collaborate on each patient’s care and treatment plan. Integration was enhanced to include dental services in 2008 by participating in the Early Childhood Oral Health (ECOH) initiative. Behavioral health providers are consulted when children and adolescents miss dental appointments. The behavioral health providers actively engage the parents/guardians of patients to determine the cause for missed appointments and assist with implementing services and strategies to help parents get their children to dental appointments.

Health Partners offers oral health screenings, caries risk assessments and fluoride varnish applications to children aged 6 months to 17 years during medical visits. Primary care support staff perform risk assessments and place fluoride varnishes. Primary care providers conduct oral health evaluations and assessments. Medical providers, nurses and medical assistants are trained by dental providers to complete oral health assessments, educate on oral health and to apply fluoride varnish. If primary care providers are uncertain about the urgency of a dental condition they may ask a dentist to briefly assess a patient in the medical exam room to determine if immediate dental care is needed. Given the integrated, patient-centered nature of practice at Health Partners, it is routine and even expected that a dental provider would come to a patient in the primary care clinic. Internal dental referrals and appointments are made for patients requiring follow-up dental care or to establish a dental home. More than 90 percent of all children seen for medical visits receive a fluoride varnish application as part of their regular primary care visit.

In 2013, Health Partners expanded oral health assessments, education and fluoride varnish applications during medical visits to adult patients through participation in the National Network for Oral Health Access’ Interprofessional Oral Health Core Clinical Competency pilot. Adult oral health clinical competency education and training were presented by Health Partners dentists during monthly meetings of all provider disciplines and clinical support staff. Organizational job descriptions and competencies have been updated to include the oral health core clinical competencies as part of the onboard training for new primary care staff.

Behavioral health services are available to dental patients on a daily basis,
including screenings for substance abuse and depression. If the dental clinic is the first point of entry for an individual to Health Partners, a depression screening is administered and scored by dental support staff. Patients with a positive screening are seen by a behavioral health provider for brief solution-focused treatment. Referrals are made to other services within the health center as necessary.

Health Partners is also an expanded and routine HIV testing site through the Ohio Department of Health. Free HIV testing is offered to all patients during routine medical and dental visits and patients are tested unless they opt out. Initially, many of the dental staff were very resistant to providing HIV testing. This quickly changed when two dental patients tested positive within the first two months of offering HIV testing. Patients testing positive can be immediately linked to Health Partners’ behavioral health services for counseling and to medical services for treatment.

Technology

Care is facilitated in this model using a comprehensive electronic health record (EHR) system (PrimeSuite, Greenway Medical Technologies) that integrates the health record of all services received. The same electronic health record system is utilized across all sites and services at Health Partners. All providers, clinical support staff, clerical workers, pharmacy staff and billing staff can access the health record of every health center patient. The electronic health record includes medical, dental, behavioral health, chiropractic and pharmacy visits. Reports for quality improvement, risk management, federal and state grant reporting, accreditation and other agencies are easily generated from the integrated EHR system.

Health Partners has modified its EHR clinical templates to operationalize integration at the clinical level. The primary care routine visit template for children and adults has an embedded caries risk assessment. Oral health care management strategies can be included in the after-visit summary given to patients after the primary care visit and dental referrals can be documented and requested through the EHR.

Metrics/Outcomes

It cannot be directly shown at this time that Health Partners’ integrated approach leads to improved clinical outcomes. However, in 2014, the total average cost of a visit at Health Partners was $158.11, which is lower than the average cost for health centers in Ohio, $168.96, and for health centers nationally, $193.01. The same trends are present when looking at the cost of medical and dental visits separately. A much higher proportion, 40.6 percent, of Health Partners’ patients receive dental care, compared to all health centers in Ohio (21.8 percent) and nationally (23.7 percent). A much higher proportion of Health Partners’ patients, 74.3 percent, receive depression screenings, compared to all health centers in Ohio (38.8 percent) and nationally (38.8 percent). Yearly surveys show high levels of patient satisfaction with the care received at Health Partners from both medical and dental patients.

Conclusion

Health centers offer an opportunity to learn about and examine different models of providing integrated care in underserved communities. Health centers have been leaders in embracing integrated care with the aim of improving health in the populations they serve. Health Partners of Western Ohio is an early adopter of this paradigm and has developed systems change that other health care organizations can learn from.

With the advent of the Affordable Care Act (ACA) and the emergence of accountable care organizations (ACOs), there may be opportunities to examine the results of integrated care systems. ACOs will align provider incentives with provision of quality, coordinated care rather than volume of services. In the ACA, ACOs are highlighted as a means to improve quality of care while reducing cost. If health care delivery organizations that offer multiple, co-located, integrated health care services become involved in ACOs and show improved care and cost savings, health centers will be at the forefront of innovation that can benefit the populations they serve.

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HealthPartners: Integrated Care Case Study

David S. Gesko, DDS

Founded in 1957, HealthPartners is the nation’s largest consumer-governed medical and dental collaborative organization. Based in Minnesota, HealthPartners includes a medical group and comprehensive medical plan, a dental group and dental plan. Also part of the HealthPartners family is pharmacy, an expansive hospital system including a Level I trauma center, Health Promotion department and an independent HealthPartners Institute for Education and Research.

Berwick et al. refer to the organizational “integrator” as one that “accepts responsibility for … at least five components: partnership with individuals and families, redesign of primary care, population health management, financial management and macro system integration. The HealthPartners family of companies is well-suited for an approach of this design and has made significant efforts to affect the quality of care delivery by enacting a multifaceted definition and approach.

Pursuing a vision for the highest quality in health care provision, affordability and patient experience, the Triple Aim, HealthPartners Dental Group (HPDG) has established many innovative programs and initiatives in line with quality aims. These initiatives stand to benefit a sizeable population of patients. HPGD consists of 24 HealthPartners dental clinics across the seven-county greater Twin Cities metropolitan area and serves more than 125,000 patients. It is an interdisciplinary, multispecialty group practice of some 75 dentists in the “internal” clinic structure. In the broader community of the upper Midwest, more than 2,500 dentists participate in the HealthPartners preferred provider organization (PPO) network and practice throughout Minnesota, Wisconsin, North Dakota, South Dakota and Iowa.

Integration Is Key

This issue focuses on the role of dentistry in an integrated system and HPGD is most certainly defined by that title. Our value comes from being part of a larger integrated system of care, and it is in this place we clearly find our identity.

Certainly, all of our providers have the autonomy and empowerment to act on their own relative to diagnosis and treatment planning. That said, we are indeed a “group practice” and we see that very differently than a “group of practices.” The former relies on a common philosophy of care and a shared agenda regarding the approach to care in a systematic manner. Layer on the fact that we are also a dental plan and a research institute and you begin to

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see the multidimensional nature of our integration. We believe that the active participation in research, including practical chairside research conducted through the National Dental Practice-Based Research Network, allows us the opportunity to better understand how to define and deliver quality care. Oral health and dental research has contributed uniquely to the HealthPartners research portfolio and the profession’s body of knowledge, but has also positioned HealthPartners’ dentists to be a part of the research process and for HealthPartners Dental Group to facilitate research findings and products into practice where appropriate. As an example, a recent study competitively awarded with federal funds examined a tool to support computer-assisted tobacco intervention in HealthPartners dental encounters. Patient-centered outcomes helped to illustrate the competency of both dentists and dental hygienists in implementing strategies outlined in the U.S. Public Health Service clinical practice guideline for health care providers on treating tobacco use and dependence. Another research project allowed for independent and scientifically rigorous examination of the quality of restorations placed by dentists when compared with dental assistants and hygienists with special training to place select restorations (when certified and under the supervision of a dentist). Again, the examination of competency in HealthPartners expands to include not only an individual dentist, but also the entire dentist-led team of clinicians delivering treatment. It is, after all, this collective expertise that benefits the individual patient and his or her comprehensive treatment needs.

An opportunity for not only HealthPartners practitioners, but also dentists and hygienists across the nation, is participation in practice-based research. The National Dental Practice-Based Research Network (NDPBRN) is a consortium of participating practices and dental organizations committed to advancing the knowledge of dental practice and ways to improve it. The network promises “practical science done about, in and for the benefit of real-world, everyday clinical practice.” The major source of funding for the nation’s network is the National Institute of Dental and Craniofacial Research (NIDCR), part of the U.S. National Institutes of Health (NIH). HealthPartners was involved in early efforts for dental practice-based research and enthusiastically supports and participates in the national network. HPDG’s underlying motivation to support practitioners’ involvement is that in order to continuously evaluate competence and quality of care, it is critical to have high-quality, practice-based research findings and subsequent evidence-based practice guidelines as a baseline for comparison.

In turn, as a dental plan, we learn from our long history of providing care — and measuring all aspects of that care — and strive to integrate those learnings into a creative plan design and innovative ways to finance care. We believe that with this structure, we are well-positioned to deliver Triple Aim results to the members and patients that we serve.

**Oral health and dental research has contributed uniquely to the HealthPartners research portfolio and the profession’s body of knowledge.**

**Integrated Management**

Partnering on a constant basis with our exceptional team of clinicians is our nonclinician leadership. With the goal to allow our clinicians to perform at their very best, our management structure is integrated throughout our system. In this highly complex world of compliance with regulators and payment systems, our management system functions to support the delivery of care and allow maximum efficiency. Although very important, compliance with all the regulations can distract from quality care if the same people are left to address these issues. We have nonclinical as well as clinical leaders who partner to oversee all aspects of our practice, allowing care providers to focus on patients and their needs. This support allows all to deliver their best and divides responsibilities relative to expertise to maximize overall outcomes.

**Defining and Upholding a Care Agenda**

A systems-based (integrated) approach is both afforded and demanded by a large-group, multiclinic system. A privilege and subsequent responsibility of this orientation is to continuously evaluate those systems and to put into place performance metrics that ensure high-quality care.

Evidence-based decision making has been an underpinning value in the development of HealthPartners’ care delivery agenda. Responsiveness to authoritative guidelines is therefore expected of clinicians. HealthPartners makes its guidelines publicly available and continues to update them based on current best evidence. Annual performance evaluations in the dental group adhere to this principle. Clinical metrics pulled from a well-established and comprehensive electronic dental record system allow for administrative reporting that informs
review of a dentist’s compliance with expectations for regular risk assessment and preventive intervention, appropriately consistent treatment planning (with reasonable variation expected according to patients’ individual needs and desires) and record keeping. Subjective evaluation rounds out the performance evaluation with specific attention devoted to other equally critical competencies: patient communication, responsiveness, flexibility, respectful workplace attitudes and behaviors, positive participation in work-related activities and even an opportunity to participate in research.

While individual information remains confidential, aggregate results are reported back to clinic teams, including dental assistants, dental hygienists, dental therapists, clinic supervisors and regional managers. The competence of the entire team is improved with this strategy. As an example, systemwide risk assessment for caries, periodontal disease and oral cancer, which requires the collaborative effort of both dentists and hygienists, is reported regularly. Consistently, 90 percent of HPDG patients in a category of moderate or high risk for caries, periodontal disease and/or oral cancer are provided with appropriate interventions to mitigate this risk. Monitoring of this process of assessment and intervention is conducted in an ongoing fashion and providers are kept abreast of expectations regarding this measure.

HealthPartners Dental Group Dentist-Dentist Mentoring

A new dentist is, in the eyes of our professional organization, someone who has been out of school 10 or fewer years. On the generous side of that equation, a “new dentist” could be fully one-third through his or her career and still warrant the label. Certainly, context also plays a role. Dentists in a new practice setting are faced with the challenges of understanding and engaging their new colleagues and patients, comprehending new systems and refreshing or developing new skills.

Understanding one’s place in the social and clinical milieu of a large group practice is supported at HealthPartners through dentist-dentist mentoring of all newly hired dentists. Part of this mentoring includes an evaluation of and structured conversation about clinical and organizational decision making: guideline-oriented risk assessment and treatment planning, patient communication, record keeping, referral principles, coding, lab use … the list goes on. With human resources a highly valued asset (as it is in any practice), staff relations and expectations as well as clinic-related policies and procedures are also discussed and explained. Often, the conversation about why one needs to know is as critical as what specific knowledge or skillset is expected.

Mentoring is organized by the chief of professional services at each clinic or by the group’s associate dental director, all of whom would agree that they, too, benefit from and renew their own competencies in the process. In that same spirit, dentists more experienced in their careers at HealthPartners can also benefit from mentoring as professional challenges and situations requiring better expertise present themselves. As anyone engaged in such a process can testify, if you wish to learn something better yourself, try teaching it to someone else. Very quickly, one realizes that concepts, principles and details must be clarified in one’s own mind in order to best articulate information to another. The process is therefore a mutually beneficial one for the individuals involved, as well as a systems-improvement opportunity.

Mentoring goes far beyond imparting clinical quality aptitude, it is also a vehicle to call attention to the “experience” dimension of the Triple Aim. Clinicians will generally believe that “quality care” is “technical quality” and flows from their years of training. To be sure, this belief is in part correct. A patient’s view of quality care will expand on the clinician’s perspective and include the manner in which the care is delivered, or in other words, their “experience” throughout the care continuum. In our integrated system, we also believe this perspective is key to overall success. A shadowing program has been developed whereby clinicians are observed and suggestions offered by nonclinician-trained observers on how to deliver an exceptional patient experience at each and every patient contact. Improving this aspect of the care experience allows provider and patient to better connect, improves communication and, ultimately, outcomes of care by way of compliance with preventive treatment recommendations.

Quality Assurance

Quality assurance in HealthPartners dental clinics is a formalized process that involves ongoing random chart audits. All 75 HealthPartners dentists, along with the nearly 80 dental hygienists and now three dental therapists, participate in chart review. A new provider may be asked in his or her first
month of employment to review the charts of a more senior colleague.

The process is a participatory and equitable one, meant not to be punitive, but to establish expectations for all that are fair, reasonable and useful in assuring and improving quality. Findings from chart audits are organized, evaluated and advised on quarterly by a quality assurance committee of approximately eight representative dentists and hygienists. All dentists in the group rotate through the quality assurance committee, allowing not only for the opportunity to provide input, but also full comprehension of the process.

Measuring Quality/Health Outcomes

As mentioned earlier, we have learned to make a habit of measuring everything. For 15 years, we have utilized an electronic record system and for as many years, we have captured diagnostic codes with all diagnoses. With as large a patient base as we have, this results in a vast database allowing vast research opportunities that, as mentioned earlier, have allowed us to become a learning organization and can continuously evaluate and improve quality. Partnering is key in our organization both within and beyond our integrated system. We have been involved with the Dental Quality Alliance since its inception and are firmly committed to leading in the development of nationally agreed upon and certified metrics of measuring quality in dental care.

Currently, we measure compliance with our care guidelines and link that with our dentists’ compensation. An example of this is relative to the early, nonsurgical management of incipient carious lesions. With our diagnostic coding system, we can identify early enamel carious lesions diagnosed. Couple this with our firm belief in risk assessment and our electronic records, and we have the ability to follow and monitor the entire spectrum of care from diagnosis through the management of those diagnoses. We can determine if the evidence to treat an early lesion on a low-risk patient is indeed being done through conservative remineralization or invasive surgical restoration.

In addition, all of our dental group patients receive systematic and reproducible risk assessments on periodontal disease as well as oral cancer. Identifying the risk for the major disease entities we treat allows us to develop customized treatment plans and recommendations based on individual risk and apply evidence-based interventions focused on mitigating that risk. In addition, measuring risk for so long has now allowed us to measure and report the change in risk over time. We see this truly as an outcome measure and a step in our journey to measure and report quality.

Affordability and Total Cost-of-Care Management

I have elaborated on strategies we employ in this model of care delivery/management and financing that impact health outcomes, the pinnacle in my opinion, of the Triple Aim. Affordability is also integral to the Triple Aim and is essential as you simultaneously manage these goals. Recently, we made great strides in our ability to measure the total cost of care (TCOC) within our “internal” care system (HealthPartners Dental Group/HPDG) along with the TCOC of our network provider groups. That analysis has produced an affirmation that not only can our internal dental group deliver great health outcomes, but it can do so at a significantly more affordable rate.

Conclusion

Integration is most definitely the key to our success. Clearly, the delivery of dental care is evolving in this country. Management complexity increases daily relative to regulation, payment and compliance issues. Our model of group practice strives to address these challenges by allowing clinicians to focus on what they do best — deliver care consistent with the Triple Aim. Through integrated management support and research connection, we believe our model of care is well-positioned to address the dynamic market we currently face as well as into the foreseeable future.

REFERENCES

2. www.ihi.org/engage/initiatives/tripleaim/Pages/default.aspx.

THE AUTHOR, David S. Gesko, DDS, can reached at david.s.gesko@healthpartners.com.
NORTHERN CALIFORNIA:
FOLSOM: FACILITY ONLY. 1,200 sq. ft., Pano, Digital, new compressor #CA209
SACRAMENTO: General Practice. 7 Ops, 3,079 sq. ft., 2nd DDS – Separate Practices, 2013 GR $794K. #CA140
LIVEROVER: Practice & Building. Approx. 1,200 sq. ft., 4 ops, Dental Pan & X-ray, Laser, Dentrix. 2014 GR $740K. #CA300
MARIN COUNTY: Mill Valley 1,260 sq. ft., 3 Ops, 1,160 sq. ft. PPO practice, 2 days/week in 2014. #CA267
FACILITY ONLY 1,200 sq. ft. 2014 GR $672K. #CA284
SACRAMENTO: 3 Ops, 1 add’l plumbed. Dentrix software, Digital, Pano. 2014 GR $788K. #CA297
San Francisco: Periodontal Practice & Corte Madera Creek. 2014 GR $315K. #CA305
GR $1.07MM, Adj. Net of $494K. #CA201
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Taking Protected Health Information Precautions With Third Parties

CDA Risk Management Staff

Keep your elbows off the table. Send thank-you notes promptly. Most important, if you don’t have something nice, true and necessary to say, don’t say anything at all. The manners instilled in us as children are still valuable in our professional, grown-up lives. But, while it should not be taken for granted that your practice’s efforts are always nice and true, understanding what is necessary to say or share can be more complex.

Compliance with HIPAA and Protected Health Information (PHI) rules is more than just good manners. It’s a habit essential to protecting your practice, your patients and your integrity as a trusted health care provider.

PHI is not limited to the clinical information contained in a patient’s file. It encompasses any note, document or record related to treatment, including lab and insurance reports, billing and coding information, appointment times, phone messages or anything else that reveals the patient-practitioner relationship. PHI should never be shared with unauthorized parties.

The office team is often on the frontline of information requests from third parties such as debt collection services, credit card companies and marketing firms. So, what protocols should your office have in place?

First, make sure you have business associate agreements on file with every entity that could use your patients’ information for nonclinical matters. HIPAA requires that you have business associate agreements with any entities, individuals or organizations that create, receive, maintain or transmit patient health information to perform nonclinical functions, such as claims processing or information systems management, on behalf of your practice. Second, create a practice policy to disclose only the minimum necessary information, and engage the entire team to follow it.

Unfortunately for one practice, policies and oversight weren’t in place, and the pursuit of a missed appointment fee resulted in a serious PHI issue and costs in excess of $2,000.

It began when the practice charged missed appointment fees of $25 each for

Make sure you have business associate agreements on file with every entity that could use your patients’ information for nonclinical matters.

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You are also not a sales goal or a market segment. You are a dentist. And we are The Dentists Insurance Company, TDIC. It’s been 35 years since a small group of dentists founded our company. And, while times may have changed, our promises remain the same: to only protect dentists, to protect them better than any other insurance company and to be there when they need us. At TDIC, we look forward to delivering on these promises as we innovate and grow.

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two minor patients in the same family. The charges were not paid and were escalated to collections. When the debt collection agency contacted the dental practice, the front office staffer shared more than the financial information needed to collect the debt; she also sent over the minor patients’ health questionnaires. This errant disclosure was revealed in the debt collector’s conversation with the patients’ mother, who was understandably concerned. The case was settled at a cost to the practice of $1,000 per patient — not counting time, fees and stress incurred by the practice.

In this case, there were many opportunities to improve processes and patient trust. Sending $50 in non-procedure charges to collections was likely not prudent. Not having or following, solid protocol on sharing information with third parties was even less so. PHI compliance and penalties or settlements aside, any action that compromises patient trust puts the practice’s reputation at risk.

**How Can Your Practice Mitigate Risk?**

**Step one:** Limit access of patient information to businesses outside of your practice and obtain business associate agreements for third parties, including your claims clearinghouse, practice management software vendor, file-sharing service, management consultant, attorney and/or accountant.

**Step two:** Establish a written office policy that defines PHI and educate staff on how the information will be collected, shared, stored and securely destroyed in accordance with HIPAA. Train current and new staff members on your office’s privacy rules.

**Step three:** Within the office policy, clearly delineate between “covered entities” such as health care providers or health plans, which may need records containing PHI, and “business associates,” which do not.

**Step four:** Perform periodic review of your policies to ensure staff members are following proper protocols.

Not sure if your practice’s protocols are sufficient? The Dentists Insurance Company (TDIC) offers policyholders both a self-serve Risk Management Resource Guide, which covers patient record and documentation issues, and a free, confidential Risk Management Advice Line. After all, sharing information in a nice, true and necessary way is not just HIPAA compliant, it’s also simply polite.

TDIC’s Risk Management Advice Line at 800.733.0634 is staffed with trained analysts who can answer PHI and other questions related to dental practice.
QUESTIONS MOST OFTEN ASKED BY SELLERS:

1. Can I get all cash for the sale of my practice?
2. If I decide to assist the Buyer with financing, how can I be guaranteed payment of the balance of the sales price?
3. Can I sell my practice and continue to work on a part time basis?
4. How can I most successfully transfer my patients to the new dentist?
5. What if I have some reservation about a prospective Buyer of my practice?
6. How can I be certain my Broker will demonstrate absolute discretion in handling the transaction in all aspects, including dealing with personnel and patients?
7. What are the tax and legal ramifications when a dental practice is sold?

QUESTIONS MOST OFTEN ASKED BY BUYERS:

1. Can I afford to buy a dental practice?
2. Can I afford not to buy a dental practice?
3. What are ALL of the benefits of owning a practice?
4. What kinds of assets will help me qualify for financing the purchase of a practice?
5. Is it possible to purchase a practice without a personal cash investment?
6. What kinds of things should a Buyer consider when evaluating a practice?
7. What are the tax consequences for the Buyer when purchasing a practice?

Lee Skarin & Associates have been successfully assisting Sellers and Buyers of Dental Practices for nearly 30 years in providing the answers to these and other questions that have been of concern to Dentists.

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6100 SANTA CLARA Phenomenal platform for Ambitious Successor. Great location with 5-op facility. Current Management is not taking advantage of what is possible even though revenues were approximately $800,000 in 2015. Shall top $1 Million first year with little effort if New Owner extends hours.

6099 FAIRFIELD Long established practice collected $500,000 in 2015. 3-days of Hygiene. 4-ops with digital radiography.

6098 SOUTHERN SONOMA COUNTY On 4-day week, collected $468,000 with Profits of $199,000 in 2015. Averages 15 new patients per month. Great views.

6097 SAN FRANCISCO’S PARKSIDE DISTRICT Part-time practice collected $130,000+ in 2015. 2-ops with separate digital x-ray room. 3rd op available. Great opportunity for someone looking to enter private practice with low start-up costs.

6096 NORTH FRESNO’S SAINT AGNES MEDICAL VILLAGE Long established. 4-days per week of hygiene. Realized collections of $425,000 in 2015. 4-ops with 3 upgraded. Full Price $150,000.

6095 WEST CONTRA COSTA COUNTY’S PINOLE Located off Interstate 80 in Dental Village, alongside Appian Way. 3-days of Hygiene. 2015 tracking $380,000 in collections. Delivery systems in ops were upgraded 11-years ago.

6094 PERIO PRACTICE - SAN FRANCISCO BAY AREA This offering shall appeal to the Periodontist who wants a high-end practice in an extremely desirable area. 2015 Produced $1.25 Million, collected $1.25 Million and realized Available Profits of $690,000 on 3-day week.

6093 CENTRAL MARIN COUNTY Located in hub of Marin County. Consistent $700,000/year performer with strong Profits. 3-days of hygiene. Digital office.


6089 MOUNT SHASTA Small town living renowned for outdoor lifestyle. Perfect escape from Rat Race and corporate intrusion. On 3-day week, 2015 collected $900,000. Very strong Profits.

6087 LAKE TAHOE - NEVADA’S STATETLINE “Fee-for-Service” as practice is “out-of-network” with insurance companies. Collections last year topped $600,000 with Profits of $220,000. 3.5 days of hygiene per week. Nevada State Board of Dental Examiners accepts the Western Boards.

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

6070 VISALIA Strong foundation and well-positioned for successor. Strong Hygiene Department, beautiful facility, well equipped. Digital throughout. Not a Delta Premiere practice. 2015 collected $727,000 on part-time schedule. Extend hours and be busier. Best location!

6069 SANTA CRUZ Long estabished practice. 3-days of Hygiene. 4-ops with digital radiography.

6068 MONTEREY Long-established practice collected $700,000 in 2015. Year with little effort if New Owner extends hours.

6067 MOUNTAIN VIEW Long established. Averages $1 Million in 2015. Shall top $1 Million first year with little effort if New Owner extends hours.

6066 MOUNT SHasta Phenomenal platform for Ambitious Successor. Great location with 5-op facility. Current Management is not taking advantage of what is possible even though revenues were approximately $800,000 in 2015. Shall top $1 Million first year with little effort if New Owner extends hours.

ARROWHEAD Absentee Owner. Grosses $450,000. Hi Identity Lake Drive Building. Practice $350,000. RE $250,000.

DANA POINT Grossed $950,000 in 2013 with ortho. No longer doing ortho. Absentee Owner. Full price $650,000


GRANADA HILLS Location. Seeks Specialists.

HEMET Grosses $850,000 with opportunity to increase substantially. Seller will work back as will associates. Great opportunity for Oral Surgeon or Corporate Group.

INDIO DENTAL OFFICE Next to City Hall. 2 ops in 4,000 sq.ft. hi identity building includes real estate. Asking $650,000. Make Offer.

IRVINE Great location. Busy Lady DDS will Solo Group here with 5 ops or partner into acquiring building with Specialists.


MISSION VIEJO Freeway location. Solo Group. New DDS with patients will be paid 40%. Join Million Dollar state-of-art office. Membership $30,000.

NORCO - CORONA Recently renovated. Gorgeous 8 ops and digital includes cone beam. Grossing near $100,000 per month. Hi identity building approx 3,000 sq.ft. Great for Absentee Buyer or Specialist as Seller will work back on contract. Full Price for practice $1.1 Million and Building $900,000.

REDLANDS Full Price $50,000. Established 27 years. Connect with 3,000 employee Employer. Rent $850/mth year one, $1,250/mth next 5-years and then $1,450/mth 5 more years.

REDLANDS 5 Ops and digital. Rent $2,400. 900 Patients. Absentee Owner. Full Price $250,000

RIVERSIDE Divorce Sale. Full Price $31,000 includes 4 ops in historic professional location. Includes all charts seen prior to 2014. Rent negotiable.


SAN FERNANDO VALLEY Long established. Renovated in 2010 at cost of $350,000+. Gorgeous 2,000 sq.ft. 6 ops. Digital includes Panorex. Full Price $500,000.

TUSTIN BUILDING 2,000 sq.ft. available at best intersection. 60,000 autos pass daily.

TUSTIN DENTAL BUILDING 5 ops in 1,875 sq.ft. office in Tustin Hills. $1.4 Million.

VALENCIA - SANTA CLARITA 60,000-to-70,000 autos pass this intersection daily. 8 ops plumbed, 4 equipped. 2,000 sq.ft. Full Price $220,000.

YUCCA VALLEY Small dental building on .4 acres. Land Value $150,000.

Wall Street Investor seeks small Groups to manage. PPS is banding practices together of Owners retiring in near future. Cash in and work back for growing Group. Enjoy working with team spirit. Register your interest with Tom Fitterer.

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Required Employee Training

CDA Practice Support Staff

Regulations require that employers provide specific training to employees and that employers document that training. This article describes the required training but does not include training required for licensure, license renewal or for unlicensed dental assistants. Required training must be provided during working hours and at no cost to the employee. Some training may be provided off site as long as facility-specific information is provided to the employee. Certified trainers are not required. Cal/OSHA does require the trainer for bloodborne pathogens/exposure control to be “knowledgeable in the subject matter.”

Upon Hire

Employers should provide basic safety training to employees soon after the start of employment. Fire and emergency, hazard communication and injury and illness prevention information are included in the dental office’s written plans that are required by Cal/OSHA. New employees may be instructed verbally on office procedures and should have an opportunity to review the written plans and to ask questions of the trainer. Training topics include but are not limited to:

- Location of exits, fire extinguisher (if one is available), eyewash station, first-aid kit.
- Location of personal protective equipment to use when handling chemicals or working with lasers or UV light.
- Procedure for screening patients for aerosol-transmissible diseases.
- Procedure for reporting employee injuries, potential hazards and unsafe work practices in the dental office.
- Identification of chemical, radiation, infectious and other hazards in the office, plus procedures and equipment utilized to prevent exposure to the hazards.

- Location of safety data sheets and explanation of the hazard communication plan, labeling of containers, pictograms and signal words.
- Training frequency is not mandated, however, regular review of the topics is recommended.


Before Exposure to Blood-Borne Pathogens

Training to prevent exposure to blood-borne pathogens must be provided to an employee upon assignment to duties that potentially expose the employee to blood-borne pathogens. The training must include, at a minimum:

- A copy and explanation of the regulation. A general explanation of the epidemiology and symptoms of blood-borne diseases.
- An explanation of modes of transmission of blood-borne pathogens.

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An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan.

An explanation of appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials (OPIM).

An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, administrative or work practice controls and personal protective equipment.

Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.

An explanation of the basis for selection of personal protective equipment.

Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated and that the vaccine and vaccination will be offered free of charge.

Information on appropriate actions to take and people to contact in an emergency involving blood or OPIM.

An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident, the medical follow-up that will be made available and the procedure for recording the incident on the Sharps Injury Log.

Information on the post-exposure evaluation and follow-
**4085 SANTA ROSA GP & BUILDING**

Practice and real estate are offered for sale in a well-established condominiumized medical/dental complex conveniently located in the heart of Santa Rosa, near Memorial Hospital. This 1,200 sq. ft. single story office is centrally located in a desirable, mixed use commercial and residential corridor known as Doctors Row. The office comes equipped, furnished and ready for you to continue your professional career with established and new patients (approx. 750 active patients).

Tastefully decorated with a homey décor, the practice has 3 fully equipped ops, reception area, private office, staff lounge, etc. Seller is retiring after almost 20 years but will assist for a smooth transition. Average Gross Receipts of $256K+ with adj. net of approx. $110K. Asking price $160K for the practice, and $270K for the real estate.

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**4091 HOLLISTER GP & PEDIATRIC**

Country living at its best ~ small town community feel with affordable housing, in quaint bedroom community to Silicon Valley. General and Pediatric practice located in corner professional building on well-travelled street near Hazel Hawkins Hospital. Fully-equipped 1,600 sq. ft. office with 2 enclosed adult ops and 3 open pedo ops. Great opportunity for a turn key practice with trained staff and approximately 700 active patients. 2014 GR $228K. Seller is relocating out of the area, but will help for a smooth transition. Asking price only $125K.

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**4090 SANTA CLARA DENTAL FACILITY**

Turn-key dental facility in highly visible 30 year old modern, commercial & professional mix building with large daytime business draw & large residential population, in a well-travelled area. Dental practice has been at this location for 30 years. Seller has relocated & is offering 6 fully furnished & functional operatories. Office remodeled in 2010. 2,240 sq. ft. suite includes large waiting room, large front office, central lab, 2 private offices, break room & bathroom. Existing lease has 4 options to renew for 5 years.

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**4089 SUNNYVALE GP**

Extremely desirable location on the corner of two well known major cross streets with easy freeway access. Beautifully appointed practice with 5 plumbed, 4 fully equipped ops. Lots of natural light and a relaxing setting. Seller is offering 12 years of goodwill and approx. 500 active patients. Average gross receipts (last 3 years) $328K+ with an adjusted average net of $122K+. Seller will help for a smooth transition. Asking price $250K.

---

**4084 SAN BRUNO GP**

Located in Tanforan Shopping Center. 2014 Gross Receipts $279K. Convenient, spacious design, 5 op.& private office. Asking $179K.

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**4010 SF GP**

State-of-the-art, modern dental practice in gorgeous facility with recently upgraded reception, business and private office in approx. 3,200 sq. ft. office with 6 fully equipped ops. 2014 Gross Receipts over $1.3 Million. 2015 on schedule for $1.6 Million. Asking $1.1 Million.

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**4086 SILICON VALLEY PERIO**

Well-established Perio practice in prime San Jose location with referral sources nearby. Located in a commercial & residential mix neighborhood with a large daytime business draw. Approx. 1,100 sq. ft. office with 4 fully-equipped ops. Well trained dedicated staff, seller retiring and willing to help for smooth transition. 2014 GR $452K+, 2015 on schedule for $539K+ as of August. Asking $295K.

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**4092 SAN JOSE GP**

Well-established practice offering over 40 years of goodwill. Fabulous location conveniently situated at two major cross streets. Practice average gross receipts $665K+ with average adj. net of $223K+. 7 days of hygiene and 1,300-1,400 active patients, all fee-for-service (Delta Premier Provider only, no other PPOs accepted). This opportunity won’t last long. Asking $550K.

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**4088 NEWARK/FREMONT DENTAL FACILITY**

1,400 sq. ft. facility with 4 fully-equipped operatories setup for right-handed delivery, reception area, private office, consult room, staff lounge, lab area, sterilization area, storage area, 2 bathrooms, common area and plenty of parking. Located in mall close to new housing. Lease expires in 3 years with 5 year option to renew. Landlord willing to negotiate new 10 year lease at a fair market rate. Equipment list available. Asking $80K.

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**4095 SAN MATEO GP**

San Mateo solo-group practice in a split level dental building on a well travelled corner close to downtown and Caltrain station. Shared office space in seller owned suite is approximately 2000 square feet with 6 fully equipped operatories and private offices. Seller is willing to negotiate lease or sell his interest in the building to the practice buyer. 2014 GR $650K Average overhead is 63%. Seller is transitioning into retirement. Asking $471K for the practice.

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up that the employer is required to provide for the employee following an exposure incident.

■ An explanation of the signs and labels and/or color coding required.

■ An opportunity for interactive questions and answers with the person conducting the training session.

This training must be provided annually within one year of the previous training.

References: Exposure Control Plan. A sample plan and a copy of the blood-borne pathogens regulation are on cda.org/practicesupport. The post-exposure protocol is detailed in both the sample plan and on the poster set provided by CDA and component dental societies.

Before Working With Protected Health Information

A health care provider that is a HIPAA-covered entity is required to have written policies and procedures describing how it ensures the privacy and security of patient information. At a minimum, a dental office may satisfy the training requirement by providing each employee and any individual considered part of the practice workforce (such as a regional occupational program student or independent contractor dental specialist) with a copy of the office’s written policies and procedures and collecting documentation that the individuals have reviewed the documents.

The frequency of privacy training is not mandated. However, it is recommended that training occur as often as necessary to ensure that employees understand what they need to do. Retraining is required if an employee is found to have violated a policy or failed to follow procedure.

Waste Management

There are two separate sets of laws for medical waste and for hazardous waste and, in many areas, two different regulatory agencies. Document employee training on the management of both waste streams. All employees in a dental office should receive training to ensure regulated waste is properly disposed. Training can be as simple as having employees review written documents that describe proper waste disposal. A local enforcement agency may require annual training.

The use of amalgam separators is required in some areas of California. Dental offices in these areas are issued wastewater discharge permits, and one of the permit requirements is to train employees on the proper operation of the separator and on proper waste disposal. Training frequency is specified in the permit conditions. Federal regulations to require the use of separators throughout the country are expected to be announced later this year.

Annual Training

Blood-borne pathogens/exposure control training must be provided annually to employees who are potentially exposed to blood-borne pathogens. This training requirement is different and separate from the two-unit infection control course required by the Dental Board of California for license renewal.

Unless required by a local enforcement agency, the other regulations do not have an annual training requirement. It is recommended that other training, such as HIPAA privacy and security training, be provided annually to employees until such time that the employer is confident that employees understand the requirements.

When Something Changes

Whenever the dental office changes a procedure or introduces new equipment or material that may affect workplace safety, appropriate employee training must be provided. Employees also must be trained to comply with new laws and regulations that impact safety in the dental practice, patient health information or waste management. Training should occur soon after the effective date of the new or changed law.

Regulatory Compliance appears monthly and features resources about laws and regulations that impact dental practices. Visit cda.org/practicesupport for more than 600 practice support resources, including practice management, employment practices, dental benefit plans and regulatory compliance.
Early childhood caries


Purpose: The purpose of this paper was to conduct a systematic review of the evidence on five clinical questions: 1) Do self-applied and professionally applied fluorides reduce the incidence of early childhood caries (ECC)? 2) Do anticaries agents (antimicrobials, mineralizing agents) reduce the incidence of ECC? 3) Do sealants reduce the incidence of ECC? 4) Do temporary restorations provide disease management for ECC? 5) Does traditional restorative dentistry provide disease management for ECC?

Methods: A broad search of articles published in English was conducted via PubMed database and Cochrane Library. Different search words pertaining to the topic were used. The time frame of the search was between 2007 and April 2014. The quality of evidence for each publication was rated using the GRADE profiler software version 3.6.1.

Results: Question 1: On self-applied fluorides: The evidence using these agents is insufficient. Professional fluorides, fluoride varnish: Quality of evidence is low, but to some extent, it has been shown to decrease the incidence of ECC. Silver diamine fluoride: No recent publication since 2000, thus the quality of evidence is very low. Question 2: The quality of evidence is graded very low with regard to different anticaries agents reducing the incidence of ECC. Question 3: Due to risk of bias and indirectness, the evidence that sealants are effective in reducing ECC is considered very low. Question 4: There are no studies that evaluated ITR or ART alone as the sole management therapy without additional interventions. Therefore, these restorations do not provide disease management of ECC. Question 5a: Does restorative care reduce the relapse rates or reduce new caries? Mostly observational studies were reviewed but relapse rates were found to be around 22 to 79 percent. There is a high bias rate since these studies are mostly observational. 5b: Does restoration of primary teeth influence the progression of disease and sequelae like pain/abscess? No studies were found to substantiate this. 5c: Does restorative care improve overall quality of life and school performance? All of the studies are parental surveys. There is an overall quality of life improvement for at least one year posttreatment but these results are based on parental surveys so the quality of evidence is graded very low.

Conclusions: There is moderate and limited quality of evidence in support of fluoride toothpaste and varnish for prevention of ECC. Evidence for fluoride tablets/drops is not sufficient. There is insufficient evidence to support the use of silver diamine, adjunct prevention agents such as xylitol, providone-iodine, remineralizing agents and chlorhexidine varnish for prevention of ECC. Evidence is limited to support use of sealants, temporary restorations and traditional restorative dentistry for disease management of ECC.

– Thomas S. Tanbonliong Jr., DDS

MICROBIOLOGY

Dentures and antibiotic-resistant bacteria


Background: Two strains of Staphylococcus aureus, methicillin-resistant (MRSA) and methicillin-susceptible (MSSA), are known as active, virulent pathogens. It has been suggested that the oral cavity is a reservoir for antibiotic-resistant bacteria. However, it is unclear what proportion of outpatient and inpatient denture wearers harbor MSSA or MRSA on their dentures.

Methods: Plaque samples were collected from the denture fit surface of 100 inpatients and 100 outpatients. For quantitative analyses, samples were subcultured in agar under specific conditions and the colony-forming units of each sample was then determined. Gram-staining, antibiotic disc diffusion and phage typing were performed to identify different strains of S. aureus.

Results: Twenty-seven percent of the outpatients and 33 percent of the inpatients harbored either MRSA or MSSA on their dentures. Of the two study groups, significantly more inpatients harbored MRSA than outpatients at 12 percent and 1 percent, respectively.

Conclusions: MSSA and MRSA are found on the dentures of both inpatients and outpatients.

Clinical relevance: The results from this study strongly support the fact that MRSA and MSSA are harbored on dentures. Because localized and systemic infections caused by MRSA may be fatal, an effective MRSA eradication protocol from dentures must be developed to help reduce the chance of MRSA infection.

– Ryan Yu, BS, and Takahiro Chino, DDS, MSD, PhD
**BAY AREA**

**AC-335 SAN FRANCISCO**: Great Practice! 2100 sf, 8ops in desirable location. Call for Details $475k!

**AG-511 SAN FRANCISCO**: Trendy, tony West Portal neighborhood. 800+ sf w 3 ops $315k

**AN-490 SAN FRANCISCO**: This is an opportunity of a lifetime! 1,000 sf w/ 4 ops. $795k

**AN-514 SAN FRANCISCO Facility**: Located in the bustling financial district! 1,007 sf w/4 ops. $150k

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

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**BC-520 HAYWARD**: Located in Downtown, 1500 sf, 4 equipped ops, X-Rays in 3 ops. Call for Details $65k

**BG-407 SAN LEANDRO**: Prof bldg. Great signage! 1,200 sf w/ 3 ops $125k

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**BN-504 RICHMOND**: Established Practice and Real Estate! 1,450 sf w/ 2 ops + 2 add’l $100k / RE $700k

**BN-505 CONCORD Facility**: The essence of comfort and functionality. 800 sf w/ 3ops. **$40k**

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**CN-482 SANTA ROSA**: Rare Opportunity in highly desirable area. 1050 sf w 3 ops. **$150k**

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

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

**DC-522 PLEASANTON**: Location, Location, Location! Do not pass this opportunity! 2ops in 712sf office **$149k**

**DG-499 SARATOGA Facility**: 2 fully equipped ops & room for 1 add’l w 1,178sf. **Move-In Ready NOW ONLY $80k**

**DG-510 SAN JOSE**: Be the envy of all in a much coveted location in a large, upscale, nationally-owned Mall! 1,450 sf w/ 5ops. $1.1 mil.

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

**DN-497 PLEASANTON Facility**: Great Location! 870 sf w/ 3 ops + 1 add’l. Owner Financing w/10% Down! Reduced! **$95k**

**EG-508 FOLSOM Facility**: Rare Opportunity! 4 ops each w 800sf. **Now Only $300k!**

**EN-475 ROSEVILLE Facility**: Move In Ready! 2240 sf w 6 fully equipped ops $225k

**EN-484 FOLSOM Facility**: Fantastic Turn-Key Opportunity! Come live, practice and grow here! 1,934 sf w/ 4 Ops. **Now Only $125k**

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**NORTHERN CALIFORNIA**

**EG-508 FOLSOM Facility**: Rare Opportunity! 4 ops each w 800sf. **Now Only $300k!**

**EN-475 ROSEVILLE Facility**: Move In Ready! 2240 sf w 6 fully equipped ops $225k

**EN-484 FOLSOM Facility**: Fantastic Turn-Key Opportunity! Come live, practice and grow here! 1,934 sf w/ 4 Ops. **Now Only $125k**

**EC-525 SACRAMENTO**: Great Location! Close proximity to shopping areas. 1,500 sf w/ 3 ops 10 -15 new pts/mo $220k

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

**EN-464 ROCKLIN Facility**: Don’t miss out on this remarkable opportunity! 2,150 sf w/ 4 ops. **Now Only: $100k**

**EN-477 DAVIS**: Rare Opportunity! 4 ops each w digital xrays. No corners cut here! $320k

**EG-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**

**EN-484 FOLSOM Facility**: Fantastic Turn-Key Opportunity! Come live, practice and grow here! 1,934 sf w/ 4 Ops. **Now Only $125k**
EN-503 FOLSOM Facility: Take a close look at this opportunity! 2,150 sf w/ 5 ops. Reasonable Offers Considered!
EG-508 FOLSOM Facility: You’ll want to spend your days here! 1,500 sf w/ 4 ops + 1 add’l. $60k
EN-516 CITRUS HEIGHTS: well-established, quality practice is loaded w/30+ years of goodwill. 1,355 sf w/ 3 ops + 2 add’l! $140k
EG-521 FOLSOM Facility: Stands out above the rest! Don’t Miss this one! 1,200 sf w 3 ops. Well Equipped! $99k
EG-523 SACRAMENTO: Spacious practice and Real Estate Available NOW! Call for Details!
EG-526 CARMEL: Seller is relocating and leaving 30 yrs Goodwill behind! 1,350 sf w/ 4 ops & opt to grow! $395k
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-415 FT. BRAGG: Excellent practice in 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/ 2 ops. 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 $275k
GG-453 CHICO: 5,000 sf 7 ops Perfect for 1 or more dentists! $395k
GG-454 PARADISE: ~2,550 sf w 9 ops. 40 yrs goodwill! Amazing Opportunity! $595k
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. Now Only $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. Seller is retiring! 3,200 sf w/6 ops +2 add’l. $495k
GN-507 CHICO: It just doesn’t get any better than this! 3,000 sf w/ 7ops. Practice $535k Real Estate $750k
HC-461 SONORAN: In the beautiful Sierra Foothills, 4ops, 1350sf, free-standing bldg.. Practice $700k & Real Estate Also Available!
HG-298 REDDING FOOTHILLS: HEALTH FORCES SALE! Includes Cerec! 2,000 sf w/ 5 ops. Practice $75k & Real Estate Also Available!
HN-213 ALTURAS: Close to Oregon Border. FFS practice is 2,200 sf w/ 3 ops +1 add’l $115k
HN-280 NO EAST CA: Only Practice in Town 900 sf w/ 2 ops $110k
HN-290 PACERVILLE: Merger Op! FFS. 1,400 sf w/4 ops $210k
HG-448 LAKE TAHOE AREA: Call for Details! Upscale Family Practice. 3400sf w/6 ops $725k

CENTRAL VALLEY
IC-468 SAN JOAQUIN VALLEY: High-End Restorative Practice! Don’t miss out! 2,500 sf w/6 ops. $425k
IN-506 TURLOCK: Practice in the heart of the Central Valley! 2,000 sf w/ 5ops + 1 add’l. $425k
IN-512 MERCED: This immaculate practice is an absolute jewel! 1,200 sf w/4 ops + 1 add’l. $140k
JC-349 FRESNO Facility: Motivated Seller retiring! Step right in and make yours! Call for Details!
JG-491 FRESNO: Well-established. 40-50 new Pt/mo. 1,452 sf w/ 4 fully equipped ops $425k

SPECIALTY PRACTICES
I-9461 CENTRAL VALLEY Ortho: 1,650 sf w/5 chairs/bays & plumbed for 2 add’l $180k
CC-346 SO MARIN CO Perio: 1,142 sf w/ 3 ops. Meticulously maintained. No reasonable offer will be refused! REDUCED! $199k
CG-424 NAPA Prosth: Office has Digital X-ray & NEW 3D Imaging Unit! Ready for Experienced, high-end Prosthodontist! On 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
CG-481 S SONOMA CO Ortho: 2070 sf w/ 7 chairs + 1 exam in Med/Prof Plaza $295k
BG-517 NORTH EAST BAY Endo: 2,750 sf w/ 8 ops! Strong Practice! $500k

“Ask the Broker” can now be found at www.westernpracticesales.com
A look into the latest dental and general technology on the market

**Tech Trends**

**Chromecast Audio** (Google, $35)

Chromecast Audio is an affordable, compact device that offers users an easy way to stream music and other audio content from a smartphone, tablet or laptop to an existing speaker or sound system, essentially making the existing speaker “smart.” The device connects to speakers via Wi-Fi, which provides users with a number of benefits over Bluetooth connection, including the ability to enjoy “interruption-free listening.” With a Wi-Fi connection, the music will keep playing without disruption, for example, from a phone call or text notification (devices that connect via Bluetooth pause the streaming music and play the phone call or notifications over the connected speakers). The Wi-Fi connection also allows Chromecast Audio to stream music from the cloud and can do so with high-resolution audio support, which provides an even higher quality music playback. With Bluetooth connections, audio is re-compressed and can affect the quality of the sound. Another plus for the Chromecast Audio device is the fact that casting music over Wi-Fi won’t drain the user’s battery, while pairing from Bluetooth will. The device can also be controlled from anywhere within the Wi-Fi network and with its “multiroom” feature, allows users to group multiple Chromecast Audio devices together so the same song can be played on various speakers throughout the house. Simply set up a Chromecast Audio device for each of the speakers and create a group, then users can cast to the group the exact same way you would cast to a single Chromecast device. Users just need the device, the Chromecast app and a Wi-Fi connection, then visit chromecast.com/setup. Once set up, users can choose content from any Cast-enabled app, including Spotify, Pandora, Google Play Music, iHeartRadio, TuneIn Radio, Rdio, Deezer, Rhapsody, the audio-book platform Audible and more. As for its security, Venmo offers “bank-grade security” and according to its website, the personal and financial data of its users is encrypted and protected on secure servers to guard against any unauthorized transactions. And for extra security, users also have the ability to add a four-digit passcode number on the app, which it then requires each time the app is opened. While there are currently a number of similar personal cash transfer services, the ease of using the Venmo app, combined with its convenient ability to find and connect with friends using phone contacts or Facebook, makes it a top contender among its competitors. Whether it’s for picking up the lunch tab or splitting a taxicab, app users can set the privacy level for each individual payment, transfer or request, which are displayed in the user’s personal feed when the app opens. Regardless of the privacy level selected, payments are still visible in the user’s feed to keep a record of each transaction. If the user chooses to keep the transaction private, Venmo simply prevents that transaction from being shared anywhere other than the user’s own personal feed. Venmo is essentially a “digital wallet,” providing a social way to pay or request payment from friends and family with balances that can be used like cash and transferred to and from Venmo users immediately. The app is available in the App Store and Google Play, as well as through the website Venmo.com.

— Blake Ellington, tech trends editor

**Venmo** (Venmo, Free)

Venmo is a free, simple service that allows users to make, share or request payments instantly and securely using a linked bank account, debit card or their existing Venmo balance. Users also have the option to make payments using a credit card, but note that doing so comes with a 3 percent fee. Receiving money is free and payments received through Venmo are credited to the user’s Venmo balance immediately. Transferring a user’s Venmo balance to a linked bank account, which can be done in as little as one business day, is also free. And, Venmo can be used to make payments to anyone in the U.S., whether they have Venmo or not, using a phone number or email, the recipient would simply need to create a Venmo account to accept the payment. As for its security, Venmo offers “bank-grade security” and according to its website, the personal and financial data of its users is encrypted and protected on secure servers to guard against any unauthorized transactions. And for extra security, users also have the ability to add a four-digit passcode number on the app, which it then requires each time the app is opened. While there are currently a number of similar personal cash transfer services, the ease of using the Venmo app, combined with its convenient ability to find and connect with friends using phone contacts or Facebook, makes it a top contender among its competitors. Whether it’s for picking up the lunch tab or splitting a taxicab, app users can set the privacy level for each individual payment, transfer or request, which are displayed in the user’s personal feed when the app opens. Regardless of the privacy level selected, payments are still visible in the user’s feed to keep a record of each transaction. If the user chooses to keep the transaction private, Venmo simply prevents that transaction from being shared anywhere other than the user’s own personal feed. Venmo is essentially a “digital wallet,” providing a social way to pay or request payment from friends and family with balances that can be used like cash and transferred to and from Venmo users immediately. The app is available in the App Store and Google Play, as well as through the website Venmo.com.

— Blake Ellington, tech trends editor
What will you discover in Anaheim?

Insight. The latest research, tools and techniques are waiting for you at CDA Presents. Get your synapses firing while earning C.E. credits at cutting-edge programs, inspirational lectures and hands-on workshops.
Before wearing UltraFit tray in the mouth

UltraFit tray after just 10 minutes in the mouth

With no impressions or custom trays necessary, Opalescence Go is ready to use right out of the package! The comfortable, adaptable UltraFit™ pre-filled tray provides molar-to-molar coverage, and quickly adjusts to any smile.