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Retail Dental Clinics: A Viable Model for the Underserved?

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Retail Dental Clinics: A Viable Model for the Underserved?

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by

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About the Foundation

The **California HealthCare Foundation** is an independent philanthropy committed to improving the way health care is delivered and financed in California. By promoting innovations in care and broader access to information, our goal is to ensure that all Californians can get the care they need, when they need it, at a price they can afford. For more information, visit www.chcf.org.

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I. Overview

RETAIL DENTAL CLINICS COULD INCREASE access to services for underserved populations, including the insured and uninsured, people with low to moderate incomes, and those who live in areas where there are few dentists. In this conceptual model, appropriately trained oral health practitioners would deliver a limited scope of services—prevention and/or treatment, depending on the practitioners’ training—in a small, in-store environment.

The concept introduces innovations into service delivery, business and operating practices, and patient care. Compared with traditional dental practices, it is a more streamlined, leaner, lower-cost business model in which walk-in or scheduled patients would receive moderately priced services during expanded hours. These innovations could create a more convenient, affordable, and patient-friendly option for basic dental care.

Preliminary explorations suggest that retail dental clinics would be viable in California and elsewhere if registered dental hygienists could legally provide routine care, as they can in some states, without a dentist present. Additional staff in this model might include new types of mid-level professionals, such as advanced dental hygiene practitioners and dental therapists. The model seems promising in the current economic climate: Clinics’ costs would be in line with revenues, retailers are interested in leasing space to them, and many consumers express interest in the concept. However, it is unclear if retail dental clinics would substantially improve access to services and the oral health of the underserved, since the model could evolve in various directions.

This feasibility report, based on interviews with dentists and other experts (see Appendix A), consumer surveys, and published reports, examines factors that would support or inhibit the emergence of retail dental clinics in California and elsewhere.

II. Background

The Importance of Oral Health

Oral health is essential to overall health and quality of life at any age, as problems can cause infection and signal trouble in other parts of the body.¹ Untreated dental diseases may result in severe pain, infection, difficulty performing daily activities, and, in rare instances, even death. The American Dental Association recommends a dental examination every six months, yet many people — even those with dental insurance — forego this exam.² Use of dental services is especially low in certain populations, such as seniors, pregnant women, and low-income children, increasing their risk of oral health problems. Nationally, nearly one in three people older than 65 has untreated cavities, and one in six between 65 and 74 years old has periodontal (gum) disease.³ Periodontal disease has been associated with increased risk for diabetes, cardiovascular disease, stroke, and bacterial pneumonia, and has been implicated in poor birth outcomes.⁴

Tooth decay is one of the most common chronic childhood diseases in the United States. It is five times more prevalent than asthma and is more frequently found among poor children, particularly those without health or dental insurance or who obtain care through Medicaid.⁵ Decayed teeth affect children's ability to eat, sleep, and learn; may result in health and appearance problems that can greatly reduce a child's odds of succeeding at school; and potentially lead to a lifetime of dental, social, and other health issues. In California, where children's oral health is substantially below national targets, nearly two in three have untreated tooth decay by the time they reach third grade.⁶

Access to Dentists

An important element of access to care is the local supply of dentists. An estimated one in six Americans, or 49 million people, live in areas lacking adequate dental services.⁷ The national dentist-to-population ratio has been falling since 1992 and is projected to sink to about 55 per 100,000 by 2020, leaving one active dentist for more than 1,800 people.⁸ Experts also predict that there will not be enough dental school graduates each year to replace the dentists who retire or simply abandon the profession.⁹

An adequate supply of dentists in a community does not necessarily mean that all of its residents have access to care. Many Californians, especially some racial/ethnic groups and children in low-income families, do not have private dental insurance or money to pay for oral care, and finding a dentist who accepts Medi-Cal can be difficult. A lack of reliable public transportation in rural areas also may limit access to care. In any case, when there are too few dentists in a region, such access is compromised.¹⁰ Although California has a dentist-to-population ratio above the national average, there are 233 dental health professional shortage areas.¹¹

Dental Insurance and Frequency of Care

Dental insurance significantly increases the frequency of dental visits, while also reducing racial and ethnic disparities in care. However, surveys conducted for this report (see Appendix B) found that only 54 percent of Californians with employer-provided or privately purchased dental plans said they had been to a dentist in the previous six months. Five percent had never been and, for 18 percent, more

than a year had elapsed since their last visit. Among the uninsured, only 23.5 percent had seen a dentist in the prior six months.

Children living in the highest-income households in California are more likely than those living in poorer households to have visited the dentist recently. In 2005, 24 percent of the state's 6 million children had never visited a dentist. More than two-thirds had visited a dentist in the previous year, including 53 percent within the previous six months.¹² Although there are no evidence-based clinical practice guidelines regarding the frequency of dental visits, the American Academy of Pediatric Dentistry recommends every six months. Across all racial and ethnic groups, roughly half of California children under age six have not visited the dentist during the previous year.¹³ In 2006, California enacted an oral health screening requirement for school-age children that is likely to increase demand for preventive dental care, but this will put additional pressure on all dentists to care for children enrolled in Medi-Cal and exacerbate the supply-and-demand problem.

As of May 2007, Medi-Cal covered about 8.5 million Californians, nearly all of whom automatically qualified for dental benefits.¹⁴ Nonetheless, many Medi-Cal beneficiaries do not obtain regular dental care and only about half are aware of their dental benefits.¹⁵ Seniors and people with disabilities account for 21 percent of Medi-Cal beneficiaries and 63 percent of the program's medical expenditures, but only 30 percent of its dental care expenditures. Although the number of Medi-Cal beneficiaries receiving dental services has increased, California's expenditures per beneficiary have decreased.¹⁶

Dental Care Barriers in California

There are many reasons Californians do not receive regular dental care. Affordability is among the leading causes. Nearly 60 percent of people who were unable to get the dental care they needed in 2008 said they could not afford it, and another 17 percent cited a lack of insurance.¹⁷ For those who are worried about costs, part of the problem is the lack of pricing transparency in dental offices, which makes consumers wary that any visit will result in a much larger bill than expected. Finally, many dental offices also do not offer appointment times outside of normal business hours, and many people cannot afford to take time away from work to obtain care they may perceive as noncritical.

Many Medicaid beneficiaries have difficulty finding dentists, who largely avoid public programs — primarily because of low reimbursement. California's reimbursement rates are among the lowest in the nation and well below the fees that most dentists charge. Only about 40 percent of private dental practices accept patients in the Medi-Cal dental program.¹⁸ In addition, the program has complex and confusing rules, such as which services require treatment authorization. Review and processing of authorization requests, and the pace of reimbursement, can be slow.

Facing serious budget shortfalls, California dropped optional benefits from its Medicaid program in July 2009, including dental benefits for adults. California's actions mirrored those of many states: As of 2007, 22 had either eliminated adult dental services entirely or reduced them to emergency services only. Another 13 states list their services as "limited." These adults must now find free or low-cost dental services to meet their needs.

Ramifications of Limited Access to Dental Care

One consequence of poor access to dental care is emergency room visits for preventable dental conditions. More than 83,000 emergency room visits in California (about 738,000 nationally) are due to “ambulatory-care sensitive” dental complaints—problems that in many cases could have been avoided through routine preventive or restorative dental care.¹⁹ In some California counties, emergency room visits for preventable dental conditions occur more frequently than visits for preventable asthma and diabetes episodes. The financial ramifications of this are serious: emergency room care can be many more times expensive than the same care provided in a dental office.²⁰

III. Retail Dental Clinics

Retail Health Care as a Model

Retail dental clinics would be similar to retail health care clinics, or “convenient care clinics,” that are located in drug, grocery, and mass merchandising stores. By offering a limited scope of services, retail health care clinics can treat patients without triage in 15 minutes or less, with or without an appointment, during extended hours. There is a list of services with fixed prices for patients who pay in cash, and a list of acceptable insurers and related copayments. The consumer proposition is: immediate, convenient, high-quality care by a health care professional at known, affordable prices.

Nationally, the prevalence and use of retail health care clinics has increased in recent years with some 1,200 clinics in 36 states, visited by nearly 3.4 million Americans annually.²¹ These clinics provide less-costly treatment for common illnesses than physician offices or urgent care centers, with no compromise in quality or the provision of preventive care.²²

Initially, these clinics appealed to both ends of the economic spectrum: affluent consumers unconcerned about out-of-pocket costs but interested in convenience, and uninsured, less well-off consumers in search of lower out-of-pocket costs. People in all socioeconomic groups use the clinics. Other targeted consumers include insured people with high deductibles, uninsured people seeking access to care, and families with children seeking care at a convenient location and time. For customers who pay cash or have high deductibles, the out-of-pocket cost is substantially lower than that for other care options, such as urgent care centers or doctor offices. For insured customers, the copayment is the same regardless of where they seek treatment.

Retail health care clinics do not replace primary care physicians or serve as a medical home. They refer patients to local physicians when necessary care is outside their scope of services and help consumers establish such a home at a medical office. The clinics aim to be a portal into the mainstream medical community. All report that they refer patients to a primary care doctor if a patient does not have one.²³ Sixty-three percent of all retail clinic patients say they have insurance but no relationship with a primary care physician.²⁴

The clinics can provide care at lower cost by offering only a few services, employing a mid-level practitioner (usually a nurse practitioner), and using space, equipment, and inventory that are smaller and less costly than those in traditional physician offices. Marketing costs are also lower because customers are primarily shoppers who notice the clinic or see the in-store signs.

The Retail Dental Clinic Model

Similarly, retail dental clinics would offer a limited set of transparently priced, high-quality services delivered by oral-health professionals in a streamlined, low-cost facility inside a retail outlet, which is convenient for consumers. This business model relies upon smaller and cheaper space, less equipment, simpler inventory, and lower advertising costs. It satisfies core consumer needs by offering affordable prices, walk-in and scheduled visits, and longer hours of operation. If thoughtfully conceived and properly executed, such clinics could also increase access to services by accepting public insurance available under Medicaid and the Children’s Health Insurance Program.

Scope of Services

The types of retail dental services at clinics would depend on practitioners' scope of practice, patients' oral care needs, and a combination of consumer demand and logistical or business constraints. At a minimum, clinics would have to offer essential diagnostic and preventive care, including screenings for schoolchildren, oral exams, x-rays, cleaning, polishing, fluoride varnish, and sealants. A clinic could expand its services to include teeth whitening or straightening if there were sufficient demand. For economic reasons, a mid-level oral health professional, such as a registered dental hygienist, would have to provide all of the services, excluding more complex procedures that only dentists can legally perform, such as extractions, amalgams, and complex restorative work. Mid-level scope of practice in most states does not include diagnosis, exams, and sealants, but this could change as laws evolve or new workforce models emerge.

A core service would be referrals to dentists for further treatment if necessary. Retail dental clinics would not become “dental homes” and replace dentists. Rather, their services would complement those of dentists and help patients establish a dental home, thus ensuring they receive more complex treatment if and when they need it.²⁵ Importantly, all providers—clinics, hygienists, and dentists—must educate patients about, and motivate them to maintain, oral health.

Findings from two of three consumer surveys for this report suggest that retail dental clinics could complement dental homes. Of respondents who expressed interest in using such clinics, the vast majority agreed or strongly agreed with these statements:

- “I like that the results of the exam and x-rays can be sent to my dentist” (87 percent);

- “The option to send a copy of my visit record [to a dental home] is important to me” (84 percent); and
- “The option to get a referral to a dentist I can afford is important to me” (83 percent).

Depending on clinicians' scope of practice, services they might provide include adult and/or pediatric exams, x-ray images, adult and/or pediatric cleaning, fluoride application, sealants (mostly pediatric), and referrals to dentists for further treatment or to establish a dental home.^{26,27}

Exams

Dental exams range from checking for cavities to more complex activities — examining teeth, looking for periodontal disease and oral cancer, taking x-ray images, and completing the patient's chart. Variations in the complexity and comprehensiveness of exams make it difficult to establish price transparency, which would be necessary at retail dental clinics, and the uncertain length of appointments — 15 minutes, 30 minutes, or longer — makes it difficult to schedule patients. A retail clinic could avoid these problems by predetermining the nature of a visit based on the amount of time that has elapsed since the last exam and/or cleaning. For example, a clinic could deem a visit complex if more than six months have passed since the last visit, and schedule and price the subsequent visit accordingly.

Cleaning

Teeth cleaning can also be straightforward or complex and more time-consuming. The three levels of cleaning are basic (hand scaling), medium (ultrasonic and hand scaling), and high (ultrasonic scaling, hand scaling, and polish). The level of complexity is related to the amount and type of work performed and the patient's overall oral health.

Sealants

If appropriate, sealants are applied after an exam and cleaning. A retail dental clinic would refer patients to dentists if, for example, a condition required more complex treatment than application of a sealant.

X-Ray Images

X-ray exams, an essential diagnostic tool, would be a key service at retail dental clinics. Digital x-ray images, which are captured by sensors rather than photographic film, can be delivered to a patient's dental home easily and cost-effectively, assuming the dentist has the necessary electronic communication technology. Given the small footprint of a typical retail clinic (200 to 500 square feet), it would not be feasible or cost-effective to install traditional x-ray technology. (Such technology necessitates lead-lined walls, and retailers would likely reject it due to safety concerns.) Many states, including California, require dentists to submit x-ray images with reimbursement claims.²⁸

Healthy Teeth Packages

Clinics could offer service “packages” — such as a complex exam, full set of x-ray images and cleaning, or teeth cleaning and fluoride application, all on one visit and for a set price — as well as multiple services on multiple visits.

Cosmetic Services

Additionally, clinics could offer basic cosmetic services, such as teeth whitening and straightening, to augment revenues.²⁹ This could be an easy way for consumers to try a clinic. Cosmetic services would not be a focus of clinics that seek to improve access to preventive oral health care for underserved populations.

Integrating with a Dental Home

Many elements of the retail dental clinic model are dictated by space constraints and the need to integrate with patients' dental homes. Electronic dental records and digital x-ray technology would better enable clinics to streamline transfers of patient information to dental homes. Digital intraoral cameras can greatly facilitate such transfers.³⁰ They yield high-quality images that can be sent to a dentist's office along with x-ray images and the hygienist's findings, and would reduce the time it takes a dentist to examine a patient who has already been seen at a retail clinic.³¹

Personal Dental Records

Consumers could populate and manage their own personalized dental records if retail clinics were to share the digital information with them, perhaps for use in publicly available personal health record software available from Google or Microsoft. This would help patients stay abreast of their routine and preventive dental care.

IV. Demand for Retail Dental Clinics

Diagnostic and Preventive Care Guidelines

The recommended standard for diagnostic dental care is a semi-annual oral exam or a comprehensive oral exam and a complete set of x-ray images. Preventive care for adults is prophylaxis (cleaning) and, for children ages 6 to 17, prophylaxis and fluoride application. Preventive care for children may also include excavation of decay by hand, without a drill (sometimes referred to as a temporary filling or “no drill fill”), and application of a sealant.

Of the ten most common procedures delivered under California’s Medicaid dental program, the top eight are diagnostic or preventive, accounting for 6.8 million procedures at a cost of \$131 million, or 21 percent of expenditures.³²

The Potential Market

Diagnosis and prevention are the highest-volume procedures in the dental care industry. If every one of California’s 33 million residents were to receive an exam and cleaning semi-annually as recommended, 132 million procedures would be performed each year. Although this estimate overstates the true market, given the economic and other barriers to regular dental care, even a fraction would likely constitute a substantial portion of retail dental clinics’ business. About 10 percent to 20 percent of semi-annual visits would require or result in x-ray exams,³³ adding between 6.6 million and 13 million procedures to the potential total.

On the other hand, because 27 percent of Californians reported in 2007 that they had not visited a dentist at all and 19 percent had only one visit in the previous year, the actual market

for diagnostic and preventive care is probably substantially smaller than the above estimates suggest.³⁴ Importantly, children tend to visit the dentist more frequently than adults do and therefore would likely be a significant part of the market for retail dental clinics.³⁵

Consumer Demand

Results from the surveys for this report suggest that a significant portion of consumers are clearly interested in the prospect of services offered by retail dental clinics. Forty-four percent of respondents said they would be very likely or somewhat likely to use them, 21 percent said they might or might not, and 36 percent said they probably wouldn’t.³⁶ The findings for Latinos show that they are more interested than respondents in general: 55 percent (63 percent of those with an annual household income of less than \$35,000) said they would be very likely or somewhat likely to use retail dental services, 21 percent said they might or might not use them, and 19 percent said they probably wouldn’t.³⁷ Among other findings:

- 49 percent of respondents with an annual household income of less than \$35,000 said they would be somewhat likely or very likely to use a retail dental clinic;
- Of those interested in using a clinic, 27 percent visit the dentist once a year and 36 percent go twice a year;
- Of those who pay cash for dental services because they lack insurance, 41 percent said they would

be somewhat likely or very likely to use a retail dental clinic; and

- 45 percent of respondents younger than 35 said they would be somewhat likely or very likely to do so.

Potential Patients

Based on the survey results, potential retail dental clinic consumers would have one or more of the following characteristics:

- Annual household income of less than \$35,000;
- Uninsured or enrolled in Medicaid, and/or generally pay cash for dental services;
- Younger than 35;
- Parent to at least one child; and
- Infrequent user of dental services.

Nine percent of Californians have public dental insurance and 39 percent have no dental insurance,³⁸ for a total of about 16 million people. The 52 percent of residents with employment-based or privately purchased dental insurance might be interested in visiting a retail dental clinic for teeth cleaning or other basic services simply because it is convenient or because the clinic is linked to their dental home.

V. The Business Model

TO BETTER ASSESS FEASIBILITY, THE author constructed a hypothetical retail dental clinic operating at full capacity. The clinic would occupy 500 square feet in a retail outlet; employ an unspecified number of registered dental hygienists; use standard dental equipment, including digital x-ray and an electronic dental record; be open from 8 a.m. to 8 p.m. on weekdays and for 12 hours on weekends; and engage in limited marketing. The feasibility assessment includes these variables:

- Practitioner type and salary levels. For example, clinics might employ dental hygienists and a dental assistant in various combinations;
- Length of work shifts;
- Payer mix;
- Service mix;
- Time and price per procedure;
- Capital costs (depending on the types of equipment); and
- Capital recovery (depending on how long it takes to repay the loan principal and interest).

Building out and equipping the clinic would cost about \$220,000, including plumbing. Fixed operating costs—labor and rent—and variable operating expenses would be approximately \$195,000 and \$48,000 a year, respectively. About three-quarters of expenses would be for dental hygienists to staff the clinic.

Early proponents of retail dental clinics thought the cost structure might be very similar to that of

retail health care clinics. However, dental supplies cost more than medical supplies do, and capital expenses, such as those for digital x-ray equipment and dental chairs, are higher. In addition, hourly prices for dental services are lower than prices for medical services, which means lower hourly revenues.

Economic Feasibility

Along with the service mix, fundamental issues that determine the economic feasibility of a retail dental clinic are the payer mix, staffing costs, and how many and what type of visits are necessary to break even.

This report is accompanied by an interactive financial model that allows the user to estimate the projected revenues, costs, and profit or loss under various payment and staffing scenarios. The model, in the form of a Microsoft Excel spreadsheet, is available on the California HealthCare Foundation Web site at www.chcf.org/topics/view.cfm?itemID=134119.

Payer Mix

Retail dental clinics would most likely receive revenue from more than one type of payer—some combination of Medicaid and other government programs, patients paying out of pocket, and private insurers. They would need to adjust their service offerings to optimize that mix. The five sources of revenue included in various payer mix scenarios in the proposed business model are:

- Low government reimbursements (below the national Medicaid average), such as those in California under Medicaid;

- Medium government reimbursements (equivalent to the national Medicaid average), such as those in Georgia under Medicaid;
- Out-of-pocket cash payment of affordable fees;
- Encounter rates (reimbursement per patient visit) for federally qualified health clinics; and
- Private insurance, based on the national 75th percentile of what insurers pay to dentists.

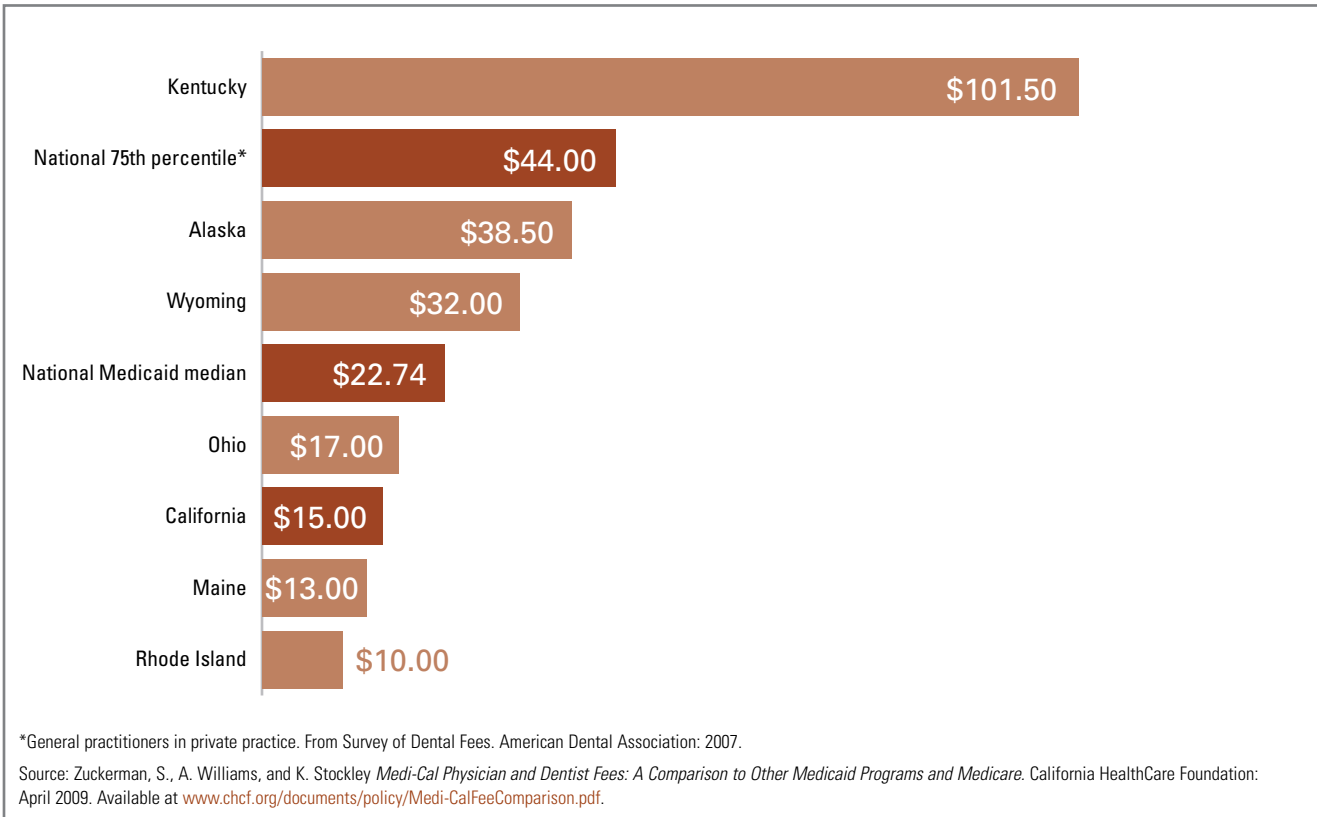
State variation in dental reimbursement rates under Medicaid would have a significant impact on the financial viability of a retail dental clinic.³⁹ In California, retail dental clinics that only served Medicaid beneficiaries could not break even, given low reimbursement rates, but they could break even in other states where reimbursement is higher. A

clinic in California would not be viable if 75 percent of the payer mix were Medicaid, even if utilization reached 90 percent or more, because the cost of procedures and operational expenses would exceed revenues.

If 30 percent of a clinic’s patients were enrolled in Medicaid and 70 percent had private insurance or paid cash, it could be financially viable, depending on Medicaid reimbursement rates in that particular state (Figure 1). The clinic also could be viable if all of its patients paid cash—\$50 for a basic oral exam and \$65 for a cleaning. If the clientele were all privately insured, the clinic might be feasible, depending on reimbursement rates and the cost of establishing and maintaining numerous contractual relationships with insurers.

Private dental insurers typically pay at the 75th percentile of usual and customary rates nationally.

Figure 1. State Comparison of Medicaid Fee-for-Service Reimbursement Rates for Periodic Oral Evaluation



While privately insured patients would be appealing to retail dental clinics because of the higher payments they generate and their more extensive use of dental care, they also might be more difficult to attract. They are more likely to have a dental home (77 percent of those with private dental insurance had visited a dentist in the previous six months, according to a survey for this report) and therefore would probably constitute a smaller portion of a clinic's customer base.

Encounter-based reimbursements for federally qualified health centers (FQHCs) might make retail dental clinics viable, depending on the mix of services provided during an individual encounter and the clinic's specific reimbursement rates. Quality-of-care standards must be factored into decisions about the number of visits necessary to complete a treatment plan.

Pricing, Price Sensitivity, and Transparency

A crucial question for potential clinic operators is whether consumers would be willing to pay out of pocket for services. Results from a test of price sensitivity embedded in the consumer survey suggest that consumers are willing to pay \$50 to \$65 for an exam and \$65 to \$95 for a cleaning.

Two issues emerged in gauging price sensitivity: dental consumers have difficulty determining what a good value might be in terms of price; and many do not know how much they pay for dental care. The survey results show that:

- 23 percent of respondents did not know how much they normally pay, or how much their insurer pays, for an exam and cleaning;
- 13 percent did not know their copayment amount;
- 35 percent did not know the amount of their annual deductible; and

- 33 percent did not know if retail dental clinic services would be a good value.

Regarding price transparency, 64 percent of all respondents agreed or strongly agreed with the statement, "I like that the clinic's prices for oral exams and/or teeth cleaning [would be] posted." Among those who indicated they would likely use such a clinic, 83 percent of respondents agreed.

Transparent pricing would be a core element of retail dental clinics. If some patients were to pay out of pocket for services, non-negotiable prices would have to be clearly posted. So would sliding scale copayments if a clinic were part of a FQHC.

Labor and Other Operational Costs

Another important financial viability factor is labor costs, which would constitute about 75 percent of operating expenses. Consumables, electronic dental records, rent, and marketing would constitute the remainder.

In most traditional dental practices, the professional workforce consists of dentists, registered dental hygienists, and dental assistants. A retail dental clinic's particular mix of staff and their legal scope of practice would shape its cost structure. Given retail clinics' limited scope of services, space, and equipment, a registered dental hygienist and dental assistant would probably be the best and most likely combination.

Three factors figure into estimating labor costs: practitioners' training and licensure level, their salaries, and the time necessary to perform each procedure. The latter varies widely, depending on patient type, patients' comfort with dental care, their medical and dental histories, and the kinds of services they need. The business model could be based on basic exams and cleanings that take between 15 minutes and 60 minutes. If the amount of time

necessary to perform basic exams and cleanings extended beyond these limits without an increase in revenues, labor costs would quickly overtake revenues. In the surveys for this report, 71 percent of respondents said their exams plus cleaning took 45 minutes or less.

Recording patients' medical and dental histories would be another labor expense. Electronic dental records at retail clinics would enable the front desk assistant or patients to enter histories efficiently. Some retail health care clinics ask patients to perform part of this task using a kiosk, which reduces administrative time and overhead.

The cost per hour to operate a retail dental clinic would be about \$48 (\$41 in operating expenses and \$7 in amortized capital costs). The median national reimbursement rate under Medicaid for a periodic adult exam is \$22.74, and even less for pediatric exams. Consequently, clinics probably would not be financially sustainable if they accepted only Medicaid and performed pediatric exams. But if they could attract a diverse payer mix, with some reimbursements higher than others (depending on consumers' insurance coverage), clinics could be sustainable while providing better access to convenient and affordable services.

Capital Costs, Depreciation, and Amortization

The approximate \$220,000 cost to retrofit and equip a clinic would be significant.⁴⁰ So would amortization of capital expenditures. Five-year, straight-line depreciation and interest (assuming a moderate interest rate) would be about \$35,000 annually.⁴¹

Retailers' Perspective

For clinics to be viable, retail store owners would have to endorse the concept. It is unclear if, from the retailers' perspective, the value proposition is

compelling enough that a clinic operator could secure favorable lease terms. Retailers would receive lease revenue and might also charge a brand fee, as Wal-Mart does when it rents space to health care clinics. However, the dental-related, revenue-earning opportunities—selling products such as toothpaste, brushes, floss, and whiteners—may be limited. Incremental sales of these products are less lucrative than, for example, sales of over-the-counter medications and prescription drugs. Retailers must believe that clinics will generate strong demand for merchandise and improve their relationship with customers. In addition to Wal-Mart, outlets that would more likely benefit from the higher volume of dental customers include other mass merchandisers such as Target, warehouse stores (Costco, BJ's Wholesale Club, Sam's Club), discount stores seeking health care-related business (99¢ Only Stores, Family Dollar), drugstores (CVS, Walgreens), and large, multicategory grocery stores.

A survey for this report revealed that 78 percent of respondents said they agreed or strongly agreed with the statement, "I like that this clinic [would be] in my local store." (Another question asked about the most beneficial features of retail dental service, "convenient location at my store," tied for second place, after extended hours.) Seventy percent of respondents indicated they most preferred a mass merchandise location, 41 percent a drugstore, 28 percent a warehouse store, and 19 percent a grocery store.⁴²

Dental clinics might be more attractive to retailers in underserved areas, where there are fewer dentists and potential retail customers and where each customer visit is incrementally more valuable. Leasing space in these areas for smaller, lower-cost clinics could be relatively inexpensive.

Clinic Size and Configuration

A retailer's available space would dictate a dental clinic's size in most cases. At mass merchandise locations, health care clinics are typically about 500 square feet and often located at the front of the store. Clinics in drugstores and elsewhere are much smaller—about 200 square feet. Retailers would require that dental clinics retrofit and occupy all of the space they lease, with a three-room configuration most likely. Clinics would have to accommodate both adults and children, although booster seats enable children to use adult chairs. In-store construction can be challenging, given the small space, after-hours work, and the need to complete construction quickly and without disrupting the pleasant shopping atmosphere.

Services Beyond Diagnostic and Preventive Care

A clinic could extend its service mix to include optional services, depending on the potential patient and payer mixes, demand, and management prerogatives. Cosmetic dentistry, in particular, could increase revenues. Such services might include a 15-minute or 90-minute whitening and a 15-minute bleaching, and/or orthodontic teeth straightening, any of which professionals other than dentists may perform. Among the financial considerations are additional capital costs for equipment and training, and additional operating costs for marketing, ongoing training, and supplies.

One of the surveys found that among likely clinic users, 31 percent expressed interest in a 15-minute, \$95 whitening; the same percentage expressed interest in a 90-minute, \$200 whitening; and 19 percent expressed interest in teeth straightening. (Clear Invisalign braces entail 24 appointments and cost about \$4,000.)

Although cosmetic and other optional services probably would not be a priority, they could entice people to come in and subsequently receive preventive oral care.

VI. Options for Federally Qualified Health Centers

AS FEDERALLY FUNDED PRIMARY CARE CLINICS offering a full suite of health services, FQHCs are an important component in the health care safety net. Their federal contracts dictate that they provide or arrange for oral health services. The centers supply many free services according to a sliding fee scale based on income. FQHC dental practices might learn from the retail dental clinic model or consider operating something similar on-site or in a satellite retail location.

In a survey of FQHCs commissioned by the National Association of Community Health Centers, respondents cited dental restoration and prevention as the services their clients need most. The survey also found that among non-physicians, the highest rate of vacancies at FQHCs are dentist positions.⁴³

Retail dental clinics located in FQHCs or community health centers could be a compelling, preventive clinic model: The patient base already exists, Medicaid billing functions are in place, and marketing costs would be less. A lease for 500 square feet would cost about \$16,000 annually and marketing about \$10,000 annually, for a monthly total of around \$2,000.

FQHC billing is typically based on patient encounters whereby each Medicaid or Medicare patient visit generates an encounter fee, irrespective of the number of services provided.⁴⁴ Two clinic visits on separate days for an exam and then a cleaning would entail two encounter fees. FQHCs provide as much care as a visit justifies, the goal being to complete a treatment plan expeditiously. Because encounter fees average \$125 per visit, single visits with multiple procedures might produce less revenue if procedure costs during that particular visit are

high. Under FQHC funding requirements, the centers must charge sliding-scale fees so uninsured patients can afford services; some qualifying patients may not pay anything depending on their income.

In the surveys conducted for this report, consumers with an annual household income of less than \$35,000—those whom FQHCs typically serve—responded positively to the retail dental clinic concept:

- 61 percent said they would likely or very likely use such a clinic;
- 69 percent said they would likely or very likely use it for pediatric care;
- 78 percent said they pay cash for, or obtain free or publicly financed, dental care; and
- 22 percent said they have employment-based or self-purchased dental insurance.

For many consumers, the key attribute of retail dental clinics would be convenience—a facility near to where they shop that has longer work hours, including weekend hours. Many FQHCs are located in neighborhoods of the communities they serve and are close to public transportation. Likewise, FQHC-related dental clinics would need to be conveniently located and offer expanded hours of operation. Of the survey respondents who are likely to have access to FQHC care based on their reported income, 69 percent said extended hours was their first priority, followed by in-store location/clear pricing and acceptance of public insurance.⁴⁵

VII. Quality of Care

DENTAL PRACTICES MUST MEET SAFETY standards and quality-related expectations, procedures, and reporting requirements. These would also apply to retail dental clinics. The mandates could ensure quality by, for example, requiring clinics to employ experienced professionals, ensure appropriate supervision by and/or collaboration with dentists, implement quality assurance and infection control protocols, and connect patients with dental homes.

Research shows that the quality of care at independent dental hygienist practices is equal or superior to that at dentist practices.^{46–51} One study concluded:

The structural aspects of the direct access (or unsupervised) hygienist practices were generally acceptable and surpassed the dentist practices in most areas, including infection control. For process, the hygienist practices had high percentages of acceptable care and were significantly better than the dentist practices in several areas, including follow-up to medical findings, updating the medical history at recall, and documenting the evaluation of the periodontal status and soft tissues.

This study also found that independent dental hygienist practices did not increase the public's health and safety risk. And patients' perception of quality at these practices was high: 98 percent expressed satisfaction with their care.⁵²

In one of the surveys conducted for this report, 62 percent of consumers who expressed interest in using retail dental clinics said they would be satisfied with care they received from a registered dental hygienist, 23 percent were unsure, and 15 percent did not think they would be satisfied. This finding parallels the early perceptions of nurse practitioners at retail health care clinics.

VIII. Regulatory Issues

RETAIL DENTAL CLINICS RAISE IMPORTANT policy issues. To enable this model, states, which regulate health facilities, would need to change their policies regarding expanded scope of practice, licensing of dental hygienists, ownership of clinics, and facility licensing.

Scope of Practice and Licensing

States dictate the legal scope of practice of all oral health practitioners and their working relationships with each other. Some states permit direct consumer access to registered dental hygienists, who may practice autonomously (without the direct supervision of a dentist) or semi-autonomously. Some have also seen the emergence of more advanced, mid-level oral health professionals, such as oral health practitioners and dental therapists. The model in this report focuses on dental hygienists who have indirect supervisory relationships with dentists.

The most essential component of retail dental clinics would be the practitioners staffing the facility and their scope of practice. Dental hygienists' scope of practice varies by state and individual qualifications. Most states do not allow hygienists to diagnose, which precludes them from treating patients autonomously. Other states, such as Alaska, Colorado, and Maine, grant a broader scope of practice, enabling dental hygienists to diagnose and treat basic conditions.

California created a professional classification called registered dental hygienist in alternative practice (RDHAP). These independent hygienists may provide preventive and therapeutic, as opposed to dental, services through one of several types of businesses, such as a sole proprietorship. They are

limited to four “alternative settings” — residences with homebound occupants, schools, residential facilities, and hospitals—in geographic areas where there is a shortage of dental health professionals. RDHAPs must provide “documentation of an existing relationship with at least one dentist for referral, consultation, and emergency services” to the Dental Board of California.⁵³ They assess patients' dental hygiene and refer them to a dentist when an advanced procedure is necessary. A hygienist might send x-ray images and assessment findings to a dentist who then develops and returns a treatment plan. It is unclear if California would add retail dental clinics in underserved areas to its list of qualified “alternative locations,” thereby enabling the clinics to employ RDHAPs.

Clinic Ownership and Licensing

Most states do not require dental facilities to be medically licensed; rather, the practitioner is licensed. But these businesses, like others, must have an operating license. FQHCs need a state clinic license and federal qualifying status from the Health Resources and Services Administration.

A few states, including California, limit ownership of medical practices through corporate practice of medicine laws. These laws seek to ensure that corporate mandates do not influence medical practitioners. In California, dental practices must be owned by dentists.

Reimbursement

Reimbursement from public sources would be critical to ensuring the economic sustainability of retail dental clinics. Clinics would need to employ Medicaid-approved practitioners, such as RDHAPs, who could provide care to publicly insured patients under various state and local insurance programs. In addition, public insurance programs may need to create additional reimbursement categories for services delivered in these clinics.

IX. Lessons from Similar Models

A FEW RETAIL DENTAL OPERATIONS HAVE opened in other states. For example, there is a ClearSmile clinic in a Wal-Mart in Oregon and an All Smiles dental practice in a Carnival Food Stores outlet in Texas that employs dentists and offers a full suite of services. The ClearSmile clinic, which is somewhat similar to the model this report proposes, only offers teeth whitening, but makes the most of lower costs and a smaller clinic footprint. Dental hygienists provide the services. The ClearSmile clinic claims to connect patients to dentists via a telemedicine application that can store and forward images and patient records, and perform billing. The nature of these two clinics is mainly dictated by their providers' scope of services.

There are also hundreds of retail health care clinics nationwide.⁵⁴ Consumers highly rate and recommend the services these clinics provide. However, consumers do not change their behavior quickly and must be educated about new types of services or delivery models. It could take some time for them to adapt to a new model of dental care delivery.

X. Conclusion and Issues for Consideration

DELIVERING A LIMITED SET OF HIGH-QUALITY, affordable dental services in retail settings is a potentially viable model that, as another dental care venue, could address unmet oral health needs. Consumers generally like the idea of in-store dental clinics, and an appropriate mix of payers, services, and prices would make such clinics economically sustainable. Furthermore, statutes in California and other states allow dental hygienists to deliver services in specified settings.

But retail dental clinics also pose numerous policy, financial, and practical challenges, including:

- State scope-of-practice rules governing mid-level practitioners;
- Public insurance reimbursement rates and rules;
- Private insurance coverage and clinics' prices for services;
- Interest level of dental hygienists and others in practicing in such clinics;
- Dentists' support for referrals from retail clinics and/or for connectivity between clinics and dental homes;
- The availability of interested investors;
- Retailers' interest in hosting in-store dental clinics;
- Consumer perceptions of quality and value; and
- Marketing practicalities and costs related to generating new patients.

The conceptual model in this report presents new possibilities for delivering oral health care and

raises important issues. The model could evolve in a number of directions, some of which would improve access to dental services for uninsured and publicly insured people who have unmet oral health needs. Potential scenarios might include:

- **Clinics in retail locations, staffed by dental hygienists, that offer preventive services to a broad patient mix.** Economically sustainable entities would need patients who are publicly insured, privately insured, or willing to pay out of pocket.
- **Clinics in retail locations, staffed by advanced-practice dental hygienists and/or dental therapists, who offer both preventive and restorative services.** Many consumers who receive preventive services are also likely to need restorative services. Some clinics could offer the latter if their state allows advanced-practice dental hygienists or dental therapists to provide them.
- **Traditional dental practices in retail locations.** With a dentist on staff, these practices could offer comprehensive dental services.
- **Satellite dental clinics in retail locations.** To extend their practices, dentists could establish satellite sites focusing on prevention. Together, the main office and satellites would become a dental home in numerous convenient settings, providing continuity of care and connectivity with a dental practice.
- **Cosmetic retail dental clinics.** They would offer only cosmetic services, such as teeth whitening and/or straightening, and refer patients to dentists if treatment is necessary.

- **FQHC or community health center satellite clinics.** These clinics, which might offer current services or add preventive services, could be located on-site to attract existing patients or in retail settings to attract new patients. Regulatory restraints on FQHCs may apply.
- **FQHC walk-in dental centers.** Typically, there is significant demand for walk-in or urgent care at FQHCs. In addition to diagnostic and preventive services, they could separately offer emergency care—for pain or infection, for example—and refer patients to the main clinic for more comprehensive restorative and specialty care.

The foremost issue would be integrating retail dental clinics into mainstream dental care. Clinics would have to work cooperatively with dental practices so as not to disrupt patient care or the routine and more complex services these practices provide. Some consumers may incorrectly believe that preventive care at a retail dental clinic is sufficient and, therefore, they do not need a dental home for more comprehensive, advanced care when it is indicated.

Another key issue is the evolving dental workforce, driven in part by new technologies, regulatory changes, and consumer interest. As this workforce evolves, retail dental clinics could potentially offer comprehensive services using mid-level practitioners rather than dentists, thus increasing dental care capacity at more affordable prices. A national shortage of dentists makes this approach particularly attractive.

However, like most potentially disruptive innovations in health care, the retail dental clinic concept is controversial. Critics will argue that quality of care could suffer, that clinics might shift patients away from conventional dental homes, and that expanding the scope of services provided by mid-

level practitioners without direct dentist supervision may have negative consequences for patients.

In the most optimistic scenario, dental hygiene and basic treatment at a retail dental clinic would become as easy as picking up a tube of toothpaste or dental floss at the local supermarket, and more affordable, too. In the most pessimistic scenario, the clinics, depending on their business model and level of accountability, would lower dental care standards.

Given a favorable regulatory environment, some retail dental clinics could thrive if they were in optimal locations and struck the right balance of payer mix, high-quality services, and professional staff. Ideally, the best elements of the model would inspire all dental professionals to seek better ways to serve patients, particularly safety-net patients, and thereby foster a higher level of dental care in California and other states.

Appendix A: Interviewees

Guy Amico, D.D.S.

President
ClearSmile
Salem, Oregon

Ann Battrell, R.D.H., M.S.D.H.

Executive director
American Dental Hygienists' Association
Chicago, Illinois

Dori Bingham

Project manager, safety net solutions
Catalyst Institute
Boston, Massachusetts

Carolyn Brown, D.D.S.

Dental director
Native American Health Clinic
San Francisco, California

Michael D. Byars

President and chief executive officer
Minyard Food Stores
Coppell, Texas

Mark J. Doherty, D.M.D., M.P.H.

Project director, safety net solutions
Catalyst Institute
Boston, Massachusetts

Hugo Ferlito, D.D.S

Santa Cruz, California

Paul Glassman, D.D.S., M.A., M.B.A.

Professor of dental practice
Director of community oral health
Dugoni School of Dentistry, University of the Pacific
San Francisco, California

Alicia Ledlie, M.B.A.

Senior director, health care services
Wal-Mart
Bentonville, Arkansas

Richard Malouf, D.D.S.

All Smiles dental clinic
Coppell, Texas

Elizabeth Mertz, M.P.A.

Program director
Center for the Health Professions
University of California, San Francisco

Hal Muller

President
Special markets group
Henry Schein
Melville, New York

Steve Sorenson

Chief executive officer
Market Contractors
Portland, Oregon

Ariane Terlet, D.D.S.

Dental director
La Clinica de la Raza
Oakland, California

Appendix B: Survey Methodology

This report makes use of three online surveys conducted in February 2009 using Zoomerang software. The surveys were designed to gauge consumer interest, price sensitivity, and potential demand for a hypothetical retail dental clinic. Analysis of respondents' answers was based on their insurance status, payment behavior, use of dentists, dental care experience, and interest in an in-store dental clinic and services, prices, and attributes. The surveys also collected demographic information.

The first two surveys consisted of randomized, statistically reliable, nationally representative samples: 537 respondents (3 percent margin of error) and 361 respondents (4 percent margin of error). They were identical except for different price levels presented to participants to assess their price sensitivity. The third survey consisted of a randomized, statistically reliable, representative sample of 275 Californians (4 percent margin of error) who identified themselves as Latino or Hispanic. Fifty-six percent of the respondents indicated they speak at least some Spanish at home.

Endnotes

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15. See note 2.
16. See note 14.
17. See note 2.
18. See note 14.
19. Lewis, C., H. Lynch, and B. Johnston. “Dental complaints in emergency departments: A national perspective.” *Annals of Emergency Medicine* 2003;42(1): 93–99.
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- x-rays, and use a Web-based electronic dental record. After remotely reviewing a patient's information, the dentist decides if further care in his or her office is warranted. Routine preventive services provided outside of a dentist's office would keep about half of underserved people orally healthy. In effect, the virtual dental home extends a dentist's practice, offers dental home continuity, and enables the dentist to focus on specialized restorative and other care rather than prevention.
26. Nationally, exams are not currently within hygienists' scope of practice.
 27. Nationally, sealants are not currently within hygienists' scope of practice.
 28. There are two types of digital x-rays: panoramic (a new standard) and detailed. In states where x-ray images must be submitted for reimbursement purposes, the panoramic variety is not required.
 29. Nationally, most cosmetic services are not currently within hygienists' scope of practice.
 30. This assumes that both the retail clinic and dentist have interoperable information technology.
 31. Patients transferred from a retail dental clinic to a dentist might be charged by the hygienist and then again by the dentist, as dentists cannot treat patients without first examining and diagnosing them. This could vary depending on state requirements and dentists' preferences.
 32. See note 14.
 33. X-rays may not always be necessary if the images are current. However, many dentists routinely order x-rays for patients if another practice took images.
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 41. Retailers typically seek a five-year lease with tenants. Regarding depreciation, used equipment is worth very little.
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53. California Business & Professional Code §1775(a).
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