

Transcendentist and the Office of Dr. Fred Pockrass, DDS

2008 ACTERRA Business Environmental Awards

Susanne Wilson Award for Pollution Prevention/Resource Conservation

Summary

Dr. Fred and Ina Pockrass, owners of Transcendentist, Inc., have created a model for an environmentally sound dental practice. Transcendentist and the office of Dr. Fred Pockrass opened in Berkeley in March 2003 and became the first dental office certified as a green business by the Bay Area Green Business program. It is the first dental office in the country to employ environmentally sound principles in (1) office design and furnishings; (2) dental processes and materials; and (3) marketing and patient communications. The Transcendentist environmental innovations became the template for the Green Business Program's requirements for green dental offices; its efforts have garnered significant regional and national press. In year four of operation, annual revenues exceeded \$1 million, placing Transcendentist in the top 5% of dental offices nationwide, proving that its eco-friendly model is also friendly to the bottom line. Its founders have developed green products that are being sold to dental professionals nationwide, and have established the Eco-Dentistry Association to provide other dental professionals with education, technical assistance, and products and services to support an easy and cost-effective transition to green dental practices.

Program Description

I. Leadership

Reaching Beyond Compliance with a Systemic Approach

In 2002, long before the "green wave," the founders of Transcendentist set out to create a model for ecologically sound dentistry that exceeded regulatory requirements and set a new standard for how dental offices could operate. At the time, despite evidence that dental mercury contributed significantly to pollution in Bay Area waters, East Bay MUD did not require dental offices to install amalgam separators, which capture mercury-containing materials before they reach the water supply. Transcendentist eschewed mercury-containing amalgam as a filling material in its practice and installed an amalgam separator to capture the old mercury fillings, which it removed from patient's mouths.

City of Berkeley staff informed the company that it is the only dental office in Berkeley that does not require a hazardous waste permit to operate. Instead of chemical-based sterilization techniques, which dump toxic waste into the water supply, Transcendentist uses non-toxic, steam based sterilization that fully complies with OSHA requirements. The office also installed a digital imaging system instead of traditional x-rays, exposing patients to 75 to 90% less radiation, and requiring no disposal of toxic x-ray development chemicals or lead-containing foils.

The founders "rethought" every decision in the creation of the office, seeking out environmentally sound systems where available, and innovating where they were not. The natural wool, jute-backed carpets came from Georgia, because that was the only source at the time, and the cloth head rest covers for the dental chairs were originally adapted from terry-cloth mop covers until Dr. Fred and Ina found a company that would specially create them out of surgical-grade cotton. Furniture in the waiting lounge is made from recycled wood, stuffed with natural kapok, covered in cotton velvets. Wallpapers are made from the by-products of paper production, affixed with water-based paste. All of the paper used in the office is recycled content, stationary is printed with vegetable-based inks, and a unique web site replaced the typical dental office brochure. Patient medical charting, scheduling and billing are all digital, and images of patient's teeth can be e-mailed to specialists. Plastic light cover handle barriers in the dental operatories were replaced with

reusable cloth; a cloth patient “bib” replaced plastic barriers on the dental chairs. All cloth items are washed and dried on site in energy efficient machines using non-toxic detergents and germicides. Dental chairs are disinfected with biodegradable disinfectants, and instruments are wrapped in cloth sterilization towels, not throwaway paper and plastic. Stainless steel suction tips replace disposable plastic, and teeth cleaning pastes and other materials are purchased in large sizes that eliminate individual package disposal wherever possible. Electricity used in the office has always been offset with wind power credits.

Leadership in Environmental Progress

Aware of the impact dental offices have on the eco-system, representatives of the Bay Area Green Business Program invited Transcendentist to apply to become a certified green business shortly after it opened. It was first certified in mid-2003 and recertified in 2006, the first such dental office in the nine county region, and the first green dental office in the country. The Green Business program used our innovations to help establish the standards which other dental offices would need to meet to become green businesses, and because we blazed the trail, there are now four other dental offices in the Bay Area that are certified green businesses.

The founders of Transcendentist played an active role in the green health care initiatives of the non-profit Teleosis, helping to craft comprehensive pollution control, waste and energy reduction standards for medical, dental, and complementary medicine clinics nationwide. Transcendentist is also participating in the Teleosis pilot program for green health care practitioners, and is the only dental office participating in Teleosis’ “Green Pharmacy” program, which collects unused medicines for environmentally sound disposal, diverting over 700 pounds of pharmaceuticals from the water stream in its first six months.

Ina Pockrass has served on the board of the Sustainable Business Alliance and the steering committee for Sustainable Berkeley, and the practice has received significant local and national press, including the lead article in the January 2008 edition of the magazine of the American Dental Hygienists Association, entitled: “A Blueprint for a Green Dental Practice.” Both Dr. Fred and Ina are frequent speakers to community groups about green health care, mercury toxicity and green business.

II. Significant Environmental Benefits

Established Record of Environmental Benefits, Measurements of Success

Our model is designed to reduce waste, conserve energy and water, and prevent pollution. According to a recent study published in the Journal of the Canadian Dental Association, our use of steam sterilization with cloth instrument wraps has diverted 4,680 paper and plastic autoclave bags from the landfill annually – a total of 18,720 pieces of paper and 18,720 pieces of plastic over the 4-year life of the practice. The use of cloth patient bibs in the Transcendentist practice instead of the traditional 2-ply paper, 1-ply plastic bib, has diverted approximately 40,800 pieces of paper and 20,400 pieces of plastic from landfills. Together, these two innovations alone have diverted nearly 60,000 pieces of paper, and nearly 40,000 pieces of plastic.

Because we use a digital imaging system, which eliminates the lead and silver used in connection with traditional x-ray systems, as well as the toxins in x-ray development solutions like hydroquinone, acetic acid, 1-phenyl-3-pyrazolidinone, the potent liver toxin gluteraldehyde, ammonium bisulphate, sodium bisulphate, and ammonium thiosulphate, we have prevented the disposal of at least 200 liters of toxic x-ray fixer and 17,200 lead foils over the life of the practice to date. Digital patient charting, which dispenses with paper files, has saved approximately 50,000 sheets of paper over the life of the practice.

Pure Water Development, the company responsible for the collection and recycling of mercury waste material from removed amalgam fillings, reports that, each year, Transcendentist has diverted between 1.5 and 3 pounds of mercury-containing amalgam waste from entering the Bay Area's water stream.

Since the entire office was outfitted with energy efficient bulbs through the Smart Lights program in 2007, we have saved an estimated 2,645 kiloWatts in electrical energy and reduced CO2 emissions by 1,375 pounds per year. We have showcased our wind power electrical usage offsets through 3Phases Energy and received recognition from the EPA's Green Power Initiative.

History of Environmental Performance; Efforts and Improvements Over Time

Because our practice model was designed from inception to be as an environmentally conscious as possible, we have always had a history of environmental performance, as detailed above. At the same time, we have encouraged innovation in our team members and ourselves. When we decided to provide a complimentary take home toothbrush to our clients, we found a company to make a toothbrush with a handle made from recycled plastic yogurt cups. When our clients asked for bags in which to take home products from our office, we sourced organic cotton re-usable lunch bags, printed with soy-based inks. When our hygienist asked whether there was an alternative to paper and plastic sterilization bags, we had a company specially make surgical-grade cotton towels in which to sterilize our instruments.

In the past year, we added food composting to the kitchen area for staff food-waste and used teabags from the welcome lounge. We even changed tea vendors, selecting Numi Teas because it is a local company that shares our values. As our cloth patient bibs and towels started showing signs of wear, we investigated donating them, and found that the local SPCA was happy to use them with animals.

In the past six months, we have implemented a web-based patient communication program called Sesame Communications, which has virtually eliminated paper billing statements and appointment reminder cards, and which allows us to send electronic, paper-saving newsletters to our community. We've also worked with our supplier of cloth dental supplies to have them source bamboo and organic cotton, and are now offering a whole line of these products for sale to others in the dental industry, including a dentist in San Francisco who was inspired by our leadership and now is building a LEED certified dental office.

Environmental Benefits, Intentional and Otherwise

The greatest environmental benefit of our efforts is that a transformation in the dental industry is beginning, and it's starting with the awareness in the dental community that there are easy and cost-effective things that can be done which have a significant impact on the environment. In the last year alone, our practice and products have been featured in Yoga Journal, The Journal of Practical Hygiene, and Access Magazine, the official publication of the American Dental Hygienists Association, and on a segment aired on television by the Canadian Broadcast Corporation featuring innovative green business ideas. Stories in Body and Soul Magazine and Modern Hygienist Magazine are in the works. Locally, our practice has been featured in Bay Area Businesswoman, The Daily Californian, East Bay Express and KRON-TV 4.

We are now regularly getting inquiries from dentists, hygienists and other dental professionals nationwide, asking for help in greening their practices or requesting to buy our green products.

III. Potential Model for the Business Community

Appeal and Transferability: Technical, Economic and Administrative

Our analysis of the dental industry is that there are two main impediments to the adoption of green practices: a perception that “green” costs more and that it is more time consuming. To address the cost issue, the company engaged local sustainability consulting firm Natural Logic to examine fourteen environmental innovations and prove that going “green” actually saves dentists “green;” the study will be released in the first quarter 2008 and will be made available to dental professionals nationwide. The study will also showcase the marketing advantage green dental practices have with LOHAS consumers (Lifestyles of Health and Sustainability), who make up as much as one-third of the US population; for example, Transcendentist has an internal referral rate nearly three times the national average, and does virtually no traditional marketing, yet has garnered between 30 and 40 new patients every month since it opened.

To address the concern that green practices are more time consuming, we are working with a range of suppliers to create a list of green products and services, so that our colleagues do not have to reinvent the wheel. This list includes everything from links to the best amalgam separators, to amalgam reclamation practices called “retorting” which fixes the mercury-containing waste in concrete instead of sending the waste overseas, and to specialized dental software that allows for paper-free digital patient charting and scheduling.

Benefits to Employees and Customer/Community Relations

From inception, Transcendentist has been a triple bottom line company, committed to its people, our planet and to profit. We have always offered health insurance to our full-time employees, and allow our employees to elect up to a \$300 per month contribution to pre-tax Health Savings Accounts. Employees are provided with free dental services in our office, access to health and wellness practitioners and products at reduced rates, and yearly continuing education. Employees are evaluated based upon their environmental stewardship and rewarded for environmental innovations. Transcendentist employees are not subject to the toxic air and chemicals that are prevalent in nearly all other dental offices.

On the community level, we have supported non-profits financially, contributing between \$5,000 and \$10,000 per year, and make in-kind donations to organizations such as Rainforest Action Network and Circle of Life. In 2007, we persuaded our primary dental supplier, Patterson Dental, to donate 1000 fluoride applications to a program that serves children living in poverty in Ecuador, and donated 500 recycled-content toothbrushes ourselves. We have a “community resources” binder in our welcome lounge that features cards and brochures of others in the local green economy. Instead of CNN playing on the televisions in our office, we show images of planet Earth, and have stocked our welcome lounge with educational and informational books supporting a green and healthy lifestyle, such as *1001 Ways to Save Our Planet*; *365 Ways to Live Green: Your Everyday Guide to Saving the Environment*; and *Green Housekeeping*.

Common Environmental Concerns Addressed

As noted above, our model addresses a range of environmental concerns, from pollution prevention and waste reduction to energy and water conservation. As demonstrated above, our environmental innovations have already diverted significant amounts of pollution and waste and are conserving energy daily. Imagine the impact if all of the more than 170,000 dentists nationwide did just one simple and cost effective practice like installing an amalgam separator; between 255,000 and 510,000 pounds of mercury-containing waste would be diverted each year from the water supply!

Willingness to Share Program Information with Others, Including Competitors

When Transcendentist was first created, the founders' plan was to license or franchise the Transcendentist business model, envisioning 100 Transcendentist offices nationwide. Yet over the last four years, the founders decided to look for a way to have a bigger impact on the dental industry as a whole. In January 2008, we launched the Eco-Dentistry Association, a membership organization targeting about 5% of the U.S. dental market, or 10,000 dentists. We are currently building a resource-rich web site that will give members access to research about green practices, technical assistance, and access to green products and services; the site will contain a consumer section, facilitating the connection between eco-friendly dentists and the public. One program offering, "Green My Office", will provide an "eco-audit" to dental offices, complete with simple suggestions to reduce waste and pollution, conserve energy and water, all while supporting the dentist's "bottom line."

IV. Demonstrating Program Commitment

Upper Management and Organizational Support

Ecological practices are central to the Transcendentist brand identity and business model, and are not only supported, but also continually nourished by management. The values of sustainability, community, and transformation are central to both the personal lives of upper management, and the Transcendentist business. We walk our talk!

Ensuring Continued Success: Policies, Programs, Management Systems, Procedures and Goals

Transcendentist is defined in the marketplace by ecological practices and values-based business. The formation of the Eco-Dentistry Association, and the introduction of the Transcendentist product and consulting services will expand the reach, accessibility, and impact beyond just one dental office in Berkeley, transforming the industry as a whole. By targeting 10,000 dentists nationwide, the company foresees that these "early adopters" will stimulate their colleagues to follow suit. Our goal is that, one day, there won't be such a thing as a "green dental practice" and that all dental practices will embody the common sense principles at the heart of the Transcendentist business model.

The Future of Transcendentist

The company's future is bright; dental office revenues are increasing at the rate of approximately 10% a year, and in 2007, we generated over \$1 million in revenue, putting us in the top 5% of dental practices nationwide. We forecast continued growth in the dental office and a substantial increase in revenue from our products and services. And we expect the Eco-Dentistry Association to raise the profile of green practices even higher, through events, speaking engagements, conferences, and press.

V. Collaborative Effort

The Transcendentist founders believe deeply in collaborating with other organizations. Ina Pockrass currently serves on the Advisory Board of Teleosis, has been the Board Chair of Circle of Life for nearly 8 years, is the Board Chair of the Engage Network, served on the initial Steering Committee for Sustainable Berkeley, and is a former board member of The Sustainable Business Alliance. Dr. Pockrass serves on the Board of the Academy of Intuitive Medicine and the Editorial Board of Access Magazine, and is a member of professional associations including the Mercury-Free Dentists Association, the International Academy of Oral Medicine and Toxicology and the American Dental Association.