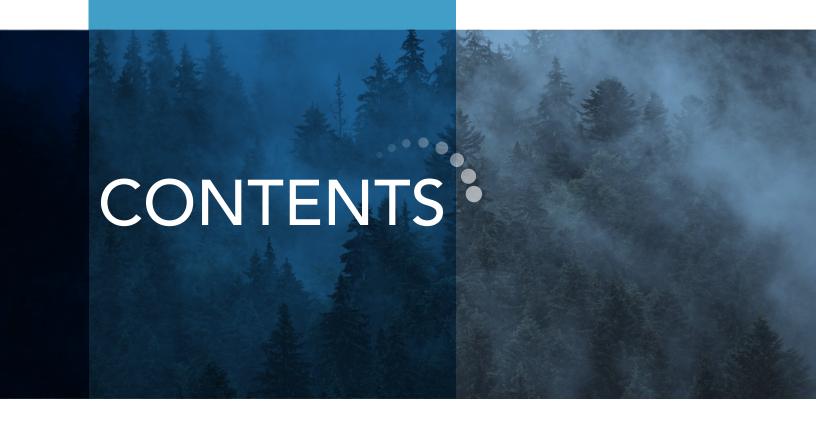


### PURSUING THE PURE PRACTICE TO

The dentist's guide to competition in the era of changing consumer attitudes, preferences and expectations



- ❖ Patient Perception and Perfect Competition
- ❖ The Healthcare Consumer
- ❖ The Shift to Clean
- Cleanrooms
- Pure Practice
- ❖ The Persisting Reality
- ❖ About Oralogix

# PATIENT PERCEPTION & PERFECT COMPETITION

## "Consumers can't tell the difference."

Over the years the business of dentistry has become increasingly competitive. Notwithstanding local supply and demand realities, today's healthcare consumers can hardly tell the difference between doctor (A) and doctor (B).

Healthcare consumers as they are now called are simply ill-equipped to determine a provider's skill so they evaluate things based on elements they can understand or relate to.

So, unless you are the only dentist in town and run what amounts to be a monopoly you must compete with several other local providers. Economists refer to this model as Perfect Competition.

Now, from a provider's lens Perfect Competition may seem to be anything but perfect. Under this most competitive economic model, sellers compete on an equal footing with their local market rivals and, as a result can find it hard to gain visibility much less earn premium fees.

## MORE COMPETITIVE

**Perfect Competition** 

Monopolistic Competition

Oligopoly

Monopoly

LESS COMPETITIVE

THE HEALTHCARE CONSUMER

#### "Whether or not to purchase selective healthcare"



Patients are healthcare consumers and they are making the decision each and every day whether or not to purchase selective healthcare service (like much of dentistry) amid other priorities. Providers in perfectly competitive markets face the challenge of trying to stand out in a crowded marketplace- where each provider's advertising looks similar and where the service rendered (from the patient's point of view) feels almost identical.

Healthcare providers train for years on how to become better diagnosticians and healers of disease but spend far less time learning how to compete in their local market- where their acquired expertise is neither understood by their patients nor viewed as superior to other providers.

Enter COVID-19, a persisting reality. As we see, selective healthcare has declined as buyers, aided by government mandates have been selecting something else-something other than your dentistry. The uncertainty felt by people,

families and communities is real and may persist for some time. These lingering anxieties are likely to influence consumer choice as patient's start to notice, and place greater value on things like office cleanliness and how safe you make them feel during their office visit. Today, a provider's advertising, public persona and even the patient's scheduled appointment must be re-imagined in order to stage a perception of safety. No longer an option, the owner of a selective care practice must include visual and market responsive elements that outwardly communicate patient safety, cleanliness, and natural solutions should they want to stand-out in today's perfectly competitive market.

### THE SHIFT TO CLEAN

### "Why Clean?"



Markets are fickle, or so it's been said. Things that were once hot are now not. In the dental space, not so long ago we were in the middle of an aesthetic revolution... remember those advertisements? Today, we have been thrust into a new revolution and we are witnessing a profound and undeniable shift to clean.

Why clean? Most likely because we have been conditioned, by big advertising campaigns from companies like Lysol<sup>1</sup>, Clorox<sup>2</sup>, and others that have us believe clean is safe. Why safe? Dr. Maslow and his work on the Hierarchy of Needs<sup>3</sup> identified Safety as one of the most primal of all human needs and he determined that we (humans) look to satisfy safety needs before escalating to higher order needs. So essentially, we have been conditioned over time to believe that clean is safe and safe is a priority.

This indicates the shift to clean is both

- A) In our conditioning and
- B) In our biology as a subconscious motivator.

# SHIFT TO CLEAN: SURFACE

### SHIFT TO CLEAN: AIR

# SHIFT TO CLEAN: WATER

The consumer public is becoming increasingly aware of the connection between surface contaminants and the transmission of disease. This is demonstrated by the use of gloves in public settings, more frequent hand washing and the copious use of hand sanitizer. In a typical office environment, many surfaces collect settled particulates or get exposed to contaminants during the course of the day. And, while some surfaces are flat and easily cleaned, others are irregular and can be difficult to access and disinfect. In fact, dental practice in general is based on the premise that contaminants trapped between teeth (irregular, difficult to access surface) needs to be removed to prevent disease.

The quality of the air we breathe can have a significant impact on our health. In 1963 the government published the Clean Air Act. Today, the Environmental Protection Agency (EPA) monitors air quality every day and publishes a daily Air Quality Index (AQI) to help the public understand what air quality means to their health and the choices they might make based on a definable standard4. Because the AQI index is so heavily cited, very often in our daily weather reports many consumers believe that ambient air can hold injurious contaminants and, most importantly they know that there are remedies available that companies can do to mitigate risk.

Water is a popular component and solvent in countless commercial fluids. Our bodies, including saliva are water-based. In 1972 the Clean Water Act was launched, geared largely towards monitoring the nation's clean water supply. Shortly thereafter, dentistry developed various technologies aimed at reducing bacterial transmissions through contaminated dental unit water lines. Viruses are of particular concern, accounting for almost half of all emerging pathogens<sup>5</sup>.Recent CDC reports highlighted in the media have sought to inform the public of the dangers of droplets and aerosols in the potential transmission of viruses, such as COVID-196. Recent academic research demonstrated that contaminants from settled aerosols can remain on surfaces for up to 3 days and that disinfection methods, including hyper-chlorous acid, are safe and effective against Covid-197.



### CLEANROOM

# "International Organization for Standards"



A cleanroom is a contained environment where provisions are made to reduce particulate contamination- such as dust, airborne microbes, aerosol particles, and chemical vapors. Mostly found in industries such as aerospace, biomedical research, or pharmaceutical manufacturing cleanrooms are categorized by ISO-1 to ISO-9 based on a measure of airborne particulates present.

However, no matter the rating, all cleanrooms are predicated on self-containment and controlling the entry of contaminants into the contained space.

A frequently used strategy in cleanroom design is the filtration, flow, and management of both persons and ambient air.



# "Cleanroom Technologies"



The question is, how might a clinical setting- an uncontained, often open floorplan design, deploy filtration and ambient air management protocols- inspired by cleanroom technologies? First, let's compare a typical dental office setting and see how it differs from a cleanroom setting.

DENTIST OFFICE SETTING	CLEANROOM SETTING
<ul><li> Unsealed space, open air/floor plan design</li><li> If not an open floor plan, room doors are often open</li><li> No ability to create negative pressure</li></ul>	<ul><li>Sealed space</li><li>Contained area, slight negative pressure</li><li>Laminar air flow</li></ul>
<ul> <li>Patient does not typically wash, dress or prepare prior to entering the operatory</li> <li>Oral cavity is the working specimen and can omit contaminants during treatment</li> </ul>	<ul> <li>All clean room staff wash, dress and prepare using official cleanroom garments</li> <li>Specimens or objects being worked on are decontaminated (or) are in isolation chambers and workers handle specimens using tools or robotics</li> </ul>
<ul> <li>Unrestricted office access</li> <li>The lobby door is open/unlocked, lobby accessible to anyone</li> <li>Lobby and clinical workspace are not isolated and share the same ambient air</li> </ul>	<ul> <li>Entry to room is double entry and air-tight</li> <li>Authorized employees only</li> <li>Strict entry/exit protocols.</li> </ul>
Windows to the outside are office/ residential grade and may leak     Sometimes windows are opened to allow fresh air inside	Rarely, if ever are there windows to the outside and if so, they are tinted, sealed and do not permit any external environments breaches
Clinical equipment will sometimes emit unfiltered or inadequately filtered exhaust air back into the operatory	<ul> <li>All air introduced into the contained space is filtered and flow is managed</li> <li>Temperature and humidity are controlled</li> </ul>
There are many irregular surfaces present. This includes ceiling light fixtures, air ducts, and work instruments that cannot be cleaned by traditional spray/wipe techniques	<ul> <li>The space is designed from the ground up for cleanroom operation- not retrofitted to become a cleanroom.</li> <li>Surfaces are considered during construction</li> <li>Industrial hygiene is engineered in from the start</li> </ul>

# 3 Part Harmony

- Localized Air Management
- Ambient Air Management
- High Intensity Air & Surface Management



So, while cleanrooms are getting a lot of media attention these days, they are highly specialized environments- imagined and built for a specific purpose. Because neither the intent nor the function of a cleanroom matches that of a dental office one cannot just cut and paste cleanroom protocol onto a dental or any other clinical setting. Rather, most would argue that a dedicated solution, imagined solely for clinical operations is the only workable answer. Such a solution would need to be affordable for a healthcare entrepreneur, easy to deploy- without office renovations and follow an operational protocol that is not disruptive. These requirements have given rise to the Pure Practice™. A Pure Practice is a clinical workspace that, through a combination of specific products and protocols can provide a safe, sanitized environment for patients, clinicians and team- working in 3-part harmony.

#### PART 1 Localized Air Management

Sometimes referred to as aerosol evacuation, localized air management is most often accomplished using a point-ofcare aerosol evacuation system. Most of these localized air management devices are designed to create a negative pressure slip-stream for capturing extra-oral salivary and respiratory droplets plus the plume of micro-mist released into the Local Protection Zone (LPZ) during treatment.

The goal of these point-of-care devices is to capture, funnel and filter the arrant, extra-oral vapor, and particulates through multi-modal filtration, including UV-C, H-14, and other technologies before releasing clean, processed air back into the operatory, where it is subsequently picked up by the ambient air management system.



Illustrating aerosol evacuation within the Local Protection Zone (~ 1 ft3)

### PART 2 Ambient Air Management

As we discussed earlier, clean rooms precisely manage ambient air. Cleanrooms are highly controlled in every way, having regulations for gowning and strict protocols for entry and exit.

However, in non-contained clinical settings, external contaminants are constantly introduced into environment. This can include outside air, fumes from the lab area, dead skin and hair, perspiration, clothing fibers, and particulates emanating from HVAC vents. Therefore, even if the clinician utilizes localized air management and is effectively managing the Local Protection Zone there are other sources of bacterial, viral and fungal contaminants that can easily enter the ambient air space.





A more comprehensive approach to safety would also include a robust ambient air management strategy capable of capturing air born particulates, (not) emanating from the Local Protection Zone. Recently, technologies such as ActivePure<sup>8</sup>, originally developed by NASA and made commercially available by Aerus, LLC, have been made commercially available so that private practices and other office environments can easily and affordably enjoy the protections of space age technology.

### PART 3 High Intensity...

As we have highlighted, clinical settings, unlike custom-built cleanrooms have nooks and crannies. Despite the best efforts to spray and wipe everything in sight, there are just some surfaces that one cannot access, reach, or even see that may be exposed to contaminants.

Therefore, the third, and final component of the Pure Practice system and protocol is High Intensity Air & Surface Management and the use of natural, eco-friendly solutions for both cleaning and disinfection.

Today, highly effective, natural solutions for cleaning and disinfection are available. One such technology from Clean Republic<sup>9</sup> utilizes the germicidal power of hypochlorous acid, a derivative of electro-activated water.





The biocidal efficacy of hypochlorous acid has been researched and is well documented. HOCl, as it is often referred to is the chemical produced by the human immune system to kill invasive organisms and fight infection. High Intensity Air & Surface Management, starts with the removal of visible bio burden on hard surfaces (between patients).

Following the removal of the visible debris any/all accessible surfaces of the operatory may be hand sprayed with Clean Republic Cleaning Solution and allowed to air dry – no wiping required.

### PART 3 High Intensity.... Cont

At specific intervals during the work day the Clean Republic Disinfectant Solution may be dispensed into the air using a small, hand-held electrostatic fogger – perfectly suited for private practices and other offices.

The anti-microbial mist dispensed from the handheld fogger blankets your treatment room, high traffic lanes or even the whole office with a whisper soft cloud of clean, clear disinfectant solution.

Virtually scent-free, non-corrosive, non-toxic and safe to the touch the biocidal cloud provides universal coverage of nooks, crannies, HVAC ducts, and everywhere standard cleaning might miss. Clean Republic's All-Purpose Cleaning Solution and it's Disinfectant+Sanitizer work harmoniously together and both products are packaged ready-to-use with no mixing, mess or complex storage requirements.





## THE PERSISTING REALITY

## "The option of investing proactively..."



Looking forward, as you return to full-scale operations your patients, and even your staff are sure to be watching you. As we noted earlier, dentists work in an exceptionally competitive profession- one that has been currently disrupted and is constantly being re-imagined.

Over the next months the virus-related media coverage is expected to prove more positive and consumer fears may begin to subside. Nevertheless, in this persisting reality modern consumers are expected to continue valuing products, services and solutions that are promoted as clean, safe, and natural.

Although clean is the in-thing, traditional cleanroom technologies do not fit the clinical space. Dentists now have the option of investing proactively, instead of reactively by adopting the Pure Practice system and utilizing Safe-Tec protocols – made especially for clinical offices.

Once established and promoted as an authorized Oralogix Pure Practice the entrepreneurial minded dentist will be well positioned within their local community and, even in a perfectly competitive market will be able to successfully rise above their rivals.

### **ABOUT** ORALOGIX



Oralogix began in 2004 as a patient specific device and oral appliance manufacturer where it made extensive use of disinfection protocols. Today, Oralogix (www.oralogix.com/professional) sources transformational technologies that allow providers to practice smarter and more holistically\*. We enable practice owners the ability to offer intra-oral, peri-oral and other on-trend and in-demand services- catering to the emerging specialty of Full Face Fitness™.

### "The dentist's guide to competition in the era of changing consumer attitudes preferences and expectation."

By: Press, J., Townsend, S. & Riggs, R.

At the onset we've taken the initiative of understanding today's healthcare consumer, then, armed with these insights we provide your practice with products and programs that help you invest proactively, capitalizing on the wants and expectations of the new, holistic minded healthcare buyer.

To that end, Oralogix avoids commodity and/or metoo products- items easily found at mega dealers and dot-com discounters. We believe that every item in our catalog can be a catalyst for change, for expansion, for true practice transformation. The market has

shifted. Today's consumer wants convenience, safety, clean spaces, natural products and they want integrative, holistic healthcare. The Oralogix Safe-Tec product portfolio allows smart, forward thinking providers the ability to attract and retain these modern healthcare consumers.

\*Holistic, def: relating to or concerned with wholes or with complete systems rather than with the analysis of, treatment of, or dissection into parts.

Merriam-Webster.com, 09/2020

### **ABOUT** THE AUTHORS



**Janet Press, RDH,** is a Fellow in Laser Dentistry, Dental Hygienist, educator, and coach. With over 35 year's clinical experience Janet brings together a blend of science, cutting-edge patient care, expanded practice protocols, and professional motivation to Dental Health Professionals. Ms. Press served ten years as Team Director at the Las Vegas Institute for Advanced Dental Studies, is an internationally recognized KOL in Dental Hygiene Laser Education and was named "Distinguished Dental Professional" by Dentsply International. Janet is the owner of 21st Century Dentistry, an approved CE provider for Laser Certification programs throughout the United States. info@janetpress.com www.janetpress.com



**Stacey Townsend, PhD**, has over eighteen years of academic research and preclinical development experience with expertise in host-pathogen interactions supporting biotechnology with a broad range of therapeutic indications and disinfection applications. Stacy has successfully led R&D efforts resulting in numerous patents, grants, and IND submissions. She earned her PhD in Veterinary Microbiology from Texas A&M University, a BS in Biology from the University of California, Riverside



**Robert Riggs, MSc, CDT, FICOI,** is the founder and managing member of Oralogix, LLC, a healthcare consultancy and specialty retailer of oral and peri-oral care products. He has over 25 years of experience in product innovation, commercialization and entrepreneurship. Riggs is a member of OSAP, the Organization for Safety and Asepsis Procedures; a Fellow of the ICOI, International Congress of Oral Implantologists and a member and content contributor for Dental Management Science, LLC. Robert holds a Master of Science from Johns Hopkins University, Carey Business School with post-graduate study at Temple University, School of Pharmacy. He can be reached at info@oralogix.com

- 1. Reckitt Benckiser, Slough UK
- 2. The Clorox Company, Oakland CA
- Maslow, A. H. (1943).
   A theory of human motivation.
   Psychological Review, 50(4), 370–396.
- Environmental Protection Agency. (2019) https://cfpub.epa.gov/airnow/ index.cfm?action=aqibasics.aqi
- Shannon MA, Bohn PW, Elimelech M, Georgiadis JG, Mariñas BJ, Mayes AM. (2008) Science and technology for water purification in the coming decades. Nature. 452(7185): 301-10. https://doi: 10.1038/nature06599. PMID: 18354474.
- Center for Disease Control. (2019) https://www.cdc.gov/coronavirus/2019-ncov/ prevent-getting-sick/how-covid-spreads.html
- Block, M. S., & Rowan, B. G. (2020).
   Hypochlorous Acid: A Review.
   Journal of oral and maxillofacial surgery:
   official journal of the American Association of
   Oral and Maxillofacial Surgeons,
   78(9), 1461–1466.
   https://doi.org/10.1016/j.joms.2020.06.029.
- 8. Aerus Corporation, Dallas, TX
- 9. Clean Republic, Boulder, CO





WWW.ORALOGIX.COM

1968 S. COAST HWY., SUITE 645 LAGUNA BEACH CA 92651