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The Reformation of Professional Roles Within Dentistry: The Dawn of the Periodontal Therapist—Part 3

The February 2003 Perio Pathways column launched the first article in "The Dawn of the Periodontal Therapist" series. The column introduced the "Service Profit Chain,"[1] which illustrated the ways practice profitability and hygienists' compensation is directly related to patients' loyalty, which is a result of their satisfaction with the value of the care they receive, which, in turn, is directly related to the periodontal therapist's ability to achieve optimal clinical end points. Full use of the periodontal therapist within a general practice setting translates into a significant win-win-win scenario for all stakeholders. I refer to them as the "winners" of this reformation of professional roles because they all stand to gain so much. They include periodontal patients, general dentists, periodontists, manufacturers of periodontal products, and master hygienists who strive to practice at the specialty level of periodontal therapist.

In April 2003, Part 2 of this series introduced the profile of today's health care consumer and discussed ways to nurture their value for periodontal therapeutics. Characteristics of today's consumer-patient were presented: their expectations of wellness over the repair model of health, their appetite for information that will allow them to "be in control" of their own bodies, and their penchant for finding the best care. The consumer-patient value equation (Figure 1) was introduced to help readers understand that value in the eyes of the consumer-patient will be created only if patients' satisfaction with treatment outcomes and their perception of the way that care is delivered is greater than the cost they will incur to receive that care. Part 2 also discussed the denominator of the value equation—the high cost of periodontal care, and the hurdles in achieving patient commitment for treatment.

Part 3 of this series will discuss the numerator of the consumer-patient value equation; results produced and the process quality. These factors relate to periodontal therapists' ability to achieve optimal clinical outcomes and how well care is delivered. Their ability to produce results and provide dependable, responsive, authoritative, empathetic care—along with tangible evidence that treatment was successful—is what distinguishes a hygienist who is performing at the periodontal therapist level.

Part 3—Creating and Fulfilling Patient Expectations of Periodontal Care and How it is Delivered

The results produced part of the numerator in the value equation is all about whether patients' posttreatment satisfaction, as measured by the fulfillment of their pretreatment expectations, has been met. The key to fulfilling our patients' expectations is in creating those expectations.

The best way to ensure that we are creating and satisfying patient pretreatment expectations is to teach them very basic periodontal concepts. Taking the time to explain what constitutes a healthy periodontium, and what type of clinical parameters indicate inflammatory periodontal activity or evidence of past disease activity actually allows us to "create" our patients' expectations. It also gives them a preview of what successful periodontal treatment will look like. The initial time we spend educating patients establishes important benchmarks for their comparison of pretreatment baselines and posttreatment outcomes. If we have successfully communicated this information, patients will have a basis on which to judge whether clinical outcomes were optimal. They will also begin to see firsthand how the neglect of self-care routines, noncompliance to host-modulatory therapy (such as Periostat®, CollaGenex Phamaceuticals, Inc Newtown, Pa), or disregard for the need to eliminate or modify risk factors impacts periodontal stability. Patients can now "connect the dots" because we have empowered them to take control of their own bodies.

The yardsticks patients use to measure delivery of care relates to the clinician's dependability, responsiveness, authority, and empathy, and tangible evidence that treatment was performed.

The medical community has long recognized that their patients' assessment of quality of care was directly tied to their levels of satisfaction.[2] Although patient satisfaction with dental care as it relates to their assessment of quality has not been widely studied, a small research project recently conducted points out an important factor related to patient satisfaction in periodontal care.[3] One of the purposes of the study was to compare patient expectations before periodontal surgery with their level of satisfaction after surgery. Although the study had limitations in terms of sample size and the use of a self-reported questionnaire, the high levels of dissatisfaction expressed by patients regarding prevention-related factors, such as obtaining information on etiology, progress, prognosis, and preventive methods was very significant. Interestingly, satisfaction scores for pain during treatment, fear of treatment, and cost of treatment increased significantly after treatment, meaning patients reported favorably on these parameters. Yet, their overall perception of the value of care they received was compromised because patients' "desire for knowledge of periodontal disease prevention" and "desire for knowledge of recurrence control methods" were not fulfilled. The researchers concluded that the satisfaction levels of periodontal patients and, therefore, their assessment of the quality of care could be significantly increased simply by providing information on preventing periodontal disease, disease management strategies, etiology, disease progression, and prognosis.

The other part of the numerator of the consumer-patient value equation is process quality. This is the way periodontal therapists deliver care. The yardsticks patients use to measure delivery of care relates to the clinician's dependability, responsiveness, authority, empathy, and tangible evidence that treatment was performed.

What does *dependability* mean? For periodontal therapists, it means not compromising on the quality of care we render, including a commitment to present both optimal and alternative treatment plans, regardless of whether a patient has managed care benefits or is a millionaire. It also means self-critiquing and asking for honest peer review of our technical competency, and consistently striving to increase technical competency, production efficiency, and novel approaches to patient empowerment. It also means that our philosophy of practice is so much ingrained in who we are that we are virtually unflappable in practicing according to accepted standards of care, and that patients have come to rely on the constancy of the quality of care we deliver. Patients have come to appreciate periodontal therapists' distinct capabilities in performing oral risk assessment and incorporating periodontal/medical prevention strategies into everyday practice. Finally, one of the reasons periodontal therapists rank high in dependability is because patients know they have done their homework; they know they are leading-edge in their knowledge base, both its depth and breadth, and they have come to rely on periodontal therapists for information that is scientifically based.

Periodontal therapists are *responsive* because they take responsibility for treatment outcomes.

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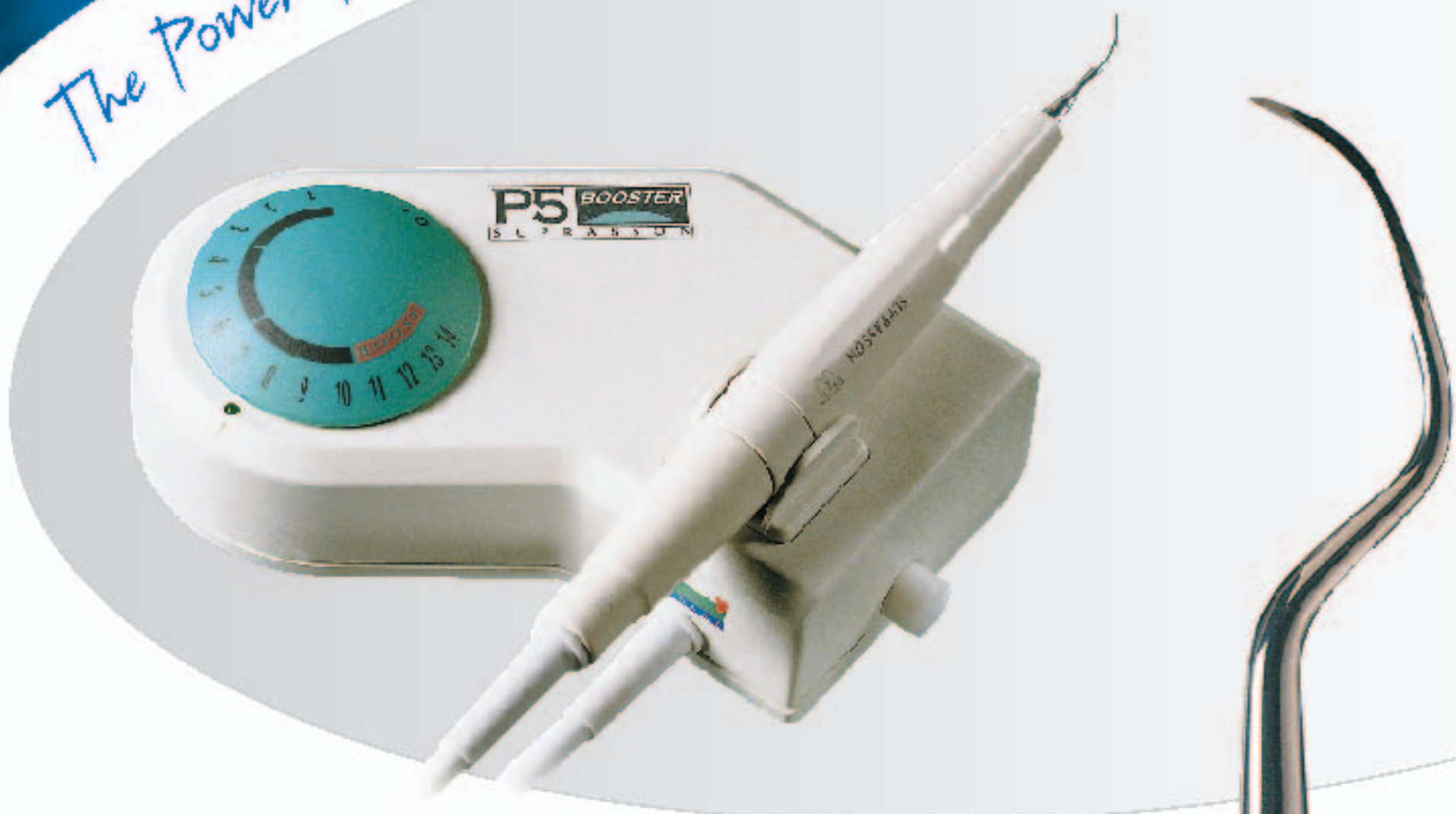

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$$\text{Value} = \frac{\text{Results Produced + Process Quality}}{\text{The Cost of Care}}$$

Figure 1—*The consumer-patient value equation. Value "in the eyes of the consumer-patient" will be created only if their satisfaction with treatment outcomes and their perception of the way that care is delivered is greater than the cost they will incur to receive that care.*

They can commit to this responsibility because they understand that (a) not everyone is universally susceptible to chronic periodontitis; (b) host response is necessary for etiological progression, independent of the bacterial ecology of the periodontium; and (c) as a primary health care provider, they have ultimate responsibility for linking the health status of the oral cavity to the rest of their patients' bodies. The reason they are comfortable with the treatment recommendations they make to their patients is because they build disease-management strategies into treatment plans that address each of the factors mentioned above. When cases deteriorate, periodontal therapists want to know why, and then figure out how to control for that variable, much like quality assurance engineers do in manufacturing industries. Periodontal therapists are not content when their patients present with "status quo" clinical findings at periodontal maintenance visits. Another quality that distinguishes periodontal therapists is the responsibility they assume for the overall success of the dental practice in terms of quality of care and the financial health of the business.

One of the most important differences in the periodontal therapist model is their level of *authority*. The key to understanding how periodontal therapists can achieve authority is in realizing that people just do not give others authority over their lives if they don't believe they are fully capable or if they mistrust their motives. For today's consumer-patient to voluntarily give a health care provider authority over his or her body, that consumer-patient must believe in the capability and the motivation of that health care professional. Frankly, that is quite an honor for periodontal therapists, because they worked very hard to learn independently what they needed to master to instill that level of patient confidence. Authority is also closely related to the responsibility periodontal therapists take for treatment outcomes.

Empathy means being sensitive to the experiences and emotions of a patient without allowing our feelings to cloud what is in their best interest. Carranza wrote, "The interest should be in the patient who has the disease and not simply in the disease itself."[4(p432)] How true. I'd like to share one of my most difficult professional moments. Halfway through completing a full-mouth probing on a 43-year-old woman who had suffered from insulin dependent diabetes since she was a teenager, I saw tears in her eyes. When I stopped to ask her if the procedure was too painful, she assured me that it was not the procedure that hurt her, but the revelation that no previous clinician had identified that she had a periodontal condition. Her sense of helplessness was magnified by the advancing retinopathy and muscular degeneration she was experiencing as a result of the young age of diabetic onset. Because I had explained the significance of the probe readings before we began, she knew halfway through the examination what the outcome of those findings would be. For an instant, my sense of despair for her almost convinced me that she would best be served by just putting away the probe and scaling and polishing her teeth, a procedure she had come to expect. The story has a happy ending, though. After one-stage full-mouth scaling and root planing, adjunctive antimicrobial therapy, long-term host- modulatory therapy (Periostat®), consistent tracking of glycated hemoglobin levels against periodontal status, faithful compliance to self-care routines, and 2-month periodontal maintenance intervals for the first year posttreatment, this patient has sustained clinical attachment gains throughout her mouth and significantly decreased glycated hemoglobin values compared to pretreatment status. This patient has often shared her gratitude for the disease intervention that was performed.

In cases like this, *tangible evidence* that treatment was performed is rather obvious. Yet, most cases we see each day are not quite this dramatic. However, clinicians who practice at the level of periodontal therapist will be careful in the periodontal evaluations of patients who present with established risk factors such as diabetes, smoking, and suspicion of genetic susceptibility (interleukin-1 positive). Discussing the high odds ratio (2.1 to 3) that diabetics have of developing periodontal disease,[5] the bidirectional relationship of diabetes and increased occurrence and progression of chronic periodontitis, and the association of periodontal disease activity and glycemic control[6] is information that is critical to a diabetic's systemic health.[7] Pointing out that successful periodontal treatment decreases inflammation and also improves diabetics' insulin sensitivity is an obvious incentive for diabetic periodontal patients to comply with recommended periodontal maintenance intervals and self-care routines.[4(p238)]

For today's consumer-patient to voluntarily give a health care provider authority over his or her body, that consumer-patient must believe in the capability and the motivation of that health care professional.

Periodontal therapists will also be astute in intercepting multiple risk-factor syndromes such as obesity, type 2 diabetes, hyperlipidemia, hypertension, and arteriosclerosis, which have additive effects in worsening the clinical courses of diseases. Patients with these kinds of multiple risk factors who present with coexisting periodontal disease may have chronic inflammatory responses that significantly increase their risk for systemic disease progression.[8] Based on recent findings, gingival inflammation may be considered a more significant risk factor for coronary artery disease (CAD) than previously reported.[9] This means that even the slightest manifestations of gingival inflammation may be significant in the whole body picture of patients with personal or familial history of CAD. Although following a patient's laboratory values of serum glucose, cholesterol, and C-reactive protein has not been established as routine in general dental practices, clinicians may actually be able to use this information to establish the presence or risk of systemic disease and make early referrals to medical experts.[10] I believe this fits squarely into the responsibility a periodontal therapist has in disease prevention and intervention. When clinicians become astute screeners for underlying systemic conditions, the value of the care we render significantly increases in the eyes of mastery-seeking consumer-patients. Decreasing the risk for preterm low-weight babies by intercepting early-stage chronic periodontitis in women during childbearing years is yet another opportunity to provide tangible evidence of our ability to render the highest levels of prevention and quality of care. A recent study confirmed that even gentle mastication is able to induce the release of bacterial endotoxins from oral origin into the bloodstream[11] in patients who present with gingival inflammation. This is especially important for patients who are at risk for subacute bacterial endocarditis or who have artificial joints, because it is critical for them to maintain periodontal health.[12] The elderly, immunocompromised, and other patients who are at high risk for respiratory infections should be monitored very closely to intercept the earliest stages of periodontal involvement. Their host defense's weakened ability to eliminate bacteria that colonize in the lower respiratory tract from the oropharyngeal region makes it important to maintain periodontal wellness.[12] There is mounting evidence of the oral cavity acting as a permanent reservoir for the *Helicobacter pylori* bacterium, a known pathogen associated with gastric ulcers as well as gastric cancers.[13] One study found that patients with pocket depths of ≥ 5 mm were at increased risk for *H pylori* seropositivity.[14] It is possible that transmission from the oral cavity as a result of long-standing periodontal inflammation and recolonization within gastric organs places patients at greater risk for serious gastric consequence.[13] It is not within the scope of this article to discuss other opportunities (and responsibilities) we have to screen for underlying systemic disease or perform therapeutic seeding for at-risk patients who still present with periodontal health. This form of primary prevention has great value, and diag-

nostic and prognostic instruments that allow us to provide this care will be hailed by consumer-patients bent on wellness preservation.

When patients understand the concept of chronic-disease management, they readily accept treatment recommendations that may be costly. They have come to understand the significance of 5-mm bleeding pockets that have failed to stabilize and appreciate the need for placing localized subgingival antimicrobials in areas that have not responded to nonsurgical treatment. Educating patients in the pathogenesis and etiological progression of chronic periodontitis, analyzing information from medical histories and oral risk questionnaires, and communicating those findings to patients is essential in bringing about their awareness of the risks associated with periodontal disease. Demonstrating what we are assessing during the periodontal evaluation, including the significance of probe readings, the relationship of bleeding on probing and active sites of inflammation, and why certain occlusal relationships exacerbate periodontal pathology help to create the right patient expectations for periodontal therapy. Facilitating a thorough understanding of the importance of compliance to prescribed host- modulatory therapy will also be essential in creating a trend toward a stable periodontium.

It is in underpromising results, overdelivering on therapeutic outcomes, "out-of-the-box" patient encounters like screening for underlying systemic disease, and pulling out all the stops in primary prevention and early-stage interception of disease states that we will nurture the perception of quality "in the eyes" of our patients. This will allow us to enlist satisfied consumers as our "patient apostles." Philosophies of practice dedicated to the wellness model, operational structures that allow us to spend more time with our patients, and allocating a dental assistant to work alongside a periodontal therapist must be committed for a practice to transition to this level of comprehensive care. This type of value-added care will frame a new paradigm for achieving patient satisfaction. For those who practice at the periodontal therapist level, it already has. COH

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