

**Practice Analysis Report Prepared For:**

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**January 31, 2007**

## Executive Summary

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Based on the data you provided, your total adult patient population >29 years of 1,000 patients are projected to exhibit the following combinations of risk and disease severity:

Score Range		Current Disease Score				total of risk category	% of risk category
		1-3	4-10	11-36	37-100		
Severity Category		Health - Gingivitis	Mild Periodontitis	Moderate Periodontitis	Severe Periodontitis		
Current Risk Score	1,2	287	284	69	0	640	64%
	3	26	106	19	22	173	17%
	4,5	0	17	84	86	187	19%
total of disease category		313	407	172	108		
% of disease category		31%	41%	17%	11%		

**Patients sample size used to prepare this report:** 777  
**The mean of all PreViser Risk Scores is:** 2.45  
**The mean of all PreViser Disease Scores is:** 16.03

From this distribution of disease risk and severity, we can estimate that your patients will require the following care over the next twelve months to optimize their periodontal health:

**Quadrants of Scaling and Root Planning:** 709  
**Prophylactic Appointments:** 244  
**Surgical procedures, assumed to be performed by specialist:** 180  
**Periodontal Maintenance Appointments:** 1,584  
**Patients who may be considered for referral to a periodontist:** 127

**Full Time Equivalent Hygienists required for adult preventive care:** 1.58  
**Full Time Equivalent Hygienists required for scaling & root planing:** .63

**Projected hours of review and management by dentist(s):** 208

**Projected gross revenue for non-surgical procedures:** \$357,856

**Implied gross revenue per hour of dentist's time:** \$ 1,720  
**Implied revenue per hour of hygienist's time:** \$ 101

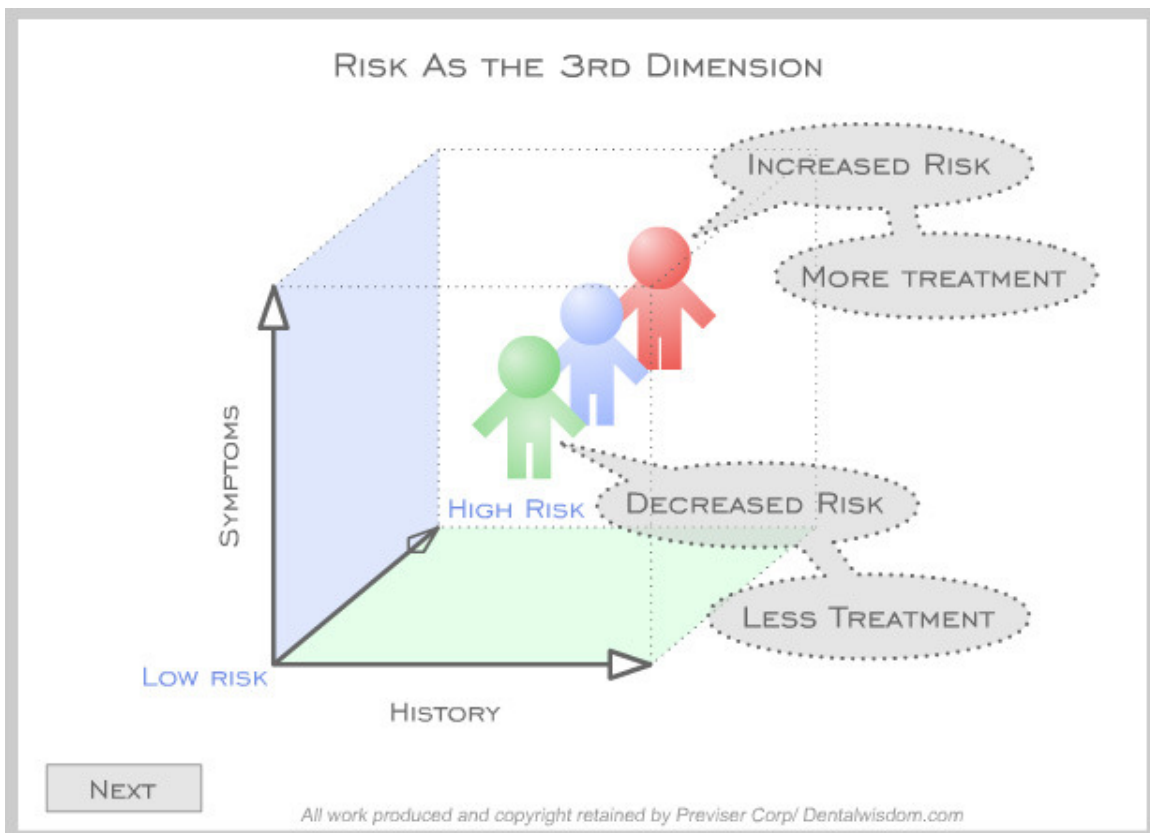
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For a discussion of the above terms, please refer to the 'Explanations of Terms' tab of this report

## Explanation of Terms

### PreViser Risk Scores

Disease risk is an essential element of appropriate treatment planning, since two patients may have the same level of disease severity yet be at different risk of the disease state advancing. Consequently, these two patients may need different treatment plans to address their respective disease states, with the difference between the two treatment plans determined by risk. The following illustrates this concept.



Periodontal disease risk for your test group was determined using the PreViser Corporation clinically validated Periodontal Assessment Tool™ (PAT), and showed a mean score of 2.45. The data you supplied regarding smoking history, diabetic status, care frequency, clinical history and other clinical data was used to calculate risk on a 1 to 5 scale, where a score of 1 indicates very low risk, while a score of 5 indicates very high risk.

The first validation study for this technology was published in JADA, *Validity and Accuracy of a Risk Calculator in Predicting Periodontal Disease*, R. C. Page et al, 2002, a copy of which can be found in the appendix of this report. A follow on paper was published in the Journal of Clinical Periodontology, *Longitudinal validation of a risk calculator for periodontal disease*, R. C. Page et al, 2003,

volume 33, pages 819-827. In these papers, it was reported that the PAT™ was an extremely accurate method for predicting the likelihood that a periodontal disease state would develop, or if present, worsen.

The ability of dental clinicians, including expert periodontists, to subjectively determine periodontal disease risk has also been examined and these subjective judgments have been found to lack clinical accuracy. These results were published in JADA, *Assessing periodontal disease risk*, R. Persson et al, 2003, a copy of which you may also find in the appendix.

### **PreViser Disease Scores**

To simplify a description of your test group's level of disease severity, a PreViser numeric disease score was assigned to each patient. This score is expressed on a 1 to 100 scale, where a score of 1 represents health, while a score of 100 represents severe disease throughout the dentition. For the analytic purposes of this report, PreViser scores have been grouped into 4 broad severity categories:

1. Health and Gingivitis, PreViser score 1 - 3
2. Mild Periodontal Disease, PreViser score 4 – 10
3. Moderate Periodontal Disease, PreViser score 11 – 36
4. Severe Periodontal Disease, PreViser score 37 - 100

This numeric scoring system provides a guide to what therapeutic interventions may be appropriate for quadrants of dentition exhibiting disease. In turn, these estimates of the procedures required to restore health to the patient population are used to calculate the economic and manpower impacts of treating the disease that was found.

### **Risk/Disease Matrix**

For any population of patients, there will be a range of periodontal disease severity, and within each severity grouping, some patients will be at higher risk than others of the disease state worsening. PreViser uses a 3 x 4 grid to characterize patients within a practice as to their disease severity and disease risk. This combination of risk and disease gives a comprehensive picture of the overall health of the population and indicates where more intensive interventions may be indicated, even when different patients share the same general disease state.

### **Quadrants of Scaling and Root Planing**

PreViser collects information on the deepest pocket encountered per sextant of dentition. This information has been used to quantify the number of quadrants of SRP likely to be required by the patient population. Some patients will have more active sites requiring SRP than others, but over your entire patient population, these differences tend to average out, allowing for a prediction of the number of CDT codes 4355 and 4341 to be provided. This calculation in turn

becomes a component for determining the number of hygienists and the billable revenue based on your reported reimbursement rates.

### **Prophylactic Appointments**

Patients at elevated levels of risk require more intensive preventive interventions than patients at lower risk. For example, a patient with a PreViser risk score of 4 (high) with gingivitis would be recommended to be seen three times per year, while a patient with a risk score of 1 (very low) with gingivitis might reasonably be seen only once every 18 months. The number of prophy appointments and the revenue generated from your modeled population are calculated from these risk scores, and reflect the preventive care suitable for patients without a diagnosis of periodontitis.

### **Surgical procedures**

Surgical procedures are calculated from the sextant pocket depth and bone height data submitted through the sample assessments. While some general dentists may perform surgery, this analysis presumes that all surgery will be performed by specialists to whom the general dentist refers those patients requiring this level of intervention, and so does not affect the projected revenue calculated for your practice.

### **Periodontal Maintenance Appointments**

All patients who have a diagnosis of periodontitis based on their disease scores are presumed to receive periodontal maintenance after active therapy, which would include those patients you reported are currently receiving active periodontal therapy.

### **Patients who may be considered for referral to a periodontist**

Each practice has its own criteria for when a patient should be referred to a periodontist, and many patients may prefer not to be so referred. For the purposes of this analysis, we have assumed that the guidelines developed by the American Academy of Periodontology would be followed by the dentist, and that all surgical procedures would be done by the specialist.

### **Full Time Equivalent Hygienists required to provide this care**

Appropriately trained hygienists are capable of managing most of the care for the periodontally affected patient. For this analysis, we presume a full time hygienist is working 1,600 hours per year. The calculation of how many such hygienists are required is based on 60 minutes for a quadrant scaling and root planing procedure, 60 minutes for a full mouth periodontal maintenance appointment and 45 minutes for an adult prophy examination.

## **Projected hours of review and management by dentist(s)**

Different clinicians wish to spend varying amounts of time with hygiene patients. Some of that time may be spent reviewing chart information, checking periodontal 'hot spots', verifying the diagnosis and the treatment plan, and conducting patient 'PR'. Clinicians using the PreViser system may still wish to conduct patient PR, but the numeric scoring simplifies and dramatically speeds up identification of improvement or deterioration in patient health in response to the treatment plan. Based on average consultation time observed from dentists using the PreViser system, it is estimated that the dentist's time spent to manage the perio patient will be 7.5 minutes for a periodontal consultation and 4 minutes for a preventive examination consultation.

## **Projected gross revenue generated**

Projected gross revenue is calculated from the data you supplied on the percentage of your patient population that is insured, what you are paid for different procedures by insured and uninsured patients, and the number of procedures needed to optimize health that can be calculated from the PreViser risk and disease matrix that describes your population.

For the purposes of this calculation, revenue from surgical procedures your patients may need is excluded from this projection. Further, this revenue calculation is the **maximum** revenue potential and does not take into consideration care you are already providing patients. For example, one dentist might already be treating 75% of the disease within his patient population, while another might only be treating 50%. Additional revenue from an active hygiene program can therefore only be calculated by subtracting what is currently being generated in your hygiene practice from this potential revenue calculation.

Not included in this calculation is the practice economic value of the use of adjunctive therapeutic interventions, including systemic antibiotics (less common), host modulators (less common), and locally applied anti-microbial agents (commonly used).

## **Implied revenue per hour**

This is a simple calculation of the calculated gross revenue of your modeled hygiene practice divided by the number of hours we estimate you will have to spend directly managing this practice.

## Data You Provided

Procedure	Fee charged	Insurance fee allowance or fee if not a covered procedure
Dr consultation for periodontal treatment	\$35.00	\$25.00
Dr evaluation for preventive treatment	\$20.00	\$15.00
Scaling and root planing (per quadrant)	\$200.00	\$150.00
Surgery (per quadrant or procedure)	\$600.00	\$400.00
Prophylaxis excluding exam fee (per visit)	\$75.00	\$65.00
Periodontal maintenance excluding exam fee (per visit)	\$100.00	\$90.00

Practice Characteristics	
% of patients that are insured	60%
# of adult patients >29 years	1000