

What is PerioPal?

PerioPal is a verbal software tool allowing hands-free periodontal charting. Using PerioPal, exam findings are recorded into a headset attached to the user's choice of hardware — laptop, desktop, or integrated system. PerioPal also supports the manual input of periodontal data using mouse and keyboard.

PerioPal uses Voice Commands. Only commands available for input are recognized.

PerioPal's Voice Command vocabulary consists of abbreviations and shortcut commands that enable accurate recording of periodontal data in a shorter amount of time. These commands are used to verbally record, chart, and store tooth types, probing depths, gingival margins, bleeding, suppuration, and other clinical findings such as mobility, furcations, plaque, and inaccurate gingival attachments. Clinical attachment levels are automatically calculated.

Practice Usability:

PerioPal was designed to be easily interfaced to most popular dental systems using a customized integration tool called **DataGrabber**. DataGrabber from Apteryx Inc. allows the automated transfer of patient name, birth date, and record ID number to be passed to PerioPal. The DataGrabber interface eliminates the need to modify your dental office system software and still have a fully integrated solution.

A network version of PerioPal can be installed on a shared network drive for multi-user applications.

How does PerioPal work?

During a periodontal exam, a clinician speaks PerioPal's Voice Commands into a headset microphone attached to a computer. The user's verbal commands are recognized and converted into word signals.

These signals are matched with a list of authorized word commands that are stored in PerioPal's command bank. When the word signals correspond to the commands, data and images indicative of those commands are displayed on the computer screen.

When the exam is complete, the clinician may stop recording, store the data, and print four different reports with the captured exam data.

How is PerioPal different from the existing voice-driven periodontal charting systems?

Technology . . . Voice Dictation vs. Voice Command:

Many voice periodontal charting software programs use **Voice Dictation** technology to control the verbal input of the exam. The big drawback of using a voice dictation system is that each word must be compared to thousands of words in a large vocabulary before it can be recognized. Voice dictation is designed for building text sentences and paragraphs.

PerioPal uses **Voice Command** technology. This speech system restricts the vocabulary to less than 200 specific words, significantly improving accuracy and speed in word recognition. With PerioPal there are fewer than 100 recognized words with any given screen. Although periodontal exams are tedious and repetitive, there are relatively few words needed to report the patient's oral health.

PerioPal was designed for voice input. Other voice activated periodontal recording systems were designed for mouse and keyboard input, then modified to support voice activation. Every facet of PerioPal is designed to facilitate accurate and rapid data capture during the recording of a periodontal exam.

Technique . . . PerioPal reduces the Number of Spoken Words!

PerioPal's vocabulary consists of abbreviations and shortcut commands that enable the accurate recording of periodontal data in a shorter amount of time by reducing the number of spoken words.

Abbreviated Commands combine a numeric periodontal measurement with an abbreviated clinical condition!

Saying "**R3**" indicates 3 millimeters of Recession.

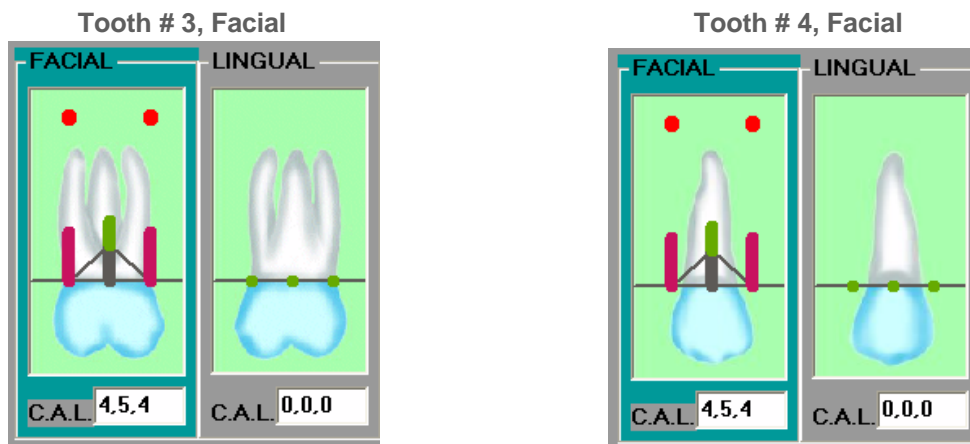
Saying "**TriMesial 3**" indicates Class III Mesio-lingual Trifurcation

Shortcut Commands direct PerioPal to chart the verbalized data in a specific manner!

Saying "**Repeat**" indicates the data matches the previous tooth surface.

Saying "**InterBleed**" indicates interproximal bleeding

Three great benefits come from using this innovative technique: voice recognition accuracy is greatly increased; there is flexible entry of data; and users can efficiently perform the exam in a single pass!



Say:
" Crown · 4 · 2 · 4 · R3 · InterBleed "

Say:
"Repeat"

Confirmation Sounds . . . Keep Users on Track!

As the exam occurs, tooth numbers are spoken to the clinician according to an automatic Tooth Sequence determined by the user during the initial setup of the software. When the program is prompted to move from one arch or tooth surface to the next, the program verbalizes the tooth position. (“Upper”, “Lower”, “Facial” or “Lingual”).

SURVEY SAYS! Users do not prefer to hear their previously recorded data repeated back by the computer. To supersede this playback, PerioPal uses two distinct audible tones to confirm the recording of data. A “Click” indicates facial surface data; a “Pop” indicates lingual surface data.

Spoken tooth numbers and audible tones allow the clinician to more accurately record a periodontal exam, focus visual attention in the oral cavity, and perform the exam with greater ease.

Flexible Data Entry . . . See it, Say it!

The order of data entry for each tooth is flexible. Using commands, clinical findings may be recorded in any order.

Other programs have a set path of data entry that is charted accordingly until it is reprogrammed or unlocked to allow changing the order of data entry. Users have also reported the tedium of being required to navigate through several dialog boxes and cascading menus in order to perform simple data entry.

Single Pass Data Capture . . .

PerioPal’s verbal commands make it possible to perform the exam in a single pass through the mouth. The clinician is able to verbalize all oral conditions as they are observed. Multiple pass methods are also supported.

SideBar . . . Record more Observations!

Clinical conditions such as tooth anatomy, malpositions of teeth, dental restorations, dental appliances, and plaque deposits contribute to periodontal disease. If such conditions are observed, the exam may be interrupted and observations can be recorded by giving the verbal command “SideBar”. A screen appears allowing the verbal recording of 72 clinical elements relating to the periodontal condition of the current tooth.

If abnormalities of the head, neck, and/or oral cavity are observed as the exam occurs, the clinician can command “Check This”, alerting re-examination of the observed quadrant location before the exam is completed.

ReProbe . . . Charting ‘Cruise Control’!

Unique to PerioPal, **ReProbe** is a command used to re-evaluate site specific areas of concern.

Re-Probe instructs PerioPal to automatically determine which teeth need re-examination from a previously completed exam. The system then focuses on each tooth needing re-examination and speaks that tooth number . This allows the clinician to remain focused in the mouth while collecting exam data.

How is PerioPal licensed?

Known for its innovative approach to solving the challenges of traditional periodontal charting, PerioPal focused on the needs of the dental practice with two new licensing policies.

Pay-Per Use and Unlimited Licensing are our response to feedback from practice owners concerned that the cost of purchasing **multiple licenses or devices** for periodontal exams could not be justified. Any new service or procedure being incorporated into a practice must be economically feasible, and periodontal exams are no exception. Because the fee structure for periodontal exams is relatively low, the tools acquired to perform the exams should be suitably priced.

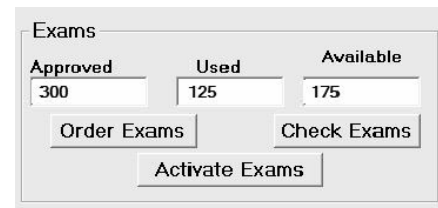
Your concepts and insightful questions gave PerioPal a 'Licensing Makeover'.

You asked, "Why can't we put PerioPal on the server and share it?"

While PerioPal's speech application could not be distributed on a server, we discovered that our 'Exams' could be! This discovery led to an innovative 'per-use' licensing policy enabling the system to be installed on as many workstations as desired! An unlimited number of users can voice train, record, chart, and report a periodontal exam.

All workstations sharing a database are able to access a common pool of activated exams. When a new exam is recorded, the system utilizes one 'Available' exam in the purchased or 'Approved' exam block.

Pay-Per-Use: Once the exams have been used, additional blocks of exams may be purchased ('Order Exams') through a simple transaction activating the additional exams on the database.



Exams		
Approved	Used	Available
300	125	175
<input type="button" value="Order Exams"/>	<input type="button" value="Check Exams"/>	
<input type="button" value="Activate Exams"/>		

Unlimited Licensing: After the 25 exam evaluation period, users can purchase an unlimited license enabling the system to be installed on as many workstations as desired! An unlimited number of users can voice train, record, chart, and report a periodontal exam. Unlimited Licensing is available for one server per location. Unlimited Licensing sales are final.

Pay-Per-Use clients may convert to Unlimited Licensing at any time at the unlimited price.

Additional Hardware and Services:

- Compatible Microphone Hardware
- Networking and Integration Services
- Support and Training Packages are available
- **Dental School Donation** for programs recognized by the Commission on Dental Accreditation
- **Corporate Pricing** available

Getting Started with a Download Version of PerioPal



1. Download Adobe Reader

If you do not have Adobe Reader on your system, download Adobe Reader first. PerioPal periodontal charts are printed in PDF format. Adobe Reader will allow viewing of these reports.



2. Purchase a Headset

We suggest purchasing your PerioPal-compatible microphone headset and USB sound device from our recommended audio hardware specialists.

*Alternatively, you can start with a lower quality USB headset for software evaluation only- **NOT** for daily use with PerioPal.*



3. Download PerioPal

PerioPal's trial version contains 25 Trial Exams and is **100% functional**. Follow the steps for downloading and registering your copy. To use the software beyond the Trial Exam period, simply order more exams and have your system bridged and/or networked.



4. Print Training Materials

Once PerioPal is downloaded, users will receive an email containing links to the printable PerioPal Installation and Training Workbook. Hard copies are available for purchase.

How are the blocks of PerioPal exams priced?

The price per exam is based upon the number of exams purchased. Purchasing in volume will save as the cost per exam decreases at higher quantities. Ongoing software upgrades are automatically included.

Total	Price	Price Per Exam
25	75.00	2.99
50	125.00	2.49
100	199.00	1.99
500	895.00	1.79

Summary of Features:

Description:

The Free Download version of PerioPal is voice driven software for periodontal examinations. Using an innovative technique, users have an improved method of independent recording that shortens the enrollment time of data, increases the accuracy of the exam, and decreases the tedious task of periodontal charting.

PerioPal's vocabulary consists of customized abbreviation commands to verbalize all clinical conditions as they are observed. Users have the freedom to record periodontal data in any order.

Probe Included:

Manual Probe Utilized

Voice Activation:

Voice Command Technology

Voice Callout:

English following the Universal and FDI Numbering Systems

Quantity:

Unlimited Workstations on a single server based on one server per location

Warranty:

12 month Warranty on Software Product

Microphone and USB Sound Device:

Purchased separately. High quality hardware recommended for optimal results.

Patient Education:

Examination Summary Reports, Comparative Analysis Report, Educational Handouts

Charting Components:

Commands verbally record Probing Depths, Gingival Margins, Bleeding, Suppuration, Mobility, Furcations, Plaque, and Inaccurate Gingival Attachments. Clinical Attachment Levels and ADA Diagnosis are automatically calculated. AAP Classification available.

Other Features:

The 'Accelerated Advance' option rapidly enrolls periodontal data, the 'PROPOSED LAA' feature facilitates optimal clinical assessments, RePROBE automatically guides users to areas of concern.

Compatible Practice Management Systems:

PerioPal comes Network and Bridge Ready. Interfaces to Dentisoft, Eaglesoft, ComputerMate, The Complete Dental System, Open Dental and The Dental Writer. Interfaces to other dental systems available with a customized integration tool, DataGrabber from Apteryx, Inc.

System Upgrades:

Software Upgrades are available

Customer Service:

Comprehensive Training Materials included (PDF format). Hard copies available for purchase.

45-Day Email Support

Support and Training Packages available

Network and Bridge Ready

Compatible Operating Systems:

Windows XP, Windows 7

Download and Registration:

Server download, registration, and networking require internet connection

Price:

Pay-Per-Use' Licensing: The price per exam is based upon the number of exams purchased. Purchasing in volume saves as the cost per exam decreases at higher quantities.

Unlimited Licensing for a one-time purchase. Unlimited number of workstations and users per server (based on one server per location).

Pay-Per-Use Conversion to Unlimited Licensing available at the full-unlimited price.