Patient Flow Analysis for Windows

WinPFA

Data Entry Manual

Contents

LIST OF GRAPHICS

RECOMMENDATIONS FOR USERS

Users who are unfamiliar with both Windows and Patient Flow Analysis (PFA) will find all sections of this manual useful. Users experienced in Windows but not in PFA may wish to skip the following sections: Installing WinPFA 1.0 (page 1); Entering New Data Sets (page 22); and Appendix A, Tools (page 61).

Users who are familiar with both Windows and PFA will find the following sections, which cover new features, most helpful: Preface (page *vii*); Organization of WinPFA 1.0 Windows (page 11); Importing a Saved Staff Listing (page 26); Appendix C, WinPFA's Default File Structure (page 65); and Appendix D, Distributed Costs (page 67).

For more information, see Table 1, Recommendations for Users (page *vi*).

Table 1. Recommendations for Users

Content Item	User-Assessed Skill Level			Page
	W+P+	**W+P-**	**W-P-**	
Installing WinPFA 1.0			✔	1
Data Entry Tools			✔	3
Organization of WinPFA 1.0's Windows	✔	✔	✔	11
Recommended Order of Sequential Data Entry by Window and Tab		✔	✔	17
The Data Entry Tutorial		✔	✔	21
What Data Are Acceptable to WinPFA		✔	✔	21
Modifying Existing Data Sets		✔	✔	22
Entering New Data Sets			✔	22
The Welcome Window			✔	23
Code Set		✔	✔	25
Importing a Saved Staff Listing	✔	✔	✔	26
The Codes-Labels Window		✔	✔	27
The Clinic Register		✔	✔	31
The Staff Register		✔	✔	35
The Client Register		✔	✔	45
The Reports		✔	✔	53
The Graph		✔	✔	59
Appendix A. Tools			✔	61
Appendix B. WinPFA's Database		✔	✔	63
Appendix C. WinPFA's Default File Structure	✔	✔	✔	65
Appendix D. Distributed Costs	✔	✔	✔	67

PREFACE

This manual is one of five by the Centers for Disease Control and Prevention (CDC) that provide instruction on Patient Flow Analysis (PFA). With these manuals, most users should be able to conduct their own PFA studies without additional technical support. The *WinPFA 1.0 Data Entry Manual* covers all aspects of data entry for experienced as well as new users of PFA; however, those new to Windows will need a basic Windows tutorial. Complementing the manual is the *Patient Flow Analysis for Windows (WinPFA) Data Collection Manual*. The corresponding manuals for PFA 2.0 are *Patient Flow Analysis in Outpatient Clinics: Data Processing* and *Patient Flow Analysis (PFA) Data Collection Manual*. Entirely new in this collection and available early 2004 is *Interpretation and Use of the WinPFA 1.0 Reports and Graph*. This instructional guide orients users to the formulas used for the statistical reports, the significance of these data, and how clinics may apply the data from the reports.

> *NOTE:* About the continued use of the term *PFA* in the WinPFA 1.0 manuals: PFA is an established and proven methodology, process, and system, referring to the entire of the process of designing the study, then collecting, analyzing, and applying the data. PFA is supported by software, formerly PFA 1.0 and 2.0, and now, WinPFA 1.0.

Purpose. The manual describes data entry so that you spend minimal time and effort to begin exploiting WinPFA 1.0. "Minimal," of course, varies from user to user. Consequently, the manual provides direction based on your familiarity with both Windows® and Patient Flow Analysis 2.0, CDC earlier version of PFA.

Audience. This manual targets three levels of computing skill:

1. Those who use Windows® daily and are familiar with PFA are directed to read no more than a few brief selections.

2. Those with experience in neither Windows® nor PFA should read extensively not only this manual, but also a range of other resources, including, for example, Windows® training tutorials plus the range of CDC PFA publications.

3. Those in between may use this manual as a how-to reference to improve their understanding of WinPFA's less intuitive features.

Contacts at the Centers for Disease Control and Prevention. For inquiries and requests for technical assistance, training, and consultation, go to the Web site of CDC's Division of Reproductive Health http://www.cdc.gov/reproductivehealth/sata_pfa_ssd.htm or contact the Services Management, Research, and Translation (SMART) Team of the Applied Sciences Branch by E-mail (pfa@cdc.gov), telephone (770/488-6260), or regular mail at

> SMART (WinPFA)
> 4770 Buford Highway
> MS K-22
> Atlanta, GA 30341-3717

INSTALLING WinPFA 1.0

To install WinPFA 1.0:

1. Insert the software into your CD drive.

2. Click *Start*, then *Run*, then *Browse*.

3. On *Look in* under *Browse*, select the compact disc (D) drive, then *WinPFA Install*, then *set-up.exe* (or *setup*).

4. Click *Open* and then *OK*.

For convenience, you'll probably want to create a desktop shortcut for easy access to WinPFA 1.0.

Your Screen Display. So that WinPFA is sized to your screen, use a screen display setting of 600 x 800 pixels.

DATA ENTRY TOOLS

The tools used for WinPFA 1.0 data entry are those commonly used in other Windows®
programs. The tutorial that follows describes some data-entry functions of the mouse and
keyboard as well as operations of three other frequently used tools: the ***Two-Button Scroll,*** the
Drop-Down Button, and ***Extended Search.***

> **NOTE:**   The mouse may pose a barrier for some people with disabilities. WinPFA permits
> all data entry to be done from the keyboard.

Keyboard Users. For a more complete description of keyboard functions, please consult your
operating system's Help function for "Accessibility for special needs overview."

Audience. New Windows® users only.

The Mouse and the Keyboard

Although WinPFA 1.0 allows users to rely more on the mouse and less on the keyboard, you
must use the keyboard to document all textual data: ***Staff ID***, ***Code-Description***, and ***Comments***.

Overview of Mouse and Keyboard Operations. The more common WinPFA data-entry
operations activated by the mouse and the keyboard are listed in Table 2 (page 4).

Table 2. Mouse and Keyboard Operations

Data-Entry Operation	Mouse Instructional	Keyboard Instructional
Advance field to field	Click the desired field	Key <***Tab***>
Move field to field in reverse order	Click the desired field	Simultaneously key <***Shift***> and <***Tab***>
Move within a field requiring multiple data	Click the desired data-entry point within the field	Key the left or right arrows
Enter the ***Date*** field	Click the ***Drop-Down Button*** to activate the drop-down calendar	Key the left or right arrow keys to move to ***Month*** or ***Day*** or ***Year*** entry-point, then key the up or down arrows
Enter numbers	Click the ***Drop-Down Button*** to activate the drop-down calculator	Key the up or down arrows to select the number
Drop-down text lists	Click the ***Drop-Down Button***	Key the <***space bar***>
Navigate lists	Position over item or click-drag the vertical slide	Key the up or down arrows
Select data from lists	Click the desired description to simultaneously select and highlight	At the desired description either key <***Enter***> or key <***space bar***>

Three Additional Tools

Three other data-entry tools accessible in most WinPFA 1.0 windows are the ***Two-Button Scroll,*** the ***Drop-Down Button,*** and ***Extended Search.*** You activate the ***Two-Button Scroll*** and the ***Drop-Down Button*** on-screen. By contrast, you invoke ***Extended Search*** from the keyboard. Descriptions of each follow.

The ***Two-Button Scroll,*** included, for example, within the ***Start, End,*** and ***Number of Appointments*** fields (Figure 1) activates when you click either the up (▲) or down (▼) buttons located to the far right of the field. This feature has fields requiring numbers, currency, and clock times. ***Number*** and ***Currency*** fields each require one selection. You may enter a selection by scrolling to it or by keying it in; for example, to select *444,* you would key in the numbers or scroll to 444 and press the enter key. ***Time*** fields, on the other hand, require three selections: hour, minute, and AM or PM. To select any of the three, scroll to it or key it in, then the other two, using the left or right arrows, for example, from *12* to *00* (Figure 1).

4

Figure 1. The Two-Button Scroll

Clicking on buttons to the right of a field produces a drop-down list. Some fields (as *Number of Appointments Scheduled,* above) have a *two-button scroll.*

Figure 2. Two-Button Scroll and Time Subfield

To move from hour to minute to AM/PM, use the left and right arrows on your keyboard. Here, the hour (12) has been selected. Clicking the up button will change the hour to 1; clicking the down arrow will change the hour to 11.

Figure 3. Time Subfield

Here, the minutes have been selected. Clicking the up and down buttons allows you to scroll in 1-minute increments.

The ***Drop-Down Button***, included, for example, in the *Geographic* field (Figure 4), activates when you click the button at the right margin of the field. (*Number* fields offer both the ***Drop-Down Button*** and the ***Two-Button Scroll.***) This activates a data-selection device specific to each field's data type:

> **Text** fields' ***Drop-Down Button*** generates drop-down descriptions. To select a description
>
> > 1. From four-item lists, click on your selection.
> >
> > 2. From longer lists
> >
> > > ▪ Click and drag the vertical scroll bar or
> > >
> > > ▪ Scroll up or down.
> > >
> > > ▪ Click on your selection.

Figure 4. Official Designation Field

An official designation description can be chosen when the Official Designation field is activated.

Clicking the drop-down button for the Official Designation field (Figure 4) produces the drop-down list shown in Figure 5.

Figure 5.   Official Designation Field Drop-Down List
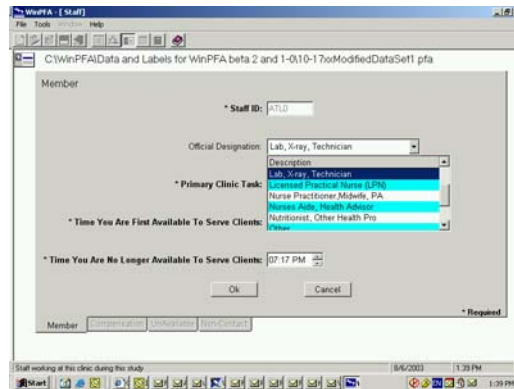
The Official Designation Field's Drop-Down List offers numerous options and disappears once you have made your selection (here, "Lab, X-ray, Technician").

NOTE: For text fields, keying *<space>* also drops down the descriptions list.

Number fields' ***Drop-Down Button*** reveals a virtual calculator. To select data:

1.   Click to select each number.

2.   Then click ***OK.***

Date fields' ***Drop-Down Button*** generates a calendar. To select dates:

1.   Click the left or right arrows at the top of the calendar for month and day.

2.   Click within the calendar to select the date (or ***Today***) (Figure 7).

Figure 6.   The Date Drop-Down Button
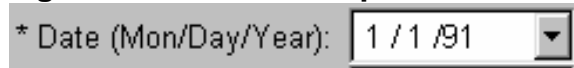
Month, day, and year are entered in the Date field.

Clicking the drop-down button in the "Number of Appointments Scheduled" field shown in Figure 8 drops down the simulated calculator shown in Figure 9.

Figure 7. Drop-Down Button and Two-Button Scroll

Number Of Appointments Scheduled: [0 ▼ ⬍]
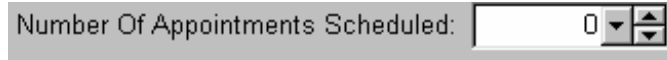
Some fields present both a drop-down button and a two-button scroll; select data using one or both.

Figure 8. Virtual Calculator for Numbers Fields
The virtual calculator that appears is used to enter the number of appointments.
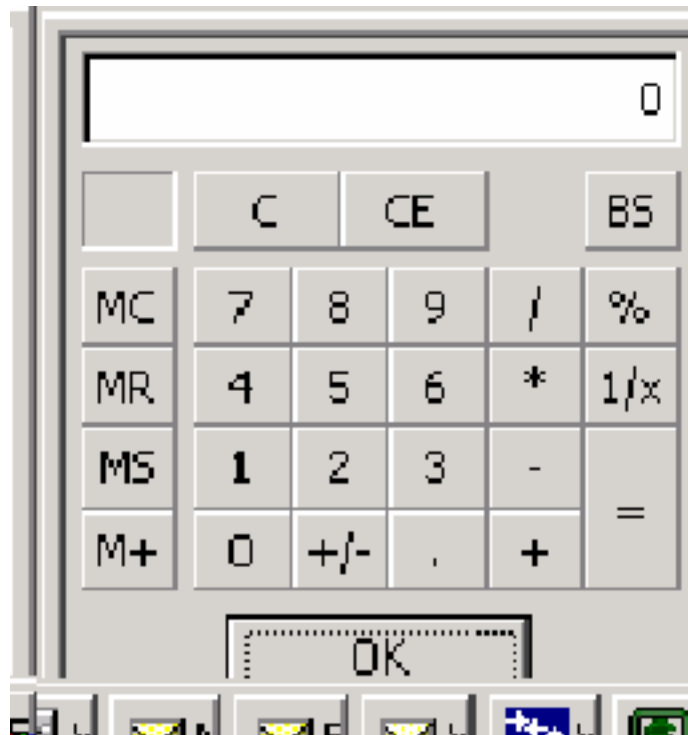
Extended Search

Drop-down lists, consisting of descriptive labels, offer selections for fields requiring textual data (see, for example, the ***Official Designation*** field) (Figure 8). The lists display as many as six selections at a time. Make your selections simply by clicking a description. To select from longer lists (for example, ***Tasks*** and ***Reason for Visit***) where your preferred selection does not display:

1. Click and drag the vertical scroll bar.

2. Key the up or down arrow to move through the list.

3. Key *<Page Up>* or *<Page Down>* to move the cursor up or down four descriptions per keystroke.

4. Activate the *Extended Search* feature.

To activate *Extended Search:*

1. Key in one or more initial characters of the desired *Description* to display the first match description from the alphabetized list;

2. If this match is the desired description, click to see it displayed in the field.

Figure 9.   Official Designation Box with Drop-Down List
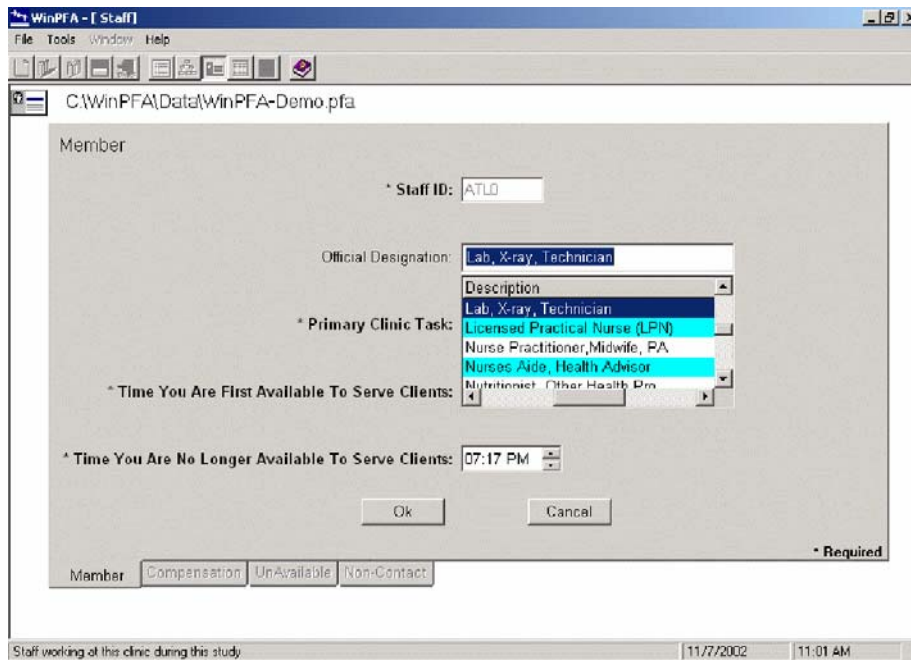
The Official Designation box allows you to select staff members' clinic tasks from a drop-down list.

ORGANIZATION OF WinPFA 1.0'S WINDOWS

Using as a model the Clinic window (the first window where you will begin to create the study database), this overview introduces new users to the typical WinPFA 1.0's windows format. The discussion includes the major elements that WinPFA presents to the user's screen along with three pop-ups. After reviewing this information, new users should continue the tutorial with Chapter 5.

Audience. New Windows® users only. Everyday Windows® users need only review the Note. Those not familiar with PFA should also review CDC's other PFA manuals.

NOTE: Experienced Windows® users may anticipate a few of WinPFA's idiosyncracies:

The keyboard must be used to document the Codes and Labels, and some typical Windows® functions are inactive, specifically:

1. CTRL+click for copying, deleting, or moving one or more files to a new folder;

2. Click text to copy;

3. Block to copy and paste.

Also, the Staff Member and Compensation tabs, though appearing as separate tabs (Figure 11) are functionally a single tab; the Add, Edit, and Delete buttons manage data for both tabs.

Figure 10. Member and Compensation Tabs
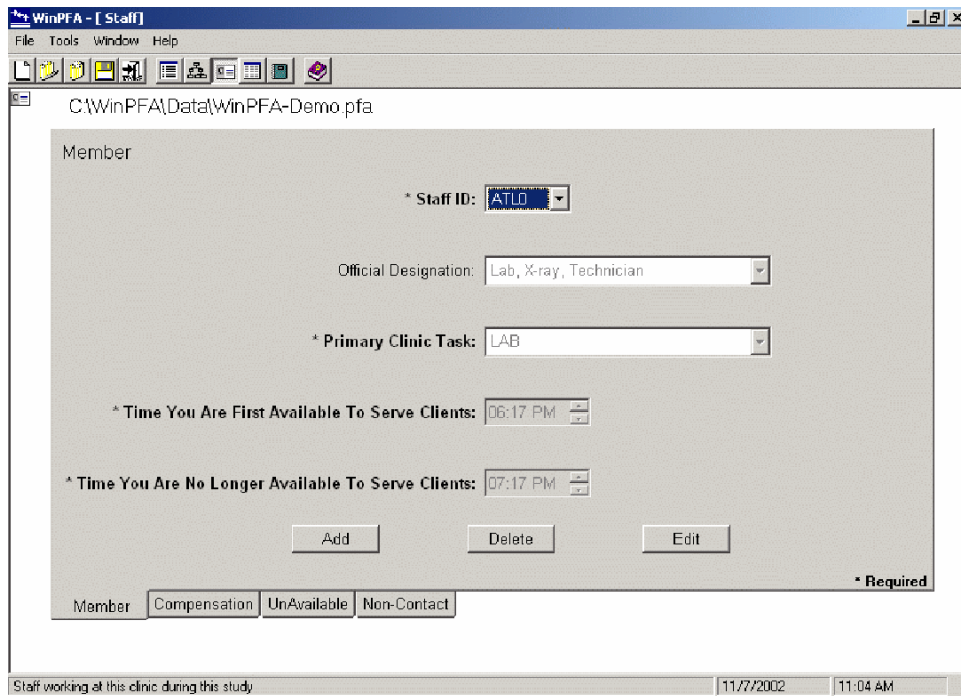
The Member and Compensation tabs describe the staff's functions, availability, and their costs to the clinic.

The Screen

Literally everything you see on the monitor (all of Figure 12) is the screen. The major elements described below are found throughout WinPFA. Starting at the top left, you will see these elements:

Window Banner. The banner identifying the window that you are currently viewing (here, the *Clinic* window).

The Menu Bar. Immediately below the window banner, the bar allows you to access a range of Windows® features, including opening and closing new files. To operate, simply click *File, Tools,* or *Help* to drop down a list of associated functions. Next, hover the mouse over any function to activate it.

Figure 11. The Screen and Its Parts
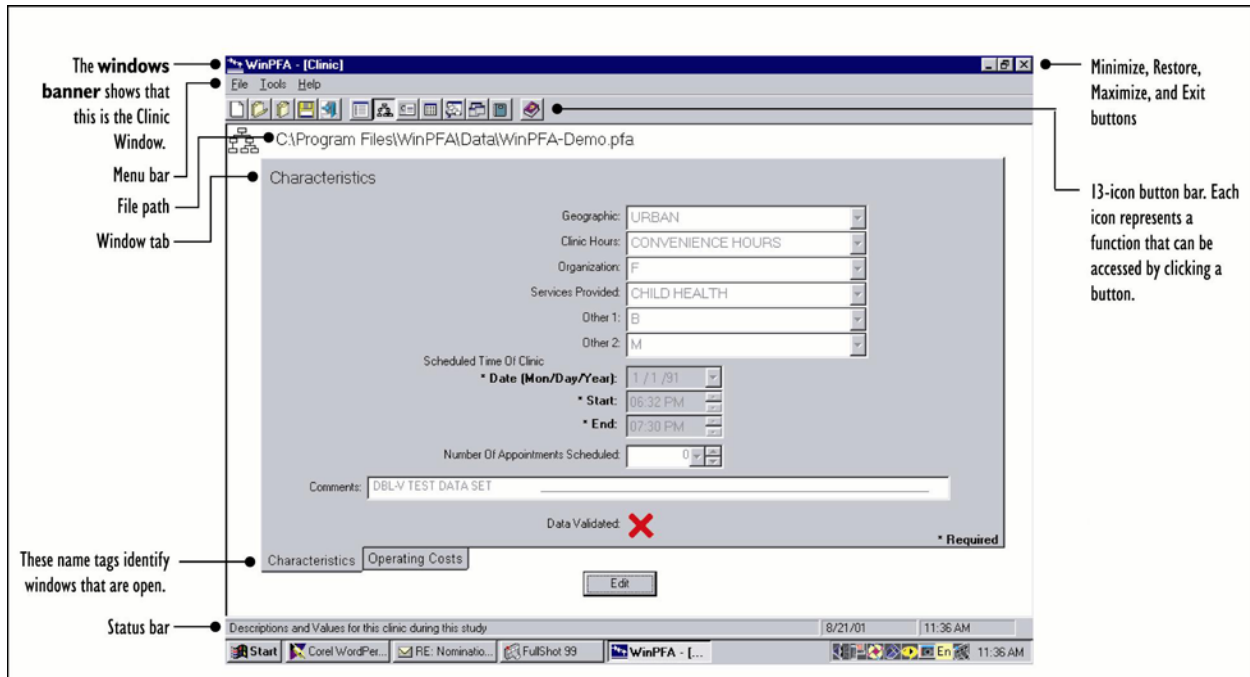
Each screen has the basic components shown here.

The 13-icon button bar. Below the Menu Bar is the button bar with its 13 button-like icons that provide access to many of the functions also accessed from the Menu Bar as well as access to the other WinPFA windows. Each icon carries a viewable label called a *tool tag;* activate the tool tag by hovering the mouse over the individual icon.

To use the button bar, click any highlighted icon. WinPFA immediately navigates to the icon's corresponding window. As this occurs, the icon assumes the depressed position, identifying which window is currently in view.

Highlighted Icons. Highlighting of individual icons is a meaningful navigation aid: Highlighting identifies those windows to which you may navigate at any time. Lack of highlighting, conversely, identifies windows to which you may navigate, *but only after other data is first entered in other windows or tabs* (for more information, see "Recommended Order of Data Entry," pp. 17–18). For example, when entering a new data set, before navigating to the *Staff* or *Client* windows (icons not highlighted), first complete the *Codes and Labels* and the *Clinic Characteristics* (icons highlighted). After their completion, the *Staff* and *Client* windows' icons become highlighted.

The Minimize, Restore-Maximize, and Exit Buttons. Occupying the upper right corner, opposite the window banner, these buttons have no direct bearing on data entry. Instead, they allow you to resize the WinPFA window and to quit WinPFA.

Duplicate Icon. Immediately below the button bar on the left is a large icon duplicating the recessed icon on the button bar. For all WinPFA windows, this icon is another navigational aid or road sign, reminding you which window you are actively viewing. Additionally, in the **Codes and Labels** and **Staff** windows, the corresponding duplicate icons allow you to save these portions of the data set as separate files.

File Path. To the right of the **Duplicate Icon** is a string of characters (*C:\Program Files\WinPFA\Data\WinPFA-demo.pfa* in the figure). The File Path identifies where you are saving this data set.

Status Bar. Toward the bottom of the screen, running from the left to the right margin, is the **Status Bar.** At the left, a short phrase describes the tab (see Figure 10) that is running within the window; at the right, the date and time of day displays.

The Window and the Tab

Located above the status bar and below the file path is the window. Access each window through the corresponding icon on the screen's button bar. Within the window are two or more tabs, where you enter new data (or review data from an existing data set). You may identify the tab at the window's upper left (*Characteristics* in Figure 9) and from the name tags along the bottom of the window. To navigate among a window's tabs, click the name tag.

Pop-Up Windows

When entering or reviewing data in WinPFA's windows, you need to be aware of how the following windows operate:

The Save As Window. Through this pop-up window, users identify a file name (including the file's folder and drive) (Figure 13) for saving three types of data:

1. The data set (at the beginning of data entry).

2. The **Codes and Labels** (saved for future re-use).

3. The **Staff Registers** (also for re-use).

Figure 12. The Save As Window
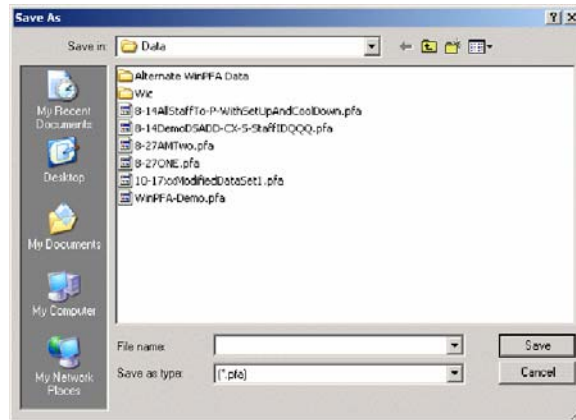
To use the Save As Window, key in a new file name, then click *Save.*

Figure 13. The Code Set Pop-Up Window
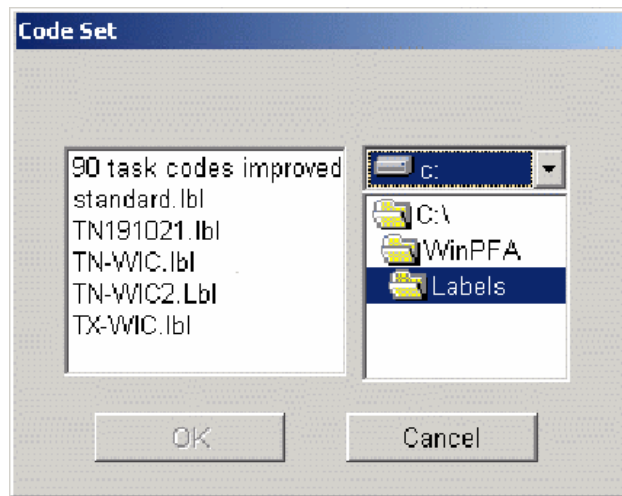
The Code Set Window. After you key the new data set file name, this pop-up window prompts you to select the Code Set that most closely meets your study design requirements.

After you key the new data set file name, the Code Set pop-up window (Figure 14) prompts you to select the **Codes and Labels** set that most closely meets your study design requirements.

> *Warning, Error, and Information Messages.* WinPFA presents these messages for a range of reasons, including the need to guard against incomplete data sets, to avoid conflicts

among the data, and to request verification of unexpected data (e.g., contacts lasting longer than 1 hour). For more information, see page 33 and page 54. Figure 15 presents a sample of these messages.

Figure 14. Warning Message
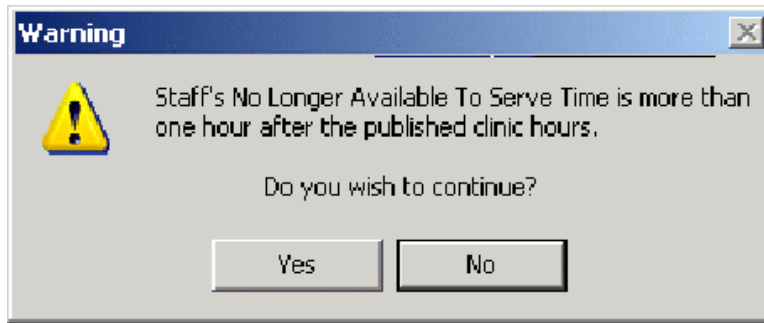
Warning Messages alert you to possible errors or conflicts in data.

Dialogue Boxes. WinPFA pops up warnings to prevent potential loss of data, usually in response to changes in the data set. For example, if you were to use the delete function in the Staff window's Member tab, WinPFA would present this message (Figure 16):

Figure 15. Dialogue Box

Dialogue boxes forewarn of possible losses of data.

Unlike WinPFA's warnings, the dialogue box requires you to decide actively to accept the change (click *Yes*) or reject it (*No*).

RECOMMENDED ORDER OF SEQUENTIAL DATA ENTRY
BY WINDOW AND TAB

Windows® Data Entry

Windows® allows WinPFA 2.0 data entry to be rapid and virtually error-free. Most study data is entered by selecting from pick lists. Exceptions are

1. "Time" boxes (or fields).

2. $ boxes.

3. Client ID and Staff ID boxes.

4. The *Comments* box.

These lists, which you established in the *Codes, Labels, and Captions* window, reflect the study design and account for the full range of data possibilities for each field.

☞ *Special Feature!!*

> WinPFA's two major elements, the data set and the *Codes, Labels, and Captions,* are complementary. But, unlike PFA 2.0, WinPFA's *Codes, Labels, and Captions* are so fundamental to the data set that you must create them before entering any data from the *Clinic, Staff,* or *Client* registers.

Here's Why. In PFA 2.0, by default, a full set of codes always exists. (Even if you have not described, for example, any Reason for Visit, 26 reason-for-visit codes already exist.) By contrast, in WinPFA 1.0, where codes are not used, the descriptions (or *Labels*) exist only if you create them. Consequently, WinPFA requires that you enter the *Codes, Labels, and Captions* before entering the data from the *Clinic, Staff,* and *Client* registers.

Entering New Data Sets

WinPFA's order for data entry mirrors that of PFA 2.0, with the following exceptions:

- With WinPFA, you must *finalize* your **Codes-Labels-Captions** before you *finalize* all the data for the **Clinic, Staff, and Client** registers.

- Before entering any Client registers, you *may* document any **Staff Non-Contacts** and specify which clients received the service.

Follow the order depicted in Figure 17. Note that the lines linking the windows and tabs carry directional arrows. Lines with two arrows indicate possible two-way movement; lines with single arrows indicate movement in one direction only. For example, once you have reached the Codes and Labels window (step 4) and begun to edit the Code Set you selected, you may neither return to select a different Code Set (step 2) nor go back to select a Staff Listing (step 3).

Although they are not described in this illustration, a range of other features may be accessed within WinPFA virtually any time during the data entry process. They include closing and renaming the data set you are documenting.

For Existing Data Sets

To review or modify an existing data set (complete or partial), WinPFA 1.0, like PFA, allows generally free movement from window to window. After selecting a data set at the **Open** data set window, WinPFA 1.0 immediately opens the Clinic window. From there, as indicated by the unshaded character of the icons on the button bar, you may freely move to all other windows.

Figure 16. Recommended Order of Data Entry
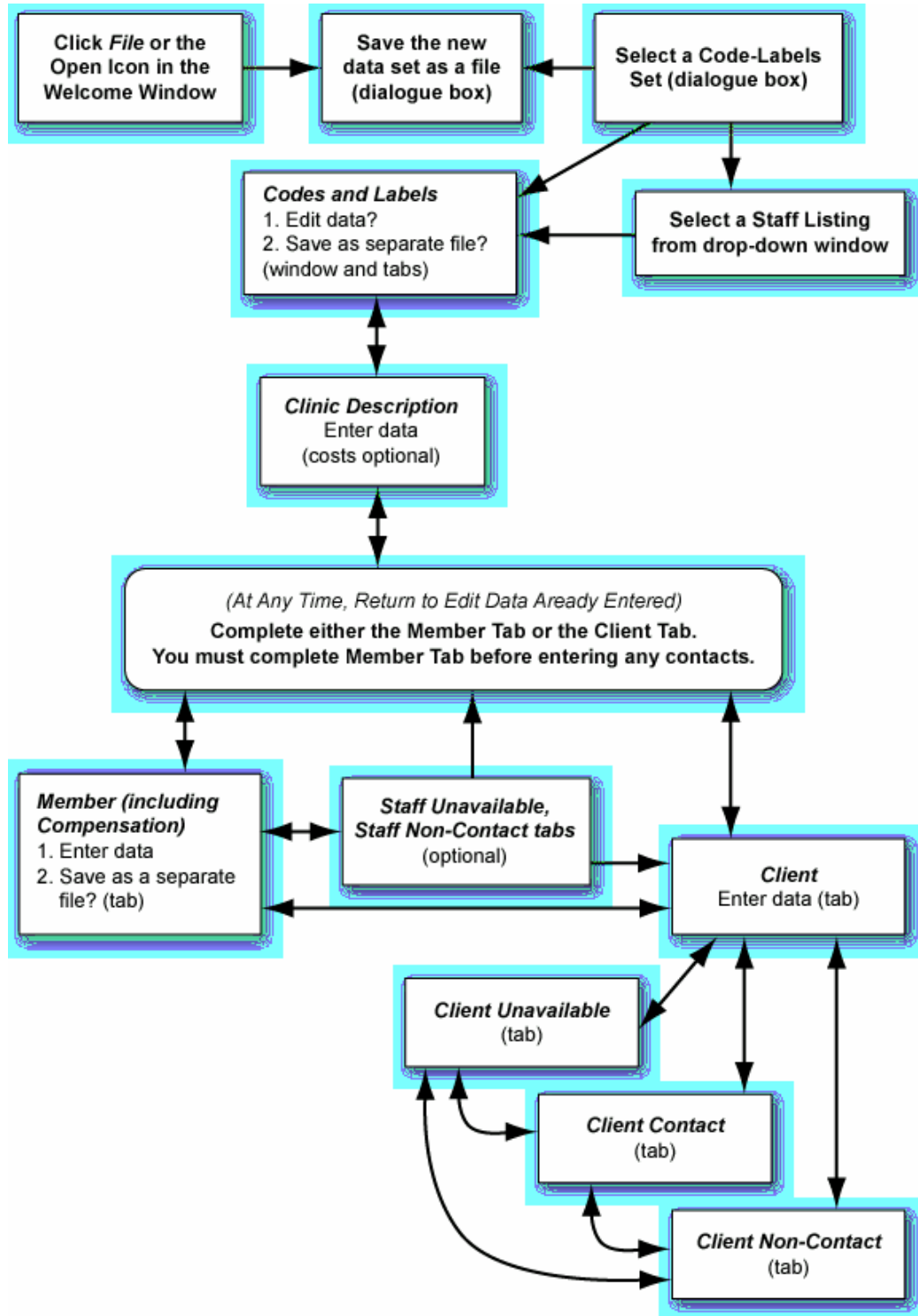
Entering data in the recommended order prevents backtracking and saves time.

THE DATA ENTRY TUTORIAL

Audience. Creation of new data sets and modification of existing ones requires prior experience with PFA 2.0 and with Windows.® Those with such experience are not the primary audience for this tutorial. Instead, their time may be better spent doing data entry and using this tutorial as an occasional reference.

Instead, this tutorial's audience is those with very little prior exposure to PFA 2.0 and whose Windows® experience is rudimentary. This audience should use this tutorial as a guide to become familiar with WinPFA 1.0's features while they improve their understanding of Windows.®

What Data Are Acceptable to WinPFA

If you read no further in this tutorial, take time to educate yourself about the WinPFA data fields. For additional information, see CDC's published WinPFA registers for characteristics of the data fields (for example, maximum length of text entries and maximum size of entries for the numeric fields) as well as the *Patient Flow Analysis for Windows® (WinPFA) Data Collection Manual*. The following describes the form and content of WinPFA 1.0's data fields.

WinPFA accepts five types of data:

1. **Text** boxes (or *fields*), with three exceptions, allow virtually any 30 characters (for example, a task may be defined as *Φ-1 Service Stop*).

   The three exceptions:

   (1) *Staff Identification,* up to four alphabetic or numeric characters.

   (2) The *Client ID Number,* up to nine numeric characters.

   (3) *Comments,* consisting of up to 100 characters.

Warning: Do not use apostrophes, quote marks, or asterisks in the descriptions. WinPFA's data validation procedure will not identify any of these characters as errors. But their use, which alters the syntax of SQL queries used in the generation of the reports, will result in the fatal Run Time Error #3075 (*Syntax Error*).

2. **Number** boxes, with one exception, accept only whole numbers up to 9,999,999 for WinPFA to run calculations for presentation in the reports.

    Exception:

    The *Fringe Benefits* field (*Staff* window) accepts decimal fractions.

3. The single *Date* box documents the date of the study.

4. **Time** boxes document hour, minute, and AM or PM *(7:15 AM).*

NOTE: From earliest to the latest, time fields may span at most 24 hours *within the same calendar day*.

New Convention!!! WinPFA analyzes time spans of less than 1 minute as 30 seconds in the Reports (formerly known as the Statistical Reports). For example, a span with 5:55 PM as *Start* and 5:55 PM as *End* would show in the database as 5:55 PM and 5:55.30 PM, respectively.

5. *Currency* boxes document costs and other financial data with individual field maximum amounts varying from $9.99 (*Reimbursable Mileage Rate*) to $10,000,000 (*Total Annual Cost Minus Staff Salary*).

Modifying Existing Data Sets

Following the steps beginning on this page (Entering New Data Sets), start by opening the data set, then proceed to any active window or tab to make modifications. For data sets that include completed clinic registers, you may access all windows and tabs.

Entering New Data Sets

The following tutorial provides a step-by-step, detailed review of data entry in WinPFA 1.0. Users needing a handy reference may consider photocopying this tutorial to allow for more immediate review of specific aspects of the program.

The Welcome Window

As you start to run WinPFA 1.0, the **Welcome** window is the first window you will see (Figure 18).

Figure 17. The Welcome Window
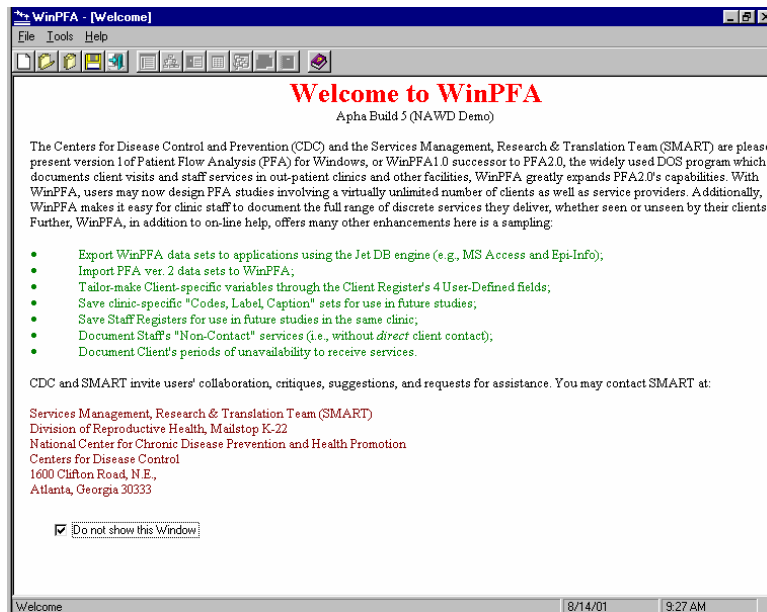
Starting at the Welcome window, click *File,* then *New.* A *Save As* window appears, allowing you to name the data set.

What To Do Here.

1.   At the **Welcome** window, click **File** in the tool bar.

2.   Click **New** or the **New** icon on the Button Bar (identified by the tool tip activated when hovering the mouse over the icon).

This activates a ***Save As*** window (Figure 19), allowing you to assign your data set a file name.

Figure 18. The Save As Window
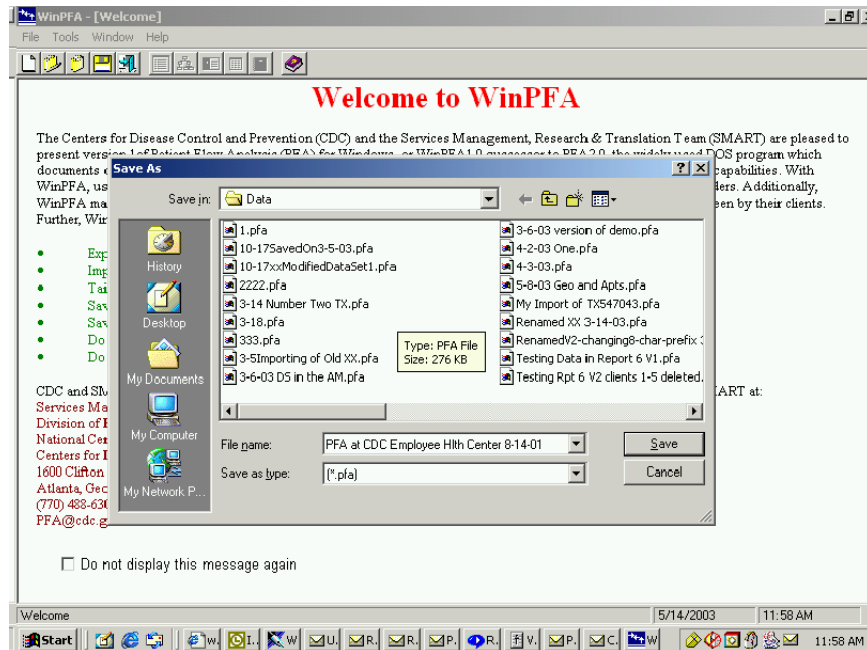
From the *Save As* window, key in the name you want to assign the data set you
are saving. Click *Save* when you are done.

Here Is What You See. To open a new data set, WinPFA activates this three-part mini-window:

1. The smallest window at the top displays WinPFA's default drive, which stores
    your WinPFA program and the corresponding **Data** and **Labels** files.

2. The large central window contains a list of data sets that came with WinPFA 1.0.
    Once you create additional sets, they will be included in this list.

3. Where you key their data set name is the **File Name** window; in Figure 19, this
    window displays the data set name *PFAatCDCEmployeeHlthCenter 8-14-01*.

What To Do Here.

1. Click anywhere in the **File Name** window.

2. Key up to 255 characters to name your data set.

3. Click the **Save** button. Clicking **Save** now also activates the **Code Set.**

Code Set

Note that the terms *Code Set* and *Labels* are interchangeable. PFA 2.0's *Codes* correspond to WinPFA 1.0's *Labels,* which are descriptions up to 30 characters in length.

NOTE:	Do not use apostrophes, quote marks, or asterisks. Using these characters will cause WinPFA 1.0 to be unable to analyze the data correctly—their use will alter the syntax of SQL queries, terminating the program or resulting in erroneous data in the reports.

Figure 19. The Code Set Window
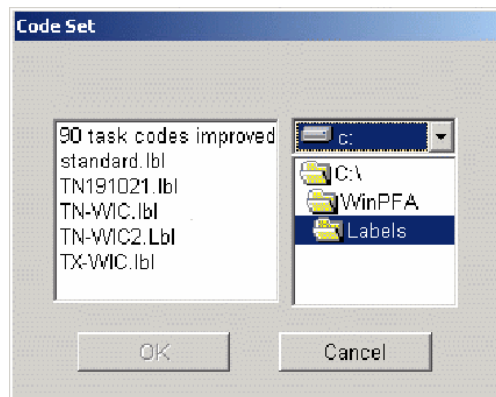
This window displays all the codes-labels sets stored in the WinPFA default labels folder.

Here Is What You See.

1. In Figure 20, the window at the lower right displays WinPFA 1.0's default folder for **Labels.**

2. The large window on the left displays the contents of the **Labels** folder. Listed here are the codes-labels sets that came with WinPFA 1.0 and any new sets you create. Select a **Code Set** from this list.

NOTE:	As illustrated in Figure 20, once this window lists more than nine Labels sets, WinPFA adds a vertical sliding bar at the right margin. To reach the desired selection, click-drag the bar to move up or down through the Labels list.

What To Do Here. Click the labels set of your choice (Figure 20 depicts ***90 task codes improved*** being selected from the ***Labels*** folder), then click ***OK.*** That final click also activates the ***Staff: Would you like to import a previously saved staff listing?*** dialogue box (Figure 21):

Figure 20. Importing a Saved Staff Listing
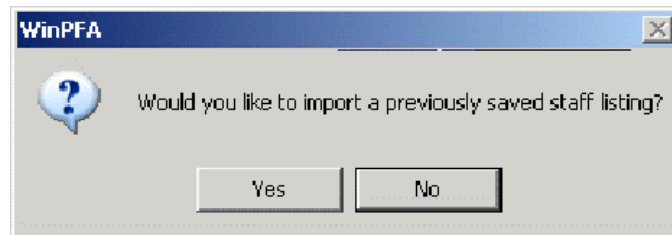
You can save data entry time by using previously saved staff listings.

NOTE:	At this early stage of data entry, with the data set name established and a Codes-Labels set defined, WinPFA 1.0 has made the study data set a permanent database. Lacking clinic, staff, and client data, this database is incomplete.

Importing a Saved Staff Listing

Many users will perform sequential PFA studies at the same site. If the preliminary study design for a pending study reveals that a sizeable portion of staff remain unchanged since an earlier study, then few if any changes among their staff register data might be necessary. Consequently, selective re-use of a saved staff listing may appreciably lessen data entry time for the pending study.

Here Is What You See.

1. The medium window at the lower right is WinPFA 1.0's default folder for ***Labels,*** the staff listing that came with WinPFA 1.0, and other user-created staff listings.

2. The large window on the left displays the contents of the ***Labels*** folder; select a staff listing from this list.

NOTE: Once this window includes more than nine Labels and Staff Listings, WinPFA includes a vertical sliding bar along the right margin; to move through the list, click-drag the bar.

What To Do Here.

1. If you have not saved any Staff Listings elsewhere, stay in this drive. To select a *Staff Listing* from this list, go to step 3.

2. To select a Staff Listing you saved elsewhere,

   ▪ Click the drop-down button to reveal the other drives.

   ▪ Select the correct drive.

3. Click your selection, then click *OK.*

That final click also activates the ***Codes-Labels*** window.

The Codes-Labels Window

Creation of the Codes-Labels requires two steps. The first, selecting an existing Labels set, you have already done. The second, editing the Labels, is what you will do here.

WinPFA's nine labels are central to data entry. With three exceptions, they uniquely supply the full range of possible data for completion of all text-type data for the ***Clinic, Staff,*** and ***Client*** windows, displaying these data as drop-down lists. Entered from the keyboard (or pasted), these are the three exceptions:

1. ***Description / Comment.***

2. ***Staff ID.***

3. ***Client ID.***

Well-planned PFA study design anticipates the full range of possible labels. Typically, users document this using Form 6, the Labels and Codes List.

Here Is What You See. The nine tabs in two rows at the bottom (Figure 22) allow you to access each label. The format for the labels displayed in this example mirrors the formats for the other eight tabs. Note that you will document contact services, non-contacts, and unavailables in the "Task/Events" tab. Complete data entry under **Description**, editing the Labels to match the data from your Form 6.

Figure 21. The Codes-Labels Window
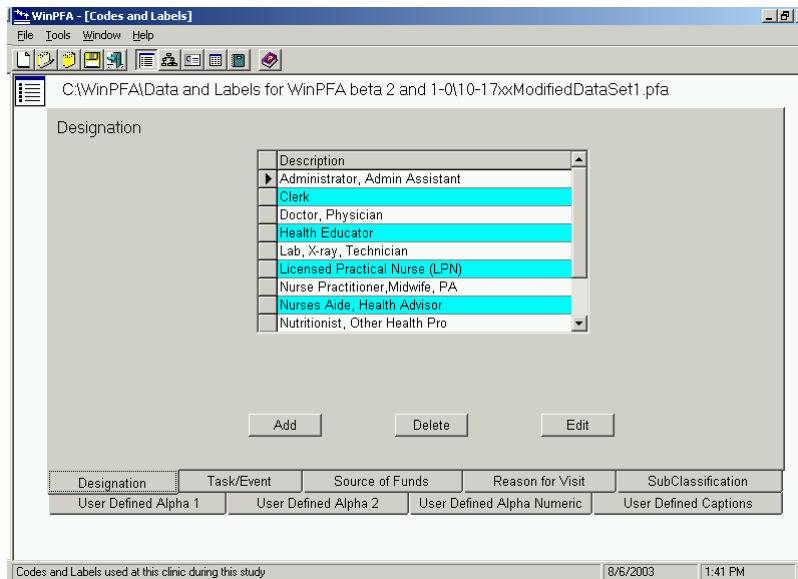
After you select an existing Labels set, you may edit the Labels in the Codes and Labels window.

What To Do Here. At the bottom of the window,

1. Click the tab you wish to edit.

2. Click **Add, Delete,** or **Edit** to modify the Label.

3. Do the same for all other tabs, depending on your study design, including the UDF Captions (i.e., the four user-defined data fields found in the Client Register).

> **NOTE:**   When in *edit* or *add* modes, WinPFA does not permit free navigation to other windows.

How To Add. To incorporate a **new** item into the Code-Description list, click the ***Add*** button. In the newly opened window, key in or copy and paste the description. Click ***OK*** or ***Cancel.***

How To Delete. To remove any **existing** Code-Description combination, click the data item you wish to delete, then the ***Delete*** button. Next, prompted by the dialogue box, ***Delete: Are you sure?*** click ***OK*** to complete the deletion or, to cancel the delete operation, click ***Cancel.***

How To Edit. To alter any description in the list, click the description you wish to edit. Next, key the changes, then click ***OK*** or ***Cancel.***

How To Modify the UDF Captions. Of the four tabs, only the UDF caption does not allow creation of a range of data formatted as a drop-down list. Instead, the UDF Caption tab allows you to custom-tailor captions for the four UDF data boxes from the Client Register:

1. User-Defined Alpha 1; for example, ***Client's Age is in this Range.***

2. User-Defined Alpha 2; for example, ***Is Partner in Clinic?***

3. User-Defined Alpha/Numeric; for example, ***ICD 9 or 10.***

4. User-Defined Numeric; for example, ***Lykert Rating on Satisfaction.***

The four UDFs expand the range of client data beyond what PFA 2.0 studies are able to document. Starting from a request for PFA studies to include medical patients' ICD-9 codes, additional client-specific data needs soon surfaced. These four resulting generically named boxes, however, needed more user-friendly captioning—exactly what the UDF caption tab provides for.

Examples of Uses for the UD Fields. Produced through the UDF captions tab, the following are sample captions for the four UD boxes corresponding to the edited captions noted above (see the **90 task codes improved** labels set for each box's range of possible selections):

1. UD Alpha 1 and UD Alpha 2 accept only alphabetic characters; for example, *Adolescent* or *Not with Partner.*

2. UD Alpha/Numeric accepts both alphabetic and numeric characters; for example, *597.89.*

3. UD Numeric accepts only numbers that WinPFA 1.0 uses to run calculations; for example, *1,999,999*.

NOTE: Among these four, UD numeric is the only one WinPFA uses to make calculations or computations such as the average, or mean, Lykert rating among all the clients.

Save Your Codes-Labels Set. Rather than go through this process again and again, in the future, for each study for which you want this same Labels, wouldn't it be better to be able to save the Labels you just modified as a file separate from this study's data set? That's what this feature allows you to do.

☞ **Special Feature!!**

Remember your first steps in creating this Labels set:

1. Select an existing labels set.

2. Modify it to agree with your study design.

What To Do Here.

1. Double-click the large *Codes and Labels* icon found just below the button bar and on the left of this window.

2. Review the newly opened *Save As* window, noting carefully in the large window the list of existing labels files found in the default *Labels* folder.

3. Save your newly modified *Labels* set to this folder (or to another folder of your choice) by keying a file name into the designated window and clicking *Save.*

NOTE: Saving your new Labels under a highly descriptive name will make it easier for you, in your next study, to select the Labels set that most closely matches your study design. Remember: Under Windows,® your file names may be up to 255 characters long, but only 60-some characters will display in the pop-up window (for example, *Labels for the CDC WIC Study at the Employee Health Center– July 23–2003*).

Next. Once your Codes-Labels set agrees with your study design, you are ready to enter data in the other windows and tabs, starting with the Clinic window. Click the Clinic Register icon found on the button bar.

Remember: Highlighting = Active.

Of the data-entry window icons—the Codes-Labels, the Clinic Description, the Staff Register, and the Client Register—only the first two, Codes-Labels and Clinic Register, are highlighted. The highlighting indicates that these windows are active. The lack of highlighting for the icons corresponding to the other windows indicates that these windows are not yet active.


The Clinic Register

Creation of the Clinic Register takes two steps:

1. Completing the Clinic Characteristics data.

2. Optionally, completing the Clinic Operating Costs data.

Beginning with this window (Figure 23), you will enter many data in fields that require numeric data (e.g., numbers, currency amounts, and hours and minutes). This also figures prominently in data entry for the other two main data entry windows: the Staff window and the Client window.

Figure 22. The Clinic Description Window
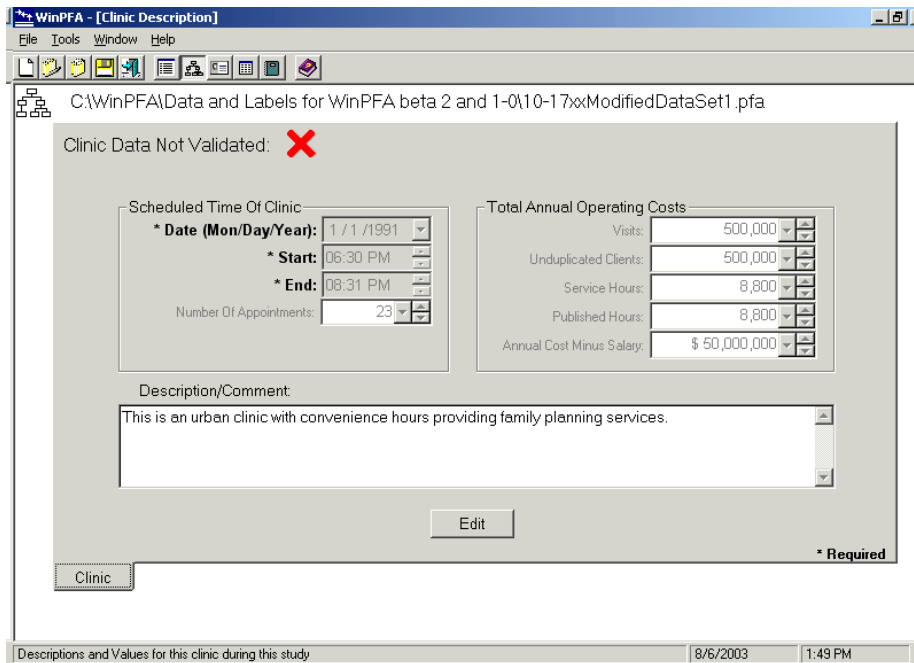
Completing the Clinic Description includes entering data for the date and time fields as well as the Number of Appointments. Optionally, you may also enter data for Total Operating Costs and Description/Comments.

NOTE: Less experienced Windows® users who prefer to shorten their reading of this tutorial need only keep in mind the following description of data entry for this window: This window's data fields, whether text, numeric, or currency, provide examples of these data-field types found in the Staff and Client windows.

The Clinic Characteristics Tab. The following instructions apply to data entry for the Clinic, Staff, and Client windows:

1. Bold-faced type and asterisks (*) designate required data boxes.

2. Boxes without bold-faced type or asterisks (*) are optional.

3. Enter data in all required and all optional boxes, per your study design.

4. Key <Tab> or click to navigate among the boxes.

5. The tab sequence from box to box runs top to bottom vertically and left to right horizontally.

6. Complete or cancel any active *Edit* functions before navigating to the other major windows.

7. All text boxes are blank until the drop-down list becomes active.

8. Defaults for all time boxes are as follows:

   ▪ Clinic Start and End Times, 12:00 AM.

   ▪ Staff boxes default to the Clinic Start Time.

   ▪ Client boxes default to Clinic Start Time.

   ▪ Staff Non-Contacts and Unavailable boxes default to the Staff Arrival Time.

   ▪ Client Contacts, Non-Contacts, and Unavailables default to the Client Arrival Time.

9. Field-level data verification triggers Error Messages; you must correct the identified problem or cancel the action.

10. Field-level data verification also triggers warning messages, which identify possible data inconsistencies; WinPFA requires you to respond to the warning by selecting *Yes* or *No.*

11. Field-level data verification also triggers information messages; here WinPFA identifies why it is canceling a user-requested operation due to potential conflict in data (for example, you may not delete registers of staff who have contacts or non-contacts).

Background Specific to the Clinic Window. Unlike the Staff Member and Client windows, the Clinic Characteristics tab allows only the *Edit* function. Because WinPFA requires one Clinic Characteristics register, *Add* and *Delete* cannot apply here.

What To Do Here. Follow these steps for each type of data:

Fields That Require Numeric Data (Times, Numbers, or Currency):

1. Hour, minute, and AM or PM:

    ▪ Navigate among the field items.

    ▪ Select data using either the two-button scroll to increase or decrease each value.

    2. Numbers and Currency:

    ▪ Key in the desired values **or**

    ▪ Use the two-button scroll **or**

    ▪ Use the drop-down button to activate a virtual calculator, then key in the desired values.

Text Boxes: The Description/Comment field allows you to document a short narrative (maximum length is 200 characters) describing the clinic and/or the clinic session:

    ▪ Click the field.

    ▪ Key in or copy and paste your desired text.

Total Annual Operating Costs. For WinPFA to include overhead or non-personnel costs while calculating service costs, complete these two fields (Figure 24).

1. One of the following:

    a. *Total Visits per Year* **or**

    b. *Total Unduplicated Clients Per Year* **or**

    c. *Total Service Hours Per Year* **or**

    d. *Published Service Hours Per Year*

    2. **And** Total Annual Cost Minus Staff Salary.

Next. With the data in the Clinic window now completed, WinPFA 1.0 activates the Staff and Client windows and associated tabs. To continue with data entry, click either window's button bar icon. This tutorial continues with the Staff window, then the Client window.

Figure 23. The Staff Window

The information you enter in the Staff window identifies the staff's function, availability, and costs to the clinic.

The Staff Register

Creation of the Staff Register (Figure 24) requires one step. The other steps are optional. Complete the Member tab and, optionally,

1. The Staff Compensation tab.

2. The Staff Unavailable tab.

3. The Staff Non-Contact tab.

Beginning with this window (Figure 24), you will enter most data by selecting items from drop-down lists. Coming directly from your Codes-Labels, these lists also figure prominently in data entry for the Client window. Each field caption corresponds to a specific Codes-Labels variable.

Mini-Tutorial for Fields Linked to Lists of Text Entries:

1. Click the drop-down button to display the list of Codes-Labels combinations.

2. For lists longer than four entries,

- Click and drag the scroll button **or**

- Activate the ***Extended Search*** to reach the preferred entry.

3. Click the required item.

4. Navigate to the next field.

The Member Tab. The following instructions apply to data entry for the Clinic and Client windows as well as the Staff window.

1. Bold-faced type and asterisks (*) designate required data fields.

2. Data for all other fields are optional.

3. Enter data in all required and all optional fields, per your study design.

4. Key <Tab> or click to navigate among the fields.

5. The tab sequence from field to field runs vertically, top to bottom, and horizontally, left to right.

6. Complete or cancel any active Edit, Add, or Delete functions before navigating to the other major windows.

7. All text boxes are blank until the drop-down list becomes active.

8. Defaults for all time boxes are as follows:

   - Clinic Start and End Times, 12:00 AM.

   - Staff boxes default to the Clinic Start Time.

   - Client boxes default to Clinic Start Time.

   - Staff Non-Contacts and Unavailable boxes default to the Staff Arrival Time.

   - Client Contacts, Non-Contacts, and Unavailable boxes default to the Client Arrival Time.

9. Field-level data verification triggers error messages; you must resolve all errors before continuing data entry.

10. Field-level data verification also triggers warnings, which identify possible data inconsistencies; WinPFA requires you to respond Yes or No.

11. Field-level data verification also triggers information messages, which notify you that WinPFA cancelled a user-requested operation (for example, deleting a staff

register after documenting a contact that the staff has with a client) due to potential conflict in data. You must edit other data before proceeding with the requested operation.

12. Reach the associated Unavailable and Non-Contact tabs by starting at the Member tab and clicking the appropriate tab.

Explanation. **Add, Delete,** and **Edit** all apply here. **Add** allows for the first-time creation of original staff registers. **Edit** allows for modification of any register's data except the Staff ID. **Delete** removes individual staff registers from the study data set.

Special Study Design Notes: The Delete feature

You may delete safely when eliminating **Reused Staff Registers** for staff not in the current study or culling from a developing data set staff who were absent for the study. However, **Delete** is not permitted for staff who have client contacts.

Presentation. The Staff ID of the register you are entering data for displays at the top of the other three associated tabs.

How To Add a Staff Register.

1. Click **Add.** This activates all the data boxes.

2. In the **Staff ID** field, key up to four characters (for example, *WAB2* or *9999*).

3. For the next two boxes, Official Designation and Primary Clinic Task,

   - Click the drop-down button to reveal the scrollable list.

   - Click the desired **Description** from each list.

4. For the next two boxes, **Time Ready to Serve...** and **Time No Longer...**

   - Click to navigate among the field items (hour/minute/AM vs. PM).

   - Enter data by increasing or decreasing each value, using either the two-button scroll or the keyboard's up and down arrows.

5. Finally, click **OK.**

How To Edit an Existing Staff Register.

1. Click the drop-down button in the Staff ID box.

2. Select the Staff ID for the register you wish to edit.

3. Click *Edit,* activating all the boxes.

4. Proceed through steps 3–5 above.

How To Delete an Existing Staff Register.

1. Click the drop-down button in the Staff ID box.

2. Select the Staff ID for the register you wish to delete.

3. Click *Delete,* activating a *Deletion* dialogue box.

4. Click *Yes* to delete or *No* to cancel the deletion.

Next. With the data in the Member tab now documented, you may remain in the Staff window to document the Compensation, Non-Contact, and Unavailable tabs or navigate to the Client Register. For any of the Staff tabs, click the corresponding tab at the bottom of the window. If the Client window is not yet documented, click the Client Register icon on the button bar.

The Compensation Tab. One data box here requires a special note: After navigating to the *Distribute Costs* box to check or uncheck it, click the box or key <Space>.

Explanation. Complete this optional tab (Figure 25), only if your study design requires calculation of clinic costs. Note that (as with PFA 2.0) *Travel Status* data are independent of *Salary* data and vice versa; therefore, you may complete neither, either, or both.

Figure 24. The Compensation Tab

The Compensation tab is used to document staff costs to the clinic.

Special Study Design Notes: For cost calculations

Salary data are used in the report's cost calculations, but only if you document these data for all staff members. Failure to document these data for any staff member will trigger a warning (*Data missing*).

     Staff Compensation boxes. These may be required, optional, or variable.

1. *Source of Funds* and *Paid Expenses* are optional.

2. All other data are required, except ***Hours*** data, which may be either required or optional.

   - They are required when *Pay Period* is *Day* or longer (for example, *Week* or *Fortnightly*).

   - They are not required (that is, **not** used for calculations) when *Pay Period* is *Session* or *Patient* or *Per Minute.*

     Compensation is an extension of the Member tab. But ***Add*** is not active here (***Add*** is reserved to create a new register). ***Edit*** is active and operates the same way it does in the Member tab: It allows for modification of any data. ***Delete,*** also

active, operates differently: It resets all data to 0 and non-checked in the case of ***Distribute Cost.***

How To Delete.

1. Click ***Delete***.

2. Click *Yes* or *No* to cancel the deletion.

How To Edit.

1. Click ***Edit,*** activating all the fields.

2. Enter ***Travel Status*** or ***Salary*** data or both.

- Either click the drop-down button in each field and select all the data **or**

- Activate the two-button scroll to increase or decrease values.

- Then click to check (✔) the last field, if you wish to distribute costs for the portion of this staff member's day when they are not providing service (See Appendix D).

- Click *OK* or *Cancel.*

The Unavailable Tab and the Non-Contact Tab. Non-Contact refers to services or work that staff performs when the client is not present; for example, clerical staff documenting a client's test results. *Unavailable* refers to periods in the staff's workday when they cannot deliver services; for example, while taking a break. **Note that these periods cannot occur any earlier than *Time Ready to Serve... *or any later than *Time No Longer Available....***
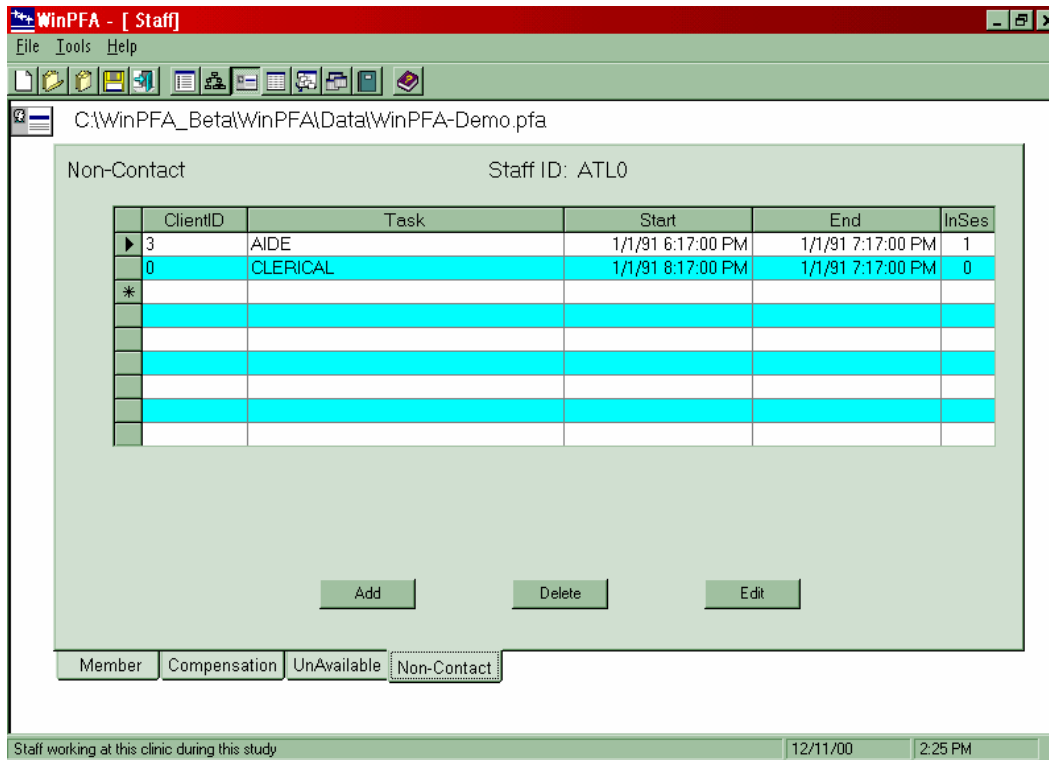
Reminder. Complete the optional Non-Contact and Unavailable tabs (Figures 26 and 27) only if required by your study design.

Figure 25. The Staff Unavailable Tab
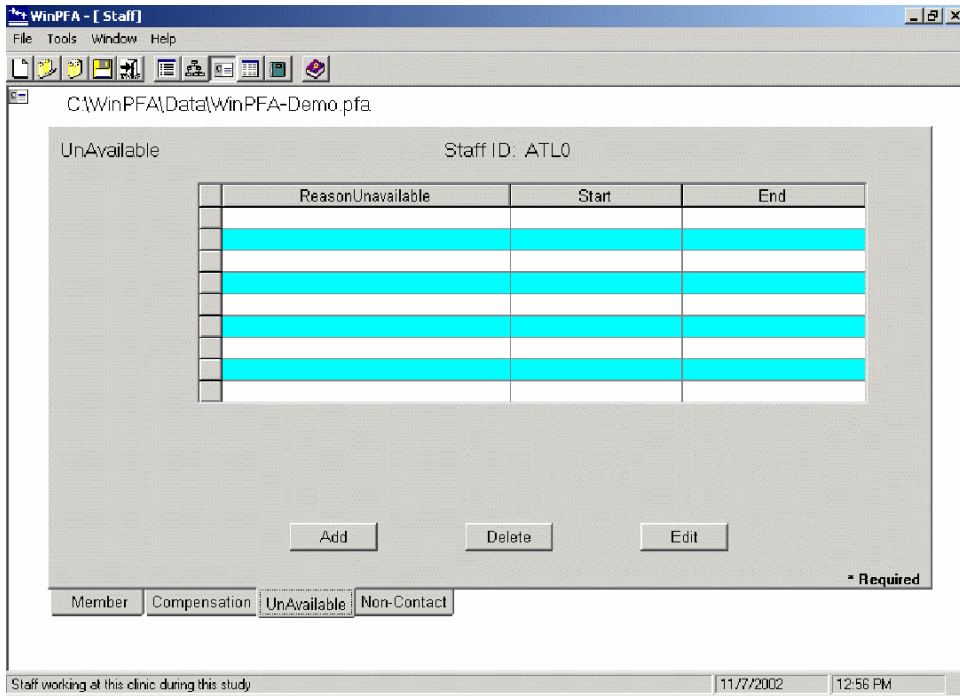
The Staff Unavailable tab documents periods when staff members are not delivering services, such as breaks.

Figure 26.   The Staff Non-Contact Tab

Use this tab to record times when staff members are working without clients present.

Explanation. **Add, Delete,** and **Edit** features all apply:

1.   **Add** allows inclusion of new **Unavailable** and **Non-Contact** time periods.

2.   **Edit** modifies any existing **Unavailable** or **Non-Contact** time periods.

3.   **Delete** removes individual **Unavailable** or **Non-Contact** periods.

NOTE: Unlike PFA 2.0, WinPFA 1.0 allows you to enter data for time fields without regard to chronologic order.

How To Add Unavailable and Non-Contact Periods.

1. Click *Add,* activating a new pop-up window for each box displayed in the large central data field box.

2. Complete all boxes by following these steps:

   Click the box's drop-down button.

   Select **Client IDs** with the dropped-down virtual calculator, then select **Descriptions** from the scrollable lists.

   a. Navigate through the field items (hour/minute/AM vs. PM).

   b. Enter data by increasing or decreasing each value.

   c. **Only for the *Non-Contact* window**:

3. Check (✔)"In-Clinic" if the client was part of this study, having a Client ID (whether known to the staff or not).

4. Leave unchecked if the client receiving the service is unknown and not in this PFA study.

5. Click OK or Cancel.

NOTE: WinPFA displays 1 for the ✔and 0 for unchecked.

How To Edit Unavailable and Non-Contact Periods.

1. Click ***Edit,*** activating all the boxes.

2. Proceed through steps 2 and 3 above.

How To Delete Unavailable and Non-Contact periods.

1. Click ***Delete,*** activating the ***Deletion*** dialogue box.

2. Click *Yes* or *No* to cancel the deletion.

Save Your Staff Listing.

☞ **Special Feature!!**

Remember your second step in creating this WinPFA data set: Selecting a **Saved Staff Listing.** After selecting the one that most closely matched the staff registers from your study, you modified them to assure 100% agreement with the staff of the current study. Rather than go through this process again, the next time you want this same Staff Registers set, wouldn't it be better to save it as you are able to save the Labels? Again, WinPFA allows you to do this.

What To Do Here.

1. Double-click the large *Staff* icon found just below the button bar on the left of this window.

2. Review the newly opened *Save As* window, noting carefully in the large window the list of files of existing Staff register sets found in the default *Labels* folder.

3. Save your newly modified Staff Register set to this folder (or to another of your choice) by keying a file name into the designated window.

4. Click *Save*.

NOTE: It may be more efficient for you to create a **Staff** folder, particularly if you find yourself using this feature frequently.

NOTE: Saving your new Staff Register sets with highly descriptive names will make it easier for you, in your next study, to select the one that most closely matches your study design. Remember: Under Windows,® your file names may be up to 255 characters long, but only 60-some characters will fully display in the pop-up window (for example, **Staff Registers for the CDC WIC Study at the Employee Health Center–July 23–2003**).

Next. With the data in the Staff window now documented, you are ready to complete documenting the Client window (Figure 28). Click the **Client Register** button found on the button bar.

The Client Register

Use the following steps to complete the Client Register:

1. Complete the Client tab.

2. Complete the Client Contact tab.

3. Complete the optional Client Unavailable tab.

4. Complete the optional Client Non-Contact tab.

One data box here requires special note: Appointment time. To document:

1. First, check or uncheck the box in the **Appointment** box, depending on whether the client has an appointment (note that *checked* or *unchecked* next appears in this box's caption).

2. If applicable, document the client's appointment time.

Explanation. The **Add, Delete,** and **Edit** features all apply here. **Add** allows for the first-time creation of original client registers. **Edit** allows for modification of any register's data except the **Client ID. Delete** removes individual client registers from the study data set.

Figure 27. The Client Window

Use the Client window to record information about the client's visit.

Presentation. The Client ID of the register you are entering data for displays at the top of the other three associated tabs (Figures 29–31).

How To Add a Client Register.

1. Click *Add,* activating all the fields.

2. In the Client ID field:

    - Key up to nine numeric characters **or**

    - Click the drop-down button to access the Windows® virtual calculator and enter the Client ID.

3. For the mandatory Reason for Visit and the optional Subclassification:

    - Click the drop-down button to reveal the scrollable lists.

    - Click *Description* to enter data from each list.

4. For Time of Appointment, Time of Arrival, and Time of Departure:

- Click to navigate among the field items (hour/minute/AM vs. PM).

- Enter data by increasing or decreasing each value, using either the two-button scroll or the keyboard's up and down arrows.

> **NOTE:** For clients without appointments, if you have not checked the appointment box, then WinPFA 1.0 documents the client having no appointment. However, due to programming constraints, the appointment time of the last client documented with an appointment will be faintly visible.

5. For the first three user-defined fields:

- Click the drop-down button to reveal the scrollable list.

- Click the desired Description from each list.

6. For the fourth user-defined field:

- Key up to nine numeric characters or

- Click the drop-down button to access the Windows® virtual calculator and enter the desired numeric value.

7. Finally, click OK or Cancel to cancel the deletion.

How To Edit an Existing Client Register.

1. Click the drop-down button in the Client ID box.

2. Click to select the ID of the register you wish to edit.

3. Click *Edit,* activating all the boxes.

4. For the boxes needing editing, proceed through the appropriate step or steps as described in 3–7 above.

How To Delete an Existing Client Register.

1. Click the drop-down button in the Client ID box;

2. Click to select the Client ID of the register you wish to delete;

3. Click *Delete,* activating a *Deletion* dialogue box; then

4. Click *Yes* or *No* to cancel the deletion.

The Client Contact, Unavailable, and Non-Contact Tabs. Non-Contact refers to activities that the clinic requires of the client (for example, completing registration forms); non-contacts, like contacts, account for what clients do during their visit. *Unavailable* refers to periods when clients cannot receive services (for example, making a personal phone call); WinPFA does not count unavailable minutes as part of the client's visit.

Reminder. Complete the optional Client Unavailable and Client Non-Contact tabs only if required by your study design.

Explanation. As for the Staff Unavailable and Non-Contact tabs, ***Add, Delete,*** and ***Edit*** features all apply for these three Client tabs:

1. ***Add*** allows inclusion of a new *Contact, Unavailable,* and *Non-Contact* time period.

2. ***Edit*** allows for modification of any existing *Contact, Unavailable,* and *Non-Contact* time periods.

3. ***Delete*** removes individual *Contact, Unavailable,* and *Non-Contact* periods.

Figure 28. The Client Contact Tab

The Client Contact tab is used to track the time the patient spends in the clinic with staff.

	StaffID	Task	Start	End
▶	MMR0	RECEPTION	05:55 PM	05:55 PM
	ATL0	LAB	06:34 PM	06:37 PM
	BAO0	OTHERHEALTH	06:47 PM	06:48 PM
	CDP0	PHYSICIAN	07:05 PM	07:10 PM
	VLA0	AIDE	07:05 PM	07:10 PM
	BAO0	OTHERHEALTH	07:13 PM	07:14 PM
	MME0	EDUCATION	07:15 PM	07:17 PM

NOTE: Unlike PFA 2.0, in WinPFA 1.0, you may enter data for time fields without regard to chronologic order.

How To Add Contact, Unavailable, and Non-Contact Periods.

1. Click *Add,* activating a new pop-up window for each field displayed in the large central data field box.

2. Complete all boxes.

3. Click the field's drop-down button.

4. Select a Code or Description from each scrollable list.

5. Navigate among the box's items (hour/minute/am vs. pm).

6. Enter data by increasing or decreasing each value.

7. Click OK or Cancel.

How To Edit Contact, Unavailable, and Non-Contact Periods.

1. Click Edit, activating all the boxes.

2. Proceed through steps 2 and 3 above.

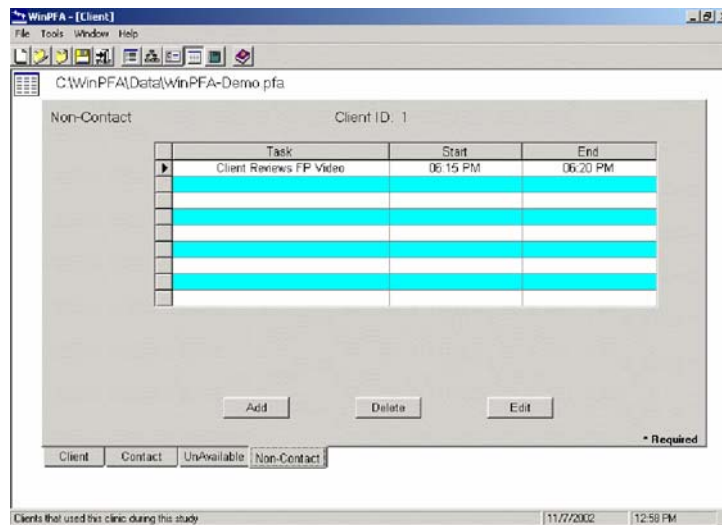*How To Delete Contact, Unavailable, and Non-Contact Periods.*

1. Click *Delete,* activating the *Deletion* dialogue box.

2. Click *Yes* to delete or *No* to cancel the deletion.

Figure 29.   The Client Unavailable Tab
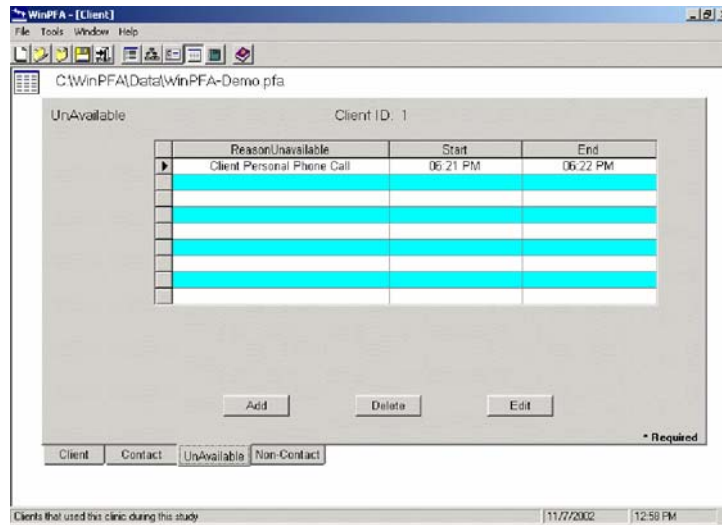
Like staff members, clients may be unavailable at certain times. The Client
Unavailable tab captures this information.

Figure 30.   The Client Non-Contact Tab

Not all the time the client spends in the clinic is with staff members. The Client
Non-Contact tab tracks patient activities such as viewing an instructional video.

THE REPORTS

Data Validation

Click the *Run Data Validation* button on the Reports window (Figure 31) to generate this data set's data validation report. This report, in ASCII text file format displaying in its own window, yields these possible outcomes:

1. The data set validates (see Figure 32, where the *Run Selected Reports* button replaces the *Data Validation*).

2. The data set validates, but with warning messages (the *Run Selected Reports* button becomes active).

3. With the Report identifying error messages, the data set does not validate (indicated by the *Run Data Validation* button remaining active).

4. An information message reports that data validation cannot proceed because the data set fails to include a staff register, a client register, or a contact (the *Run Data Validation* button remains active).

Figure 31.   The Reports Window (Run Data Validation)
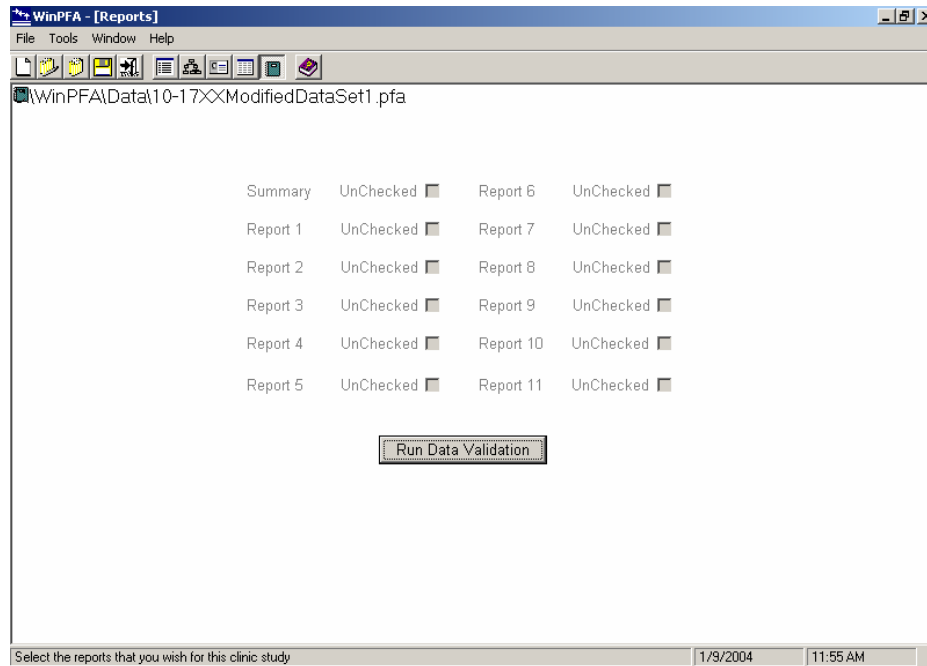
Clicking the *Run Data Validation* button will generate a report or identify errors or omissions in the data.

More on Those Messages

Like field-level data verification, data validation also generates three types of messages that identify a range of problems with the data set. Each prompts your response:

1. **Information Messages** (for example, Data set contains no Contact Records. Data set is inadequate to proceed with data validation) require you to add one or more additional records to the data set.

2. **Error Messages** (for example, *Contact during Client's Unavailable*) require you to correct the problem the messages identify.

3. **Warning Messages** (for example, *Staff With Salary of 0 may affect cost calculations,* or *Contact more than 1 hour*) do not impose requirements on you but suggest that the identified data may be outside the expected norms.

Each message includes additional information for locating the data that triggered the message. For example, a typical warning message may read in full, *Contact more than 1 hour: ATL [a staff PID] 1 [a client #] 6:30:00 [start time of the contact].* The information in the report window will enable you to navigate to the window to which the error (or warning) corresponds and make the necessary corrections. Then, with errors corrected and data validation run again, you may run any of the statistical reports.

Select Your Reports

In displaying 11 reports, the Reports window does not have sufficient space to offer the reports' descriptive names also. But, each report's tool tip does: So, hovering your mouse over each report will pop up a tool tip yielding the following titles which offer:

- Summary Report
- Report 1, "Clients' Compliance with Appointments," consists of two reports: "Clients Time of Arrival Relative to Appointment Time" and "Number of Clients with and without appointment by Reason for visit"
- Report 2, "Clients' Time in Clinic: Contacts and Non-Contacts, by Reason for Visit and Subclass," consists of: Clients Total Time in Clinic By Reason For Visit (and by SubClass); Clients Contact Time in Clinic By Reason For Visit (also by Subclass); Clients NonContact Time in Clinic By Reason For Visit (and, also by Subclass)
- Report 3, "Client Waiting Time Between Contacts, Non-Contacts, by Task and by Designation," corresponding to lines 7 and 8 of PFA 2.0's Table 4, consists of Client Waiting Time Between Service Events (Contacts) By Task; Client Waiting Time

Between Service Events (Contacts and Client Non-Contacts) By Task; Client Waiting Time Between Service Events Contacts and Staff Non-Contacts) By Task; Client Waiting Time Between Service Events (Contacts and Client/Staff Non-Contacts) By Task; and Client Waiting Time Between Service Events (Contacts) By Designation

- Report 4, "Personnel Statistics: Time Available and Service Time, by Task and by Designation," corresponding to lines 1 through 6 of PFA 2.0's Table , consists of Staff Statistics By Task and Staff Statistics By Official Designation

- Report 5, "Personnel Time by Client Served by Task," generally corresponding to lines PFA 2.0's Table 5 but excluding cost calculations, consists of Service Minutes (by task)

- Report 6, "Personnel Time by Client Served by Reason for Visit (RFV) and Subclassification (SUB)" (new report) consists of 3 reports: "Client Service Minutes (Contact, NonContact) by Reason For Visit"; "Client Service Minutes (Contact, NonContact) by Subclass"; and Client Service Minutes (Contact, NonContact) by [combined] Reason for Visit & SubClass"

- Report 7 "Personnel Costs by Client Served by Reason for Visit (RFV) and Subclassification and by Task" (corresponds to the cost calculations in PFA 2.0's Table 5)

- Report 8 "Individual Staff Data" (corresponds to PFA 2.0's Table 6)

- Report 9 "Clients per Hour by Staff Member and by Designation"; and "# Clients, # Staff, and # of Client and Staff Events during Each Time Interval" (new reports)

- Report 10 "Client Contact Sequence Frequency by Reason for Visit" (new report)

- Report 11 "Reports on User-Defined Fields" (new report)

Note that your selection of two reports triggers a dialogue box requiring your response before WinPFA can generate the report:

1. ***Report 1 (PFA 2.0's Table 1):*** The dialogue box asks what interval you wish to use to define as *on-time;* for example, you may care to define it as 15 minutes, as does PFA 2.0.

2. ***Report 8 (PFA 2.0's Table 6):*** The dialogue box asks whether you want each staff member's rate displayed.

Figure 32. The Reports Window (Run Selected Reports)
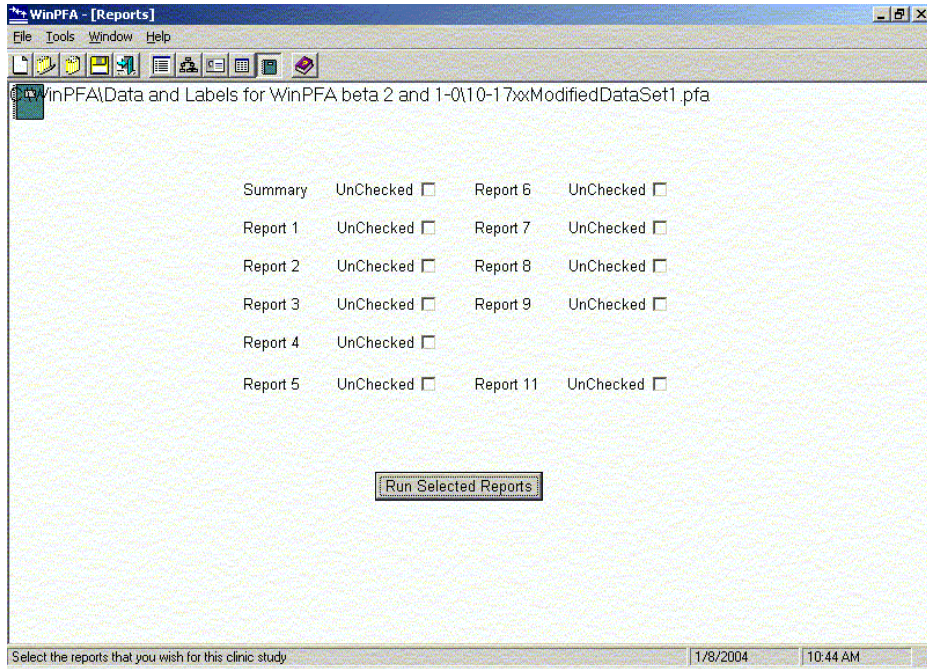
Check the appropriate boxes and click *Run Selected Reports* to generate the reports you need.

Processing Speed

How much time WinPFA takes to produce your reports depends on two key factors: First, the total number of clinic events documented (i.e., the total number of contacts plus non-contacts plus unavailable events) which varies and usually according to the number of clients; second, your PC's processing speed (usually measured in MHz or GHz). To estimate the amount of time you will need to run your data, review the following chart which displays typical times for a sampling of reports. Note that better times are achieved when the PC is running WinPFA alone. Consequently, for large data sets (e.g., in excess of 5000 events), we recommend running your reports toward the very end of your workday or when you will not need to use your PC for a predictably long period of time.

If you become anxious with WinPFA's hourglass (the "eggtimer") remaining on your screen too long and you begin to wonder if WinPFA is still operating, then in more recent versions of Windows™, you may use your Windows Task Manager to track WinPFA's progress in producing these reports. Here's what to do:

1. Key Ctrl+Alt+Delete
2. Select the "Task List" button
3. In the "Applications" tab, WinPFA will be listed as having the status: "not running" [Hint: Don't take that message literally!]
4. Navigate to the "Processes" tab; if the CPU (processing) time is incrementing second-by-second and minute-by-minute, then WinPFA.exe, is, indeed, running.
5. Next, navigate to the "Performance" tab; if the CPU usage is running at close to 100%, then WinPFA is still processing your data set.

PC Speed	Number Total Events**	Number Clients	Warnings and Errors (HH:MM:SS)	Summary (HH:MM:SS)	2 (HH:MM:SS)	3 (HH:MM:SS)	5 (HH:MM:SS)	6 (HH:MM:SS)
1.7 GHz	7540	1325	00:01:11	00:00:13	02:48:29	00:05:10	09:17:52	00:00:07
1.7 GHz*	3031	506	00:00:22	00:00:03	00:04:55	00:01:07	00:10:18	00:00:04
166 MHz	3031	506	00:05:03	00:00:48	00:32:50	00:16:02	01:01:13	00:00:53
1.7 GHz*	2121	341	00:00:15	00:00:02	00:01:34	00:00:36	00:02:49	00:00:03
166 MHz	2121	341	00:03:32	00:00:29	00:10:49	00:08:58	00:19:44	00:00:40
1.7 GHz*	923	132	00:00:06	00:00:00	00:00:08	00:00:10	00:00:11	00:00:01
166 MHz	923	132	00:01:35	00:00:12	00:01:21	00:02:59	00:02:01	00:00:25

* other programs running concurrently with WinPFA;
** total events = # contacts + # non-contacts + # unavailable events

To View the Reports

WinPFA generates each report you select as an individual file in WordPad. However, you may use Notepad, MS Word, and other word processing applications to review the data. To view each report, click its icon at the bottom of your screen. Then, select the Courier New font with a 10-point size to ensure correct alignment of the data.

To Tailor the Reports

You may custom-tailor the reports as WordPad text files. For example, you may wish to change the row or column headings or include additional explanatory information.

> ***NOTE:*** Once you have edited any of these reports, you must close the edited report before attempting to re-run the original report. Furthermore, re-running the original will result in your edited version being lost. Solution: Before closing it, save your edited version to a different Windows® folder (*directory*).

Figure 33. THE GRAPH

APPENDIX A.
TOOLS

WinPFA offers three tools:

1. Restore Welcome Screen.

2. Export.

3. Import.

All are accessible from the tool bar; ***Export*** may also be activated in the Codes and Labels window and the Staff window (see *Duplicate Icon,* page 14). Description of how to use these tools follows.

Restore Welcome Screen

Those not needing to view the Welcome Screen may click *Do not display this message again* at the Welcome Screen's bottom. To view this screen again, select *Restore Welcome Screen* under ***Tools,*** and the screen restores immediately.

Export

Once any data set is active, those wishing to export (or save for future use) either the Codes and Labels or the Staff registers may opt for either selection from the ***Export*** menu under ***Tools.*** Click the desired selection and follow the on-screen instructions, which includes providing each a file name.

Import

To import any PFA 2.0 or any Win PFA beta 1 data set already saved to any folder or directory, click **Import** from the **Tools** menu. Next, follow the on-screen instructions. Note that for PFA 2.0 data sets you must provide a WinPFA name after selecting the data set's corresponding Labels file. WinPFA's default location for PFA 2.0 data sets and Win PFA beta 1 data sets is **Data** under **WinPFA;** for PFA 2.0 Labels, the default is **Labels** under **WinPFA.**

NOTE:	To successfully import a PFA 2.0 data set, you must ensure that the name of the data set remains unchanged since first created in PFA 2.0. Also, the content of the data set's corresponding Labels file must remain unaltered. If a successfully imported data set is not error-free (as indicated by the PFA 2.0 Edit Report), then WinPFA's data validation report, running automatically with a successful import, will identify errors that you must correct before being able to generate any of seven reports.

APPENDIX B.
WinPFA'S DATABASE

PFA 2.0 is the conceptual basis for WinPFA 1.0. But that fundamental similarity does not extend to the format and content of the databases that each produces.

PFA's data structure is commonly described as a flat ASCII file: a series of individual horizontal records up to 80 characters in length coming in three prescribed formats (one for the Clinic Register, one for the Patient Registers, and one for the Personnel Registers).

In marked contrast, WinPFA 1.0's database comprises 22 tables. They are all cross-referenced, either directly or indirectly, by a small number of common variables. Possibly most importantly, what underlies the database is the Jet database (DB) engine. The Jet DB is a software industry near-standard and is used for much commercial software, including FoxPro, MS Access, and D-base, as well as CDC's Epi-Info.

WinPFA 1.0's 22 tables correspond to the 16 tabs viewable through the Codes-Labels window and the 6 windows that document Contact, Non-Contact, Nonavailable, Clinic, Staff, and Client data. For a more complete understanding of these tables:

1. Run any application that uses the Jet DB engine (for example, MS Access).

2. Next, import any WinPFA study (located as follows: *program files\WinPFA\DATA*).

3. Select the table you are interested in.

4. Examine that table, being sure to review the underlying field name and data type; to do this, for example, select ***View*** from MS Access.

APPENDIX C.
WinPFA'S DEFAULT FILE STRUCTURE

Simply defined, this is WinPFA's file structure:

> The *Program Files* folder holds the *WinPFA* folder;
>
> > The *WinPFA* folder, in turn, holds
> >
> > > 1. The *Labels* folder.
> > >
> > > 2. The *Data* folder (revealed here only by double-clicking WinPFA).
> > >
> > > 3. The *Reports* folder.

Here Is How You May Use This Information Later

If, within the *Codes-Labels* window, you choose to archive your WinPFA Labels to a personal folder (one you name and locate elsewhere), WinPFA will not display your new folder automatically. Your folder is not part of WinPFA's default structure. Instead, each time you wish to re-use one of your existing Labels, you will need to redirect WinPFA to where you have archived your customized *Labels*.

APPENDIX D.
DISTRIBUTED COSTS

Definition

With WinPFA 1.0, like PFA 2.0, users may identify as *distributed* those costs associated with the portion of a staff's workday when, according to the PFA study, no client Contact or Non-Contact services occur.

NOTE:	WinPFA also treats the clinic's prorated share of the annual clinic costs as distributed costs.

Once these costs are identified as *distributed,* WinPFA allocates them to all clients enrolled in the study.

The rationale underlying this distributed cost methodology is threefold:

1. Under nearly all circumstances, during this portion of the workday, the staff—despite not delivering any Contact or Non-Contact services—serves not only the clinic as a whole but also all its clients.

2. Were these costs to be assigned to only those clients seen by the staff, then the visit costs for these clients might be disproportionately burdensome—particularly if this staff member's usual workday includes only occasional client services, often when temporarily substituting for other staff members.

3. Equal allocation of these costs among all clients is fairer to the client and produces PFA study cost data that are more representative of the clinic.

WinPFA versus PFA

WinPFA and PFA use the same method to calculate individual distributed costs. However, WinPFA and PFA differ in regard to which staff members may contribute to distributed costs:

1. WinPFA allows users to decide which staff members (i.e., all, some, or none) may contribute to distributed costs.

2. PFA restricts users only to staff members using the designated manager task code (*M*) and those staff members whose workday does not include direct client service.

A Note of Caution

Compared with PFA, WinPFA permits the user complete freedom in designating which staff members contribute to the clinic's distributed costs. But this presents a problem: What mix of staff—all staff members, or selected staff members according to job function, or staff members who rarely see clients, or only the most highly paid staff members—should contribute their distributed costs to produce the soundest cost calculation strategy?

Users should approach this problem with three considerations in mind:

1. First, because PFA's more restrictive method of designating staff as contributors of distributed costs is more time-tested, applying similar restrictions to WinPFA may be the prudent, short-term approach, until additional experience is gained interpreting the WinPFA reports.

2. Second, WinPFA users should make use of local resources, including their organization's financial management staff, as they debate this issue in terms of their study design.

3. Additionally, for serial WinPFA studies, contributors to distributed costs should consistently be the same staff members to allow meaningful comparisons of data among studies.

GLOSSARY

Active

Characterizes features that you may immediately access.

Add

Located among the buttons located toward the bottom of many tabs, *Add* allows you to incorporate additional staff, clients, contacts, etc., into the study database.

Captions

In each tab, the descriptive names preceding the data boxes (or data fields).

Click

Pressing down once then releasing the mouse's left button.

Click and Drag

To move vertical or horizontal scroll bars, click the mouse down anywhere on the bar without releasing and then move the bar up, down, or sideways, allowing, for example, navigation to new items in a pick list.

Codes

The single characters corresponding to the variables' descriptions or labels.

Codes-Labels-Captions

The window for documenting the possible range of data for text boxes and the captions for the four user-defined (UDF) data boxes; once documented, these *Code-Label* descriptions display on drop-down lists, and the captions display in place of the UDF's default captions in the *Client* tab.

Currency Fields

Data boxes that accept only dollars and cents, documenting data for WinPFA cost calculations.

Data Structure

The system of data tables and their cross-referencing through identifiable key data fields (e.g., *Staff IDs* and *Client IDs*).

Date Field

Or *Date box,* formatted mm/dd/yy, accepts a month, a day, and a year; you document these data with the keyboard or from the drop-down calendar.

Default Folder/Drive/Directory

The preprogrammed locations on the user's PC where Windows® stores WinPFA's operating files and data files.

Default Values

The preprogrammed values appearing in data boxes before you enter any study data.

Delete

Located among the buttons near the bottom of tabs of the Staff and Client windows, *Delete* allows you to delete previously documented staff, clients, contacts, etc., from the study database.

Descriptions

The up-to-30-character labels you document in the *Codes, Labels, and Captions* window, which defines the study variables. *Note that apostrophes, quotes, and asterisks cannot be used; use of these characters will result in WinPFA's being unable to analyze the data correctly or possibly in WinPFA's terminating operation.*

Dialogue

A pop-up question that prompts your response (for example, *Yes* or *No*).

Distributed Costs

Costs associated with clinic operations unrelated to client services (contact or non-contact). For more information, see Appendix D.

Double-Click

Two quick clicks of the mouse's left button.

Drive

The major organizational unit of the PC's hard drive (for example, the C: drive).

Drop-Down Button

Mouse-activated, this button allows you to display lists of code-label description and also two data entry aids: a virtual calculator for *Numeric* boxes and a virtual calendar for the *Date* box.

Drop-Down Calculator

> User-accessed calculator activated by clicking a number box's drop-down button, for quickly entering study data.

Drop-Down Calendar

> User-accessed calendar, activated by clicking a drop-down button, for selecting the study date.

Drop-Down List or Window

> For entering data in text boxes, drop-downs list user-defined code-labels descriptions and are activated by clicking the box's drop-down button.

Edit

> Located among the buttons near the bottom of tabs of the Staff and Client windows, *Edit* allows you to modify the study database.

Error Messages

> Messages that identify conflicts among data.

Extended Search

> Allowing you to traverse drop-down lists of *Code-Labels* descriptions, the *Extended Search* is activated by keying the first or the first few characters of the desired item in the text box.

Field or Data Field

> Also known as the *data box,* the locations in each tab for documenting study data.

Flat ASCII File

> Or *flat file.* The format encoding the PFA 2.0 database and consisting of individual clinic, personnel, and patient registers with data configured in horizontal rows.

Folder

> Or in DOS, *directory.* Windows'® means of organizing files within the PC's drives (for example, C:).

Jet Data Base Engine

> The underlying organizer for the WinPFA 1.0 data structure, allowing storage of data in cross-referencing tables; Epi-Info, MS Access, and other software also exploit the Jet Data Base engine.

Key, Keying, and Keyboard

Using the keyboard (rather than the mouse) for data entry.

Labels

Possible text box entries that you document as *descriptions* in the *Codes-Labels-Captions* window.

Menu Bar

The horizontal row toward the top of the WinPFA 1.0 windows where you may access a range of features: *File, Tools, Window,* and *Help.*

Multiple Data Field

A data box requiring documentation of two or more study data; in WinPFA 1.0, only the *Date* and the *Time* boxes require such data.

Navigate

To move from location X to location Y; for example, from the *Clinic* window to the *Staff* window.

Non-Active/Inactive

Refers to a feature you cannot access.

Non-Contact

Applicable to staff and to clients, non-contacts describe the staff's non-face-to-face service contacts and, for clients, refer to what the clinic requires the client to do (for example, view a video).

Number Boxes

Data boxes accepting only whole numbers (or *integers*).

Optional Field

A data box that you may elect not to document; for example, *Subclassification* in the *Client* tab.

PFA 2.0

The 1991 version of CDC's Patient Flow Analysis, programmed for DOS but compatible with versions of Windows® through 2000.

Pop-Up Window

A small window popping up within windows or tabs that requires your response.

Published Service Hours Per Year

Reflected in a staff person informing a telephone caller, "This clinic is open from 8:30 AM until 5:00 PM," *Published Service Hours Per Year* is the yearly aggregate of the clinic's daily hours and may be calculated by summing one year's worth of the daily [published] hours. Document this in the *Operating Costs* tab.

Report

WinPFA's output that complements the graph; analogous to PFA 2.0's Statistical Reports, WinPFA's Reports include all of 2.0's tables, except table 3, which WinPFA incorporates into its Report 5.

Required Box

A data box that you must document; for example, *Client ID.*

Saved Staff Listing

An archived collection of staff registers from earlier PFA studies; you may re-use this listing to lessen data entry time for studies with similar staff data.

Scrollable List

Drop-down lists for documenting text boxes are scrollable if they consist of more than four items; to move through the list, just click and drag the vertical scroll bar; if there are four or fewer items, no scroll bar appears.

Select

Using the left button of the mouse to select from, for example, a pick list.

Special Feature

The ☞ *Special Feature!!* cues in this tutorial direct the experienced user's attention to less intuitive and highly critical aspects of WinPFA data entry.

Tab

The major subdivision of a WinPFA windows; for example, the *Staff* window's *Member, Compensation, Unavailable,* and *Non-Contact* tabs.

Tab Sequence

The sequential movement from data box to data box, achieved through use of only the <TAB> key; in WinPFA, this sequence is top to bottom and left to right.

Text Box

Data boxes accepting keyboard and other characters; *note that number characters in text boxes cannot be used by WinPFA to perform calculations.*

Time Boxes

Data boxes documenting only hour, minute, and AM vs. PM for documenting, for example, a contact.

Tool Bar

The horizontal buttons or icons found toward the top of the windows and tabs; clicking on tool bar items activates a range of features such as *Open [file], Exit Program,* and *Report.*

Tool Tips

Pop-up messages describing on-screen features and activated by your hovering the mouse over these features.

Total Annual Cost Minus Staff Salary

Except for costs associated with personnel, whether full-time, part-time, permanent, or temporary, this is the sum of all expenses incurred to operate the clinic for 1 calendar year. Document this in the *Operating Costs* tab.

Total Service Hours Per Year

The total hours the clinic is actively providing services during 1 calendar year; this number frequently is greater than the *Published Service Hours Per Year.* Document this in the *Operating Costs* tab.

Total Unduplicated Clients Per Year

The total number of clients using the clinic during 1 calendar year, regardless of the number of visits each client makes. Document this in the *Operating Costs* tab.

Total Visits Per Year

The total number of visits to the clinic made by all clients each year; for example, if each of 10 clients make 10 visits yearly, then the clinic receives 100 *Total Visits Per Year.* Document this in the *Operating Costs* tab.

Two-Button Scroll

Located at the right margin of number and other boxes, this mouse-activated two-part tool's upper portion (▲) allows you to display numbers of increasing size, while the lower portion (▼) displays numbers of decreasing size, including negative numbers for some boxes.

UDF Captions

This *Codes-Labels-Captions* tab allows you to customize the captions for the four user-defined fields of the Client tab.

Unavailable

Applicable to both staff and clients, *Unavailable* identifies periods when staff and clients may not receive or deliver services (for example, staff members taking a break from work and clients making personal phone calls).

Vertical Scroll Bar

Using this click-and-drag bar located within the right margin of many data boxes, you may navigate lists consisting of more than four items.

Window

Major divisions of WinPFA that you may view on the screen; subdivisions of windows are *Tabs*.

INDEX