
Turbo-Doc Electronic Medical Record System For Palm® Systems

About Turbo-Doc Palm

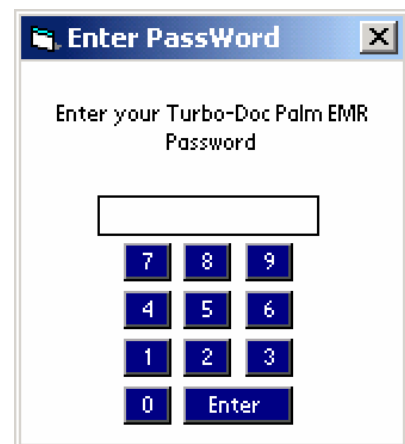
Turbo-Doc Palm EMR is a tool to aid in the creation and recollection of medical records. While Turbo-Doc Palm is a fully functional medical records generator, its primary function is as a companion to the full PC version of Turbo-Doc EMR. When used in conjunction with the full version of Turbo-Doc, it allows the user to create patient files and visit records on their PC, then export them into Turbo-Doc Palm to carry along to a hospital or clinic.

Installing Turbo-Doc Palm

The installation of the program is mostly automated, but must be started manually. Start by running the file containing the Turbo-Doc Palm installation information. The name of this file may vary, depending on if it is being installed from the Turbo-Doc CD or if it was downloaded from the internet. To install Turbo-Doc Palm from the Turbo-Doc CD, insert the CD into the CD-ROM drive. Then select Run from the Start Menu and type D:\tdoc_palm\setup.exe and press Enter. (If your CD drive has a drive letter other than D, substitute the correct drive letter for your system in place of the D in the instructions.) For installation of a downloaded version of Turbo-Doc Palm, open Windows Explorer or My Computer and browse to the folder into which the file was saved (usually My Documents). Double click on the Turbo-Doc Palm installation file (usually called TDPalmSetup.exe, but may vary). Once either of these files has been started, the installation program will prompt for any additional information it may need to complete the installation.

Running Turbo-Doc Palm

Start by clicking on the Turbo-Doc icon (TDoc EMR) from the PDA's main menu. The Turbo-Doc splash screen will appear while the database loads. Once the database is loaded the splash screen will remain visible for three seconds then will proceed to the Password screen. (Note: it is possible to bypass the three second wait by clicking anywhere on the PDA's screen.) The first time that Turbo-Doc Palm is used, a password will need to be created. The password may consist of any four numbers. Once the password is entered, the user will be asked to reenter it for verification. The password is to protect the confidentiality of the patient records. As such, if Turbo-Doc Palm is left idle for more than 20 minutes or if any additional programs are run outside of Turbo-Doc Palm (i.e., To-Do List, Notepad) the password will have to be reentered in order to access Turbo-Doc Palm records. Once the password is entered, the **Select Patient** screen will appear.



Adding a New Patient to Turbo-Doc Palm

From the **Select Patient** screen, open the **Enter New Patient** screen by either pressing the **Select Patient** button and then pressing the **New** button at the bottom of the screen, or press the **Options/Utilities** button and then select **Add New Patient**.

The Enter New Patient screen allows the user to enter the demographic information for a new

patient. When the screen first appears, the cursor defaults to the **First** field for entering the first name. To go to the next field, or any other field on the screen, simply tap on the desired field and the cursor will reposition to that field for data entry. The **ID #** field is for information only. It is populated only when viewing patients that were created or modified on the full version of Turbo-Doc.

Enter the DOB (date of birth) by clicking the button next to the DOB field. A list of years will appear first, and once the year has been chosen, the calendar screen will open. The appropriate month and day may then be selected. Once the date is entered, the day, month and year will be populated into the DOB field.

The Age field will be automatically filled in based on the date of birth selected. Tap on the Sex field to open a pop up window with **M** and **F** as options, and then simply select the appropriate option for the patient. The Race field operates similarly, tap the field to bring up the options, then select the appropriate race for the patient. The Phone field should be entered manually, and may take any letter or number.

The Referring Doctor field will bring up a list of referring doctors that have been imported into Turbo-Doc Palm from the full version of Turbo-Doc, or that have been entered manually into Turbo-Doc Palm. For information on importing records from Turbo-Doc into Turbo-Doc Palm see the Importing Records section of this guide. To add to the list of referring doctors, click on the Referring Doctor field, then click the **Options** button in the upper left-hand corner of the screen, and select **Edit Listboxes**. This will bring up the list of Doctors and Rooms for editing. Enter the text for the doctor as it should appear in the record, then press **Save Changes**. The referring doctor can be selected from the list or it can be written in manually on the Referring Doctor field.

The Room field opens a pop up window again, so previously saved room numbers can be entered by clicking on the list, or they can be manually entered as well. The Admit Date field will open the calendar again, pick the date of admission (if applicable) by selecting the year, month and day, in that order. Once the day has been selected (or if the **Today** button is pressed) the date will populate into the Admit Date field. Once all of the demographic information for the patient has been entered, press the **Save** button to save the data and return to the Select Patient screen. At any time during the creation of a patient, press the **Cancel** button to clear all entries on the screen. There is no undo for pressing **Cancel**. To return to the Select Patient screen, press **Back**.

Creating a New Patient Record

In order to create a New Patient Record, either the H&P/Cons or SOAP button at the bottom of the screen needs to be selected. Once H&P/Cons has been selected, click the **HPI** button on the left hand side of the screen to begin creating the record. After pressing **HPI**, the screen will change, presenting two lists of words and phrases associated with the History of Present Illness section. Click on the desired words in the lists to add them to the HPI section of the record. To remove words or phrases that have been added to the record, select them from the text at the top of the screen and delete them.

Each of the word lists is fully customizable. To add, edit or delete words from the lists, press the **Options** button at the top left hand side of the screen and select **Edit Listboxes**. This will open up both lists of words in an editing window. The left list will be at the top of the screen and the right list at the bottom. To edit a word or phrase, select it from the list and make the appropriate change. To add a word, scroll to the bottom of the list and add as many words or phrases as desired, keeping in mind that each line will represent one phrase, so words that need to be added separately in a record should be on separate lines. To remove a word or phrase, select it from the list, and then delete it. When the editing of the lists is complete, select **Save Changes** to save, or **Back** to discard, and the program will return to the previous screen.

Once all the text has been entered for the HPI section, press the **PSH** button to save the data entered and proceed to the next section of the record. The various sections in the record need not be entered in a specific order. In the record they will appear in the order that they are listed in Turbo-Doc Palm, but they may be entered or modified in any order desired. To go to any given section in the record, whether for the first time data entry, or to correct something on a previously entered section, press the button on the left side of the screen that corresponds to the desired section. Due to the size constraints on the Palm OS screen, the main screen for History

and Physical records has been broken into three pages. To switch between pages, press the buttons at the bottom of the screen labeled **First Page**, **Next Page**, **Prior Page**, or **Last Page** to be taken to that page. The list of sections, their button abbreviations and the page on which they appear are listed below.

First Page		Middle Page		Last Page	
HPI	History of Present Illness	GEN	General	Neuro	Neurological
PSH	Past Surgical History	HEENT	Head, Eyes, Ears, Nose, and Throat	Lymph	Lymphatics
PMH	Past Medical History	Chest	Chest	Skin	Skin
MED	Medications	Heart	Heart	Spine	Spine
ALL	Allergies	Breast	Breast	LAB	Lab Reports
SOC	Social History	Abd	Abdomen	Xray	X-Ray
FMH	Family Medical History	Rectal	Rectal	IMP	Impression
TRX	Transfusions	GU	Genitourinary	PLAN	Plan
VS	Vital Signs	Ext	Extremities	Order	Orders
		Pulse	Pulse		

Data entry in all of the above-listed screens is accomplished using the same procedure, with the following exceptions:

Vital Signs

Pressing the **VS** button will display the Vital Signs screen. This screen has specialized data entry fields for Blood Pressure (**BP**), **Pulse**, Temperature (**Temp**), Respirations (**Resp**), Intake and Output (**I & O**), and Weight (**WT**). By clicking on a field, Turbo-Doc will bring up a specialized text box with words and phrases pertaining to that field. There is also a numeric keypad to speed data entry. Simply click on the number to add it to the currently selected field. Click on the words in the list box to add them to the selected field. Once all the data has been entered for that field, click on the **->** button to proceed to the next field, or click on the next desired field (they do not have to be entered in the displayed order). Once all desired fields have been filled, press the **Back** button to return to the main screen and continue the record.

Lab

Lab Options	LANE, LOIS
CBC, EKG, Serum HCG	
.	abdominal series
and	ABG
ASAP	Aminophyllin level
draw	blood culture
now	CBC
obtain	EKG
STAT	K+
	Na+
Back	Serum HCG

Pressing the **LAB** button will display the Lab Reports screen. This screen is used to track the Lab data for a patient. The screen has two list boxes, each containing words pertinent to lab data. To add words to the Lab section, click on the desired words or phrases in the list boxes and they will appear in the Lab section text at the top of the screen. To remove words or phrases from the text, highlight them with the stylus and then delete them. To clear the entire text, click on **Lab Options** in the upper left corner of the screen and select **Clear CURRENT text**. To edit the list boxes, click on **Lab Options** and select **Edit Listboxes**. Editing these lists follows the same procedure as outlined above in the HPI section. When the data has been entered successfully, press the **Back** button to return to the last page accessed. NOTE: The Lab section can also be accessed directly from the Select Patient screen by pressing the **Labs** button located at the bottom of that screen.

X-Ray

Xray Options	LANE, LOIS
Abdominal series	
.	Abdominal series
and	biliary scan
abdominal	CT Scan
C-Spine	CXR
Chest	IVP
Head	Ultrasound
Renal	with contrast
	without contrast
Back	

Pressing the **Xray** button will display the X-ray screen. This screen is used to track X-rays performed on a patient. The screen has two list boxes, each containing words pertinent to X-ray reports. To add words to the X-ray section, click on the desired words or phrases in the list boxes and they will appear in the X-ray section text at the top of the screen. To remove words or phrases from the text, highlight them with the stylus and then delete them. To clear the entire text, click on **Xray Options** in the upper left corner of the screen and select **Clear CURRENT text**. To edit the list boxes, click on **Xray Options** and select **Edit Listboxes**. Editing these lists follows the same procedure as outlined above in the HPI section. When the data has been entered successfully, press the **Back** button to return to the last page accessed. NOTE: The X-ray section can also be accessed directly from the Select Patient screen by pressing the **Xray** button located at the bottom of that screen.

Orders

Order Options	doe, john
advance diet to full liquids.	
and	advance diet to
d/c	blood gas
decrease	clears
discharge	EKG
increase	enema
with	foley cath
Back	full liquids
	hep loc IV
	NG Tube

Pressing the **Order** button will display the Orders screen. This screen is used to track the orders requested and received for a patient. The screen has two list boxes, each containing words pertinent to orders tracking. To add words to the Orders section, click on the desired words or phrases in the list boxes and they will appear in the Orders section text at the top of the screen. To remove words or phrases from the text, highlight them with the stylus and then delete them. To clear the entire text, click on **Order Options** in the upper left corner of the screen and select **Clear CURRENT text**. To edit the list boxes, click on **Order Options** and select **Edit Listboxes**. Editing these lists follows

the same procedure as outlined above in the HPI section. When the data has been entered successfully, press the **Back** button to return to the last page accessed. NOTE: The Orders section can also be accessed directly from the Select Patient screen by pressing the **Orders** button located at the bottom of that screen.

SOAP

Patient records can also be created using the SOAP format. To create a SOAP document, press the **SOAP** button from the Select Patient screen.

Options	LANE, LOIS
Vitals	Lungs: clear Heart: regular rhythm
S	
O	no
A	not
P	pain
LAB	regular
Xray	soft
Order	tender
Back	Wound:
	with
	breath sounds
	clear
	crackles
	distended
	gallop
	LLQ
	murmur
	rales
	rhythm

- **Vitals** – Opens Vital Signs screen. Vital Sign data previously entered under the H&P/Cons section will remain on this screen and may be edited if needed.
- **S, O, A, and P** – Clicking on these buttons will bring up the Subjective, Objective, Assessment, and Plan sections of the SOAP document for data entry.
- **LAB, Xray, and Order** – Opens up the Labs, X-ray, and Orders screens, respectively.

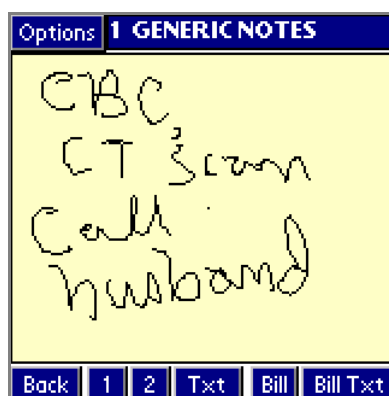
Clicking on the **Options** button on the SOAP screen provides the following options:

- **Preview** – Hides the data entry list boxes, and displays the document created so far.
- **Clear current text** – Clears all text from the currently selected section.
- **Clear ALL SOAP Data** – Clears all data from the SOAP text boxes for a specific screen. Vital signs, labs, etc, are not cleared.
- **Edit ListBoxes** – Allows the user to edit the word lists in the currently selected section.

To return to the Select Patient screen, click the **Back** button.

Notes

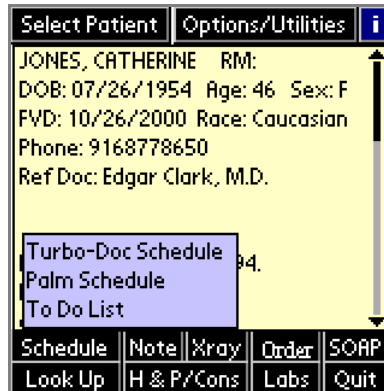
The Notes section allows the user to make text and graphic notes for quick retrieval. Notes can be stored with a specific patient's record, or they can be stored as a generic note. To access the notes page, go to the Select Patient screen and click on the **Note** button at the bottom of the screen. If a patient is selected, two options will be present: **Generic note** and a patient specific note (the patient note will appear as **Doe, Jane note**). If no patient is currently selected, only the Generic note option will be present. To add notes to the patient's record, click on the **Doe, Jane note** option. To add a generic note, click on **Generic note**. Clicking on either of these options will bring up the Notes screen.



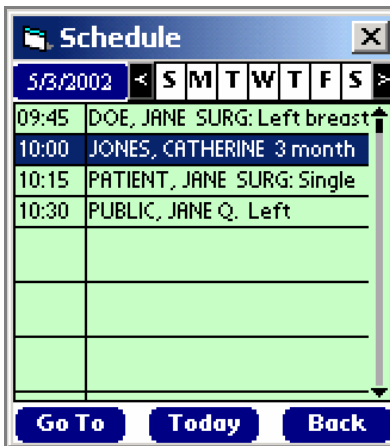
For generic notes, the top of the screen will display Generic Notes. For a patient specific note, the top of the screen will display the patient's name. Each set of notes, whether patient-specific or generic, contains five different screens to keep the notes on. At the bottom of the screen are buttons labeled **1**, **2**, **Txt**, **Bill**, and **Bill Txt**. 1, 2 and Txt are intended for general use; while Bill and Bill Txt are primarily for making notes on billing issues. The 1, 2 and Bill screens are set up like virtual sticky-notes. They are set up for writing directly to the page or drawing pictures. The Txt and Bill Txt screens are for writing text, using the normal text input for the user's PDA. To clear text from the screens, select the **Options** button. To clear just the current screen, select **Clear CURRENT text**. To clear all non bill-related notes (screens 1, 2 and Txt) select **Clear ALL NOTES text**. Please note that there is no undo feature when clearing notes screens. To clear all bill-related notes, select **Clear ALL BILL text**. To exit the notes screen, and return to the Select Patient screen, press the **Back** button. All changes made to the notes screens will be automatically saved when Back is pressed.

Schedule

The schedule screen allows the user to view appointments scheduled in the full version of Turbo-Doc. To access the scheduler, from the select patient screen, click on **Schedule**. Three options will be present: **Turbo-Doc Schedule**, **Palm Schedule**, and **To Do List**.



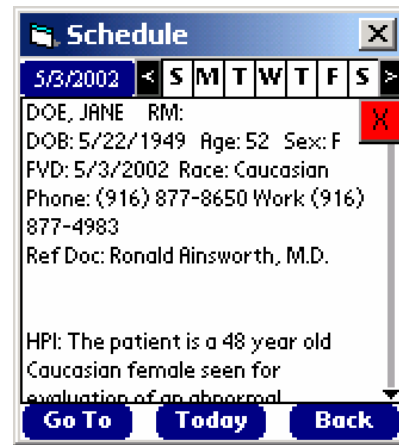
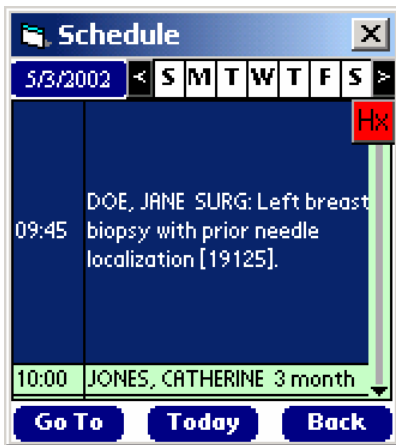
Clicking on the **Palm Schedule** or **To Do List** will exit Turbo-Doc and start up the scheduler or to do list incorporated into the PDA's software. Note that starting the Palm Scheduler or To Do List will require that Turbo-Doc be restarted to access further patient records.



After clicking on **Schedule**, select **Turbo-Doc Schedule**, and the schedule screen will appear. The scheduler will automatically open to the current date, and the appointments for that day will be listed.

The date currently selected is displayed in the top left hand corner of the screen. To go to a different date, click the **Go To** button at the bottom of the screen. This will cause a calendar to pop up, from which you can scroll between years. To choose a day, click on the month and day to be displayed. To go to the current date, click on **Today**. To return to the schedule, click on **Cancel**, **Today**, or choose a different day. It is also possible to select the current day from the schedule by clicking on **Today**. To go to different days in the current week, click on the appropriate letter at the top of the screen. To go forward or back a week, click on the forward and backward arrows at the top of the screen.

To view details of the appointment, tap on the patient. When a patient is selected, a red button labeled **Hx** will appear. Clicking on this will bring up the patient's history for the last visit recorded. To return to the scheduler, click the red **X** button.



Options/Utilities



Add New Patient – Opens the Enter New Patient screen to add a new patient record to the database.

BEAM All Databases – Copies entire current database to another PDA with Turbo-Doc Palm installed on it, overwriting any other currently existing Turbo-Doc Palm database. **WARNING:** This option cannot be undone, use with caution.

Delete ALL Patients – Clears all patients and records from the database. **WARNING:** This option cannot be undone, use with caution.

Delete Selected Patient -- Removes the currently selected patient and all associated records from the database.

Edit Selected Patient – Opens the Patient Information screen for the currently selected patient for review. To change patient demographic information, press the Edit button.

Print Selected Patient – Opens the Print Patient Records screen. See below for instructions on printing.

Lock Program – Locks the program to protect patient records. Once the Lock Program button is pushed, password must be entered to continue using Turbo-Doc Palm.

Statistics – Displays the current number of patients and phone numbers in the Turbo-Doc Palm database. Also displays the current version of Turbo-Doc Palm.

Printing with Turbo-Doc Palm

Turbo Doc Palm has printing capabilities, but requires the use of an infra-red capable printer and installation of the Palm Print Software package from Stevens Creek Software. An un-licensed version is included with the Installation, please visit their website: www.StevensCreek.com and register your version. To get to the print screen from the Select Patient screen, click **Options/Utilities**, then **Print Selected Patient**.

The screenshot shows a software interface with a blue header bar containing 'Options' and 'LOIS LANE'. Below the header is a 'Location:' label followed by a white dropdown menu with a black arrow. A list of document types follows, each with a checkbox and a date: 'Print SOAP Note 3/23/2002', 'Print H+P/Consult 11/25/2000', 'Print Orders', 'Print LABS', and 'Print X-Ray'. A red message 'Printer is NOT available' is displayed below the list. At the bottom are two blue buttons: 'Back' and 'Print'.

The Location option is the location the user was at (office, hospital, etc.) when the file was printed. To choose a location, press the arrow next to the location choices, and make a selection. To add or edit a location, click on **Options**, then **Add/Edit Locations**.

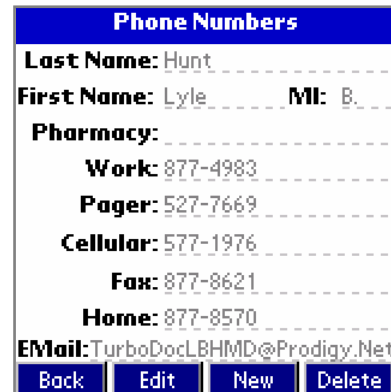
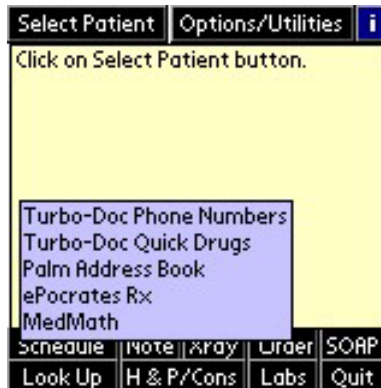
Turbo-Doc Palm can print the following types of documents: SOAP Note, H&P/Consult, Orders, Labs and X-Rays. To print one or more of the documents, select them from the list, align the IR port from the PDA to the IR port on the printer, and press Print. When selecting to print a SOAP Note, or H&P/Consult, check the date to be printed. To do this, click on the box next to the dates. This will cause a calendar to pop up, from which you can select the year, month, and day, in that order. To go to the current date, click on **Today**.

To get to the printer setup incorporated into the PDA, click **Options**, then **Print Setup**. Note that go to the Print Setup screen exits Turbo-Doc, and will require that Turbo-Doc be restarted to access further patient records.

To return to the Select Patient screen from the Print screen, press the **Back** button.

Look Up

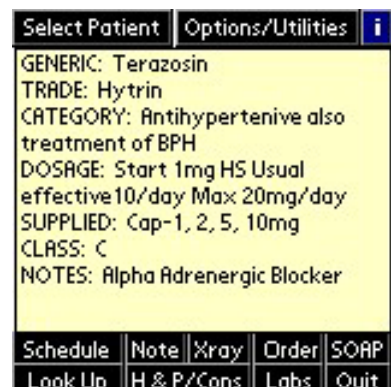
Under the Select Patient screen, click the **Look Up** button, and five options will appear: **Turbo-Doc Phone Numbers**, **Turbo-Doc Quick Drugs**, **Palm Address Book**, **ePocrates Rx** and **MedMath**.



Turbo-Doc Phone Numbers – Opens a list of phone numbers in Turbo-Doc’s database. To Locate a name and number, type in the first letter or letters and the cursor will reposition to that name. To create a new name and phone number entry, click **New**. This will open the Enter New Phone Number screen. From here it is possible to enter the name, pharmacy, phone numbers, and an email address. To open an existing record, click on the desired name. When opened, the record will be read only. At the bottom of the screen are four choices:

- **Back** – Goes back to Select Patient screen.
- **Edit** – Opens file so user can make changes.
- **New** – Opens new Information screen to create a new phone number record.
- **Delete** – Deletes currently selected record.

Turbo-Doc Quick Drugs – Opens a list of medications. Use the up and down arrows to scroll through the list or use the text input to enter the drug name to look up. Click on the drug to select it. Once a drug is selected, Turbo-Doc Palm will bring up a list of pertinent information about the drug including: generic and trade names, categories and dosages.



EPocrates Rx and MedMath are third party programs available for download on the web from www.PalmGear.com and www.Handango.com. Clicking on **Palm Address Book**, **ePocrates Rx**, or **MedMath** will exit Turbo-Doc, and will require that Turbo-Doc be restarted to access further patient records.

Synchronizing Turbo-Doc Palm to Turbo-Doc

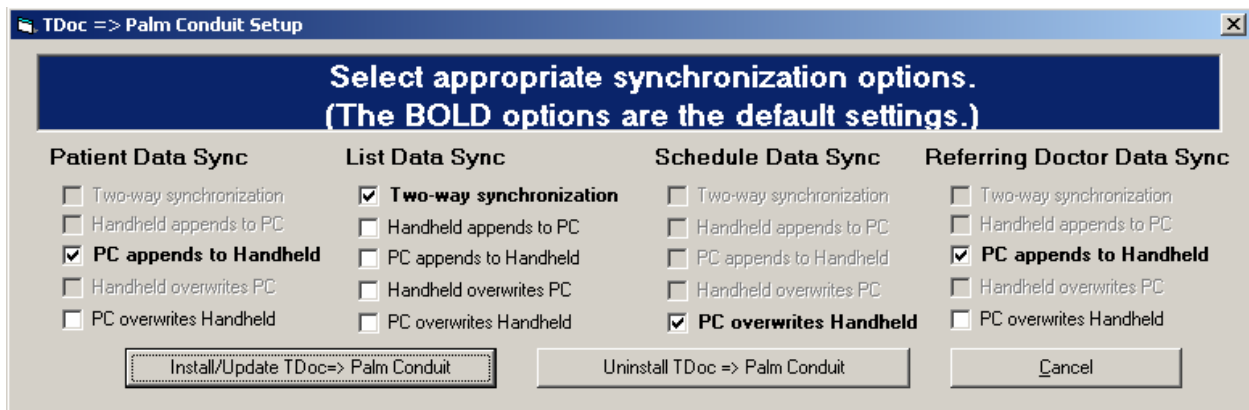
The most efficient way to add patients and patient records into Turbo-Doc Palm is to create them in the full PC version of Turbo-Doc and then export them into Turbo-Doc Palm. Turbo-Doc Palm has the capability of storing up to 1500 patient records plus the next 90 days of scheduled appointments in the Turbo-Doc scheduler.

To enable synchronization of the Turbo-Doc database to the Turbo-Doc Palm database, go to **Default Settings** in the menu bar from the Load Prior Patient screen in Turbo-Doc and select **Change Defaults**. On the Operation Mode tab, the lower right-hand corner has the following Palm synchronization settings:

- **Auto Export to Palm on Turbo-Doc Exit**—This setting will automatically set up a HotSync event to export recent Turbo-Doc records to the PDA every time Turbo-Doc is shut down.
- **Ask to Export to Palm on Turbo-Doc Exit**—This setting will ask if a HotSync event should be set up to export recent Turbo-Doc records to the PDA each time Turbo-Doc is shut down. *This is the preferred setting.*
- **Maximum Number of Patient Records to Export**—Selects the maximum number of records that will be exported to Turbo-Doc Palm. Can be from 10 to 1500.
- **Number of Prior Months to Retrieve**—Sets the number of months Turbo-Doc should look thru to find new records to export to Turbo-Doc Palm. Setting this option to 24 months will retrieve records from any date (not just within the last 24 months) until the maximum number of records is met.
- **Export Hx Present Illness, IMP and Plan**—Exports the HPI, IMP and Plan sections of the patient records.
- **Export Past Medical History**—Exports the PMH of the patient records.
- **Export ROS**—Exports the ROS of the patient records. ROS sections often contain large amounts of data, and can use up the PDA's memory capacity very quickly.
- **Export Physical Examination**—Exports the Physical Exam findings from the patient records.
- **Export Referring Doctor List**—Exports any doctor's names not currently on Turbo-Doc Palm's referring doctor list.
- **Export Schedule**—Exports scheduled appointments for the next 90 days from Turbo-Doc to be viewed on Turbo-Doc Palm.

NOTE: Turbo-Doc Palm, a normal schedule, and 1500 patient records will use 3+ MB of memory within the PDA device. Always make sure there is sufficient free memory on the PDA prior to initiating a HotSync transfer. Overloading a PDA's memory will not damage the PDA itself, but it will cause the device to lock up and may result in data loss from any Palm program (not just Turbo-Doc). If the PDA is low on memory, it may be necessary to remove lesser used programs and games from the device, as well as limiting the number of patient records exported.

There is also a button labeled **Configure HotSync**. Pressing the button will open the following window:



The settings on this window determine whether newer data is appended to the older data, or if the older data is overwritten by the newer data. It also determines which of the devices (the PDA or the PC) is considered to have the most up-to-date data, thus determining which way the synchronization travels (PC to PDA, or PDA to PC). Invalid options will be grayed out, and the default (recommended) settings are in bold. Once all the selections have been made, press the **Install/Update** button to save the changes. For new HotSync installations, Turbo-Doc will require a manual setup of the program, Conduit DSN (OBDC), required to transmit the data from Turbo-Doc to Turbo-Doc Palm. The program will prompt several steps in the setup, after which Turbo-Doc will be able to set up HotSync transfers, though the actual HotSync process still has to be started manually (refer to the PDA's instructions on initiating a HotSync transfer). This process need only be done once in order to set up Turbo-Doc to be able to correctly export to the user's PDA.

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