



MEDCHECK
User Manual

Med Check Version1.3

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Chapter 1 Introduction

1.1 Introduction

MedCheck is a powerful Point of Care Prescription Verification System that is simple to use and integrate. When incorporated with a pre-existing medical dispensing system, MedCheck significantly reduces the risk of dangerous human mistakes.

MedCheck insures that the correct medications are given to the correct patient by forcing a correct match to be made between a Patient ID and a Medication ID. All transactions, both accepted and rejected, are recorded and available for download via the standard Palm HotSync.



Chapter 2 System Requirements

2.1 System Requirements

Before MedCheck can be implemented, a basic prescription dispensing system should be in place. A system that utilizes barcode technology is ideal.

MedCheck works best if a unique identifier is used for both patient and medication. These identifiers would contain bar-coded information, again in an ideal setting. MedCheck is completely usable if barcode scanning is not available but much of the error checking benefit will be lost.

Chapter 3 Installation

This chapter details the steps for installing MedCheck. For most installations, the automatic install is sufficient. In certain scenarios, the automatic installation may not work and a manual installation is necessary.

3.1 Automatic Installation

1. Download **MedCheck.exe** from <http://www.ptshome.com> or another authorized reseller.
2. Double click **MedCheck.exe** in the folder to which you saved the download.
3. You will be prompted for a location to extract the information. The default location is **C:\PTS\MedCheck**. For simplicity, the remainder of the instructions refers to **C:\PTS\MedCheck** as the installed location. Remember to substitute the actual location when performing those steps yourself.
4. Upon successful file extraction, double-click on **setup.exe** located in **C:\PTS\MedCheck**.
5. The setup application installs both the PDA Application as well as the PC conduit used for the data transfer. Follow the remaining steps and the software installation is complete.
6. Perform a **HotSync** to your Palm Pilot. At this point, you should see the MedCheck application installed on your Palm Pilot.

NOTE: Handspring users running Windows 2000 may receive a warning message indicating that the installation failed. In almost all cases, it is safe to ignore this message and continue with normal installation.

3.2 Manual Installation

Please contact PTS Technical support at support@ptshome.com for manual installation instructions.

3.3 Removing MedCheck

In the unlikely event that you would like to remove MedCheck from your PDA, follow these simple instructions.

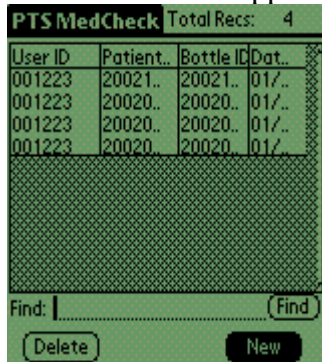
Run **Uninstall.bat** from the folder where you saved the extracted MedCheck file. This removes the conduit from the **HotSync** process but the MedCheck application must be manually removed from the PDA

Chapter 4: Default Operation

MedCheck is downloaded with a default setup that fits most dispensing situations. These default settings are provided to allow the user to evaluate MedCheck immediately after download. Following are simple instructions that explain how to use this default setup. If modifications must be made to the default setup, **Chapter 5** explains how to do this.

4.1 Entering Data

1) To begin capturing data; the user simply clicks the **New** Button from the Main Screen of the MedCheck application.

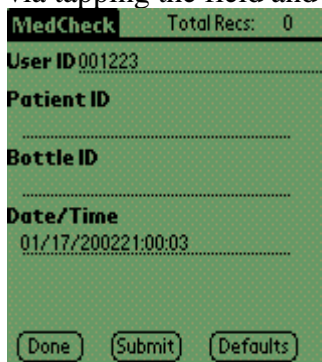


The screenshot shows the main screen of the MedCheck application. At the top, it says "PTS MedCheck" and "Total Recs: 4". Below this is a table with four columns: "User ID", "Patient..", "Bottle ID", and "Dat..". The table contains four rows of data, all with the same values: "001223", "20020..", "20020..", and "01/..". Below the table is a "Find:" field with a "Find" button. At the bottom, there are two buttons: "Delete" and "New".

User ID	Patient..	Bottle ID	Dat..
001223	20021..	20021..	01/..
001223	20020..	20020..	01/..
001223	20020..	20020..	01/..
001223	20020..	20020..	01/..

After pressing the **New** Button the User enters the data entry screen (Shown below Step 2). This screen is used to verify medications and is where Users spend the majority of their time.

2) The operator scans their Employee Identification number on their employee badge or manually enters their Employee ID number. Once the User ID number is entered MedCheck automatically fills this field with the ID number until it is manually changed via tapping the field and rescanning or manually entering.



The screenshot shows the data entry screen of the MedCheck application. At the top, it says "MedCheck" and "Total Recs: 0". Below this are four fields: "User ID" with the value "001223", "Patient ID", "Bottle ID", and "Date/Time" with the value "01/17/200221:00:03". At the bottom, there are three buttons: "Done", "Submit", and "Defaults".

3) The operator scans the **Patient ID**; typically a barcode located on the Patient's wrist bracelet or chart.

The screenshot shows the MedCheck interface with the following fields and values:

- MedCheck** Total Recs: 0
- User ID** 001223
- Patient ID** 200201010344457
- Bottle ID**
- Date/Time** 01/17/200221:00:03

Buttons at the bottom: Done, Submit, Defaults.

4) The operator scans or enters the Bottle ID, an identifier for the medication about to be dispensed. This is typically a barcode located on the medication. Upon scan of the **Bottle ID**, the record is automatically submitted and the operator is presented with a message indicating whether the entered information is valid. In order for the data to be considered valid in the default configuration, the **User Id** must contain data and the **Patient ID** and **Bottle ID** data must match exactly. A valid scan results in a **PATIENT MATCHED** message, any other combination results in an **INVALID SCAN** message.

The screenshot shows the MedCheck interface with the following fields and values:

- MedCheck** Total Recs: 3
- User ID** 001223
- Patient ID** 200201010344457
- Bottle ID** 200201010344457

Information section: PATIENT MATCHED

Button: OK

The screenshot shows the MedCheck interface with the following fields and values:

- MedCheck** Total Recs: 2
- User ID** 001223
- Patient ID** 200201010344457
- Bottle ID** 200201010344461

Information section: INVALID SCAN

Button: OK

Additional Data Captured

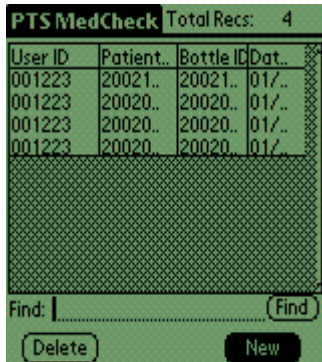
Date/Time Stamp and Status

MedCheck not only captures the data that the user scans in but every transaction receives a Date/Time stamp that is automatically attached when a **Bottle ID** scan takes place. This stamp allows the system to track exactly when a particular medication was delivered.

MedCheck also includes a non-visible **Status** field that exists for each record. This status indicates whether the last **Bottle ID** scan was valid or not. Examining the **Status** field contents after a PDA download provides invaluable information about how many potential mistakes an operator may be making when dispensing medications.

4.2 Viewing data

Any scanned data is available for limited viewing from the Main Screen of the application. Using the grid and the incorporated **Find** features allows the user a limited ability to view previously scanned data. There is little that the user can do to modify this data however. By not allowing the user access to edit the entered data a dispensing system enables itself to provide undisputable evidence of valid and invalid **Bottle ID** scans.



User ID	Patient	Bottle ID	Date
001223	20021..	20021..	01/..
001223	20020..	20020..	01/..
001223	20020..	20020..	01/..
001223	20020..	20020..	01/..

Find: Find

Delete New

Chapter 5 Customizing MedCheck

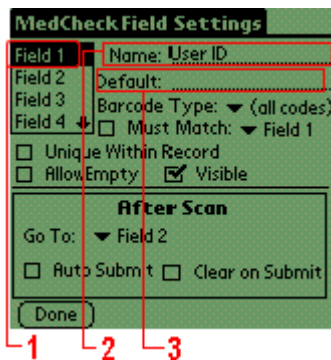
MedCheck Field Settings and Miscellaneous Settings can be easily modified to fit your exact dispensing needs.

5.1 Field Settings

Tapping the Palm Menu button and selecting Field Settings allows the user to enter the Field Settings area where MedCheck can be easily modified.



Palm Menu Button



1) Field

Choose the field you want to set.

2) Name

Enter the name you wish to label the field. This label will appear in the data entry screen and Data View screen.

3) Default

The **Default** represents the value that is initially used for the selected field. For example, you may set up one of your fields to represent a quantity. Likewise, you might want to set the **Default** for that field to be 1.

Real Time Default

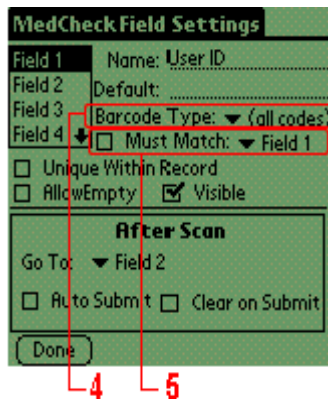
Tracer+ allows the user to utilize standard real time variables as a Default Value for any given field. There are five variables permitted at this time.

1. [*DATE*] - Enter the current date at the time of record entry
2. [*TIME*] - Enter the current time at the time of record entry.
3. [*USER*] - Enter the PDA User name at the time of record entry.
4. [*DATETIME*] - Enter the Date and Time in one field at the time of record entry.
5. [*STATUS*] – Enter the status of the current record. If the data for this record is correct upon submit, this field is populated with the Good Scan Message text of the application. The user can customize the Good Scan Message for MedCheck. (Refer to Chap. 5.2.1)
If the data for this record is incorrect upon submit, this field is populated with the Bad Scan Message text of the application. The user can also customize the Bad Scan Message. (Refer to **Chap. 5.2.1**)

Special note: These values must be entered exactly as specified. It may be easier to use the virtual keyboard as opposed to graffiti.

Note 1: The **Default** value is only used when the **Clear on Submit** option in the **After Scan** menu is selected for this field. If the user changes this value during data entry and **Clear on Submit** is not checked, the changed value is retained.

Note 2: If the user clicks the **Defaults** button from the data entry screen, this value will be cleared as well.

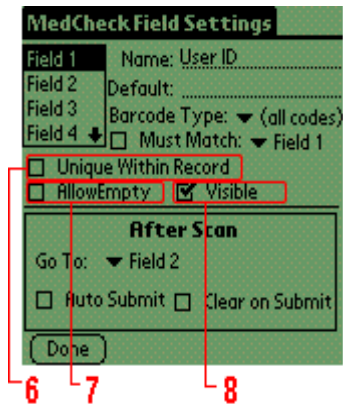


4) Barcode Type

This option prevents scans of the wrong bar code, i.e. if the Patient ID bar code type differs from Bottle ID the user cannot scan the Patient ID in place of a Bottle ID if they are not matching.

5) Must Match

This option designates a field to validate against. If this field does not require a match set it to its own field number.



6) Unique Within Record

This option is selected when the field value can only appear once within the record. This may be set for the User ID.

7) Allow Empty

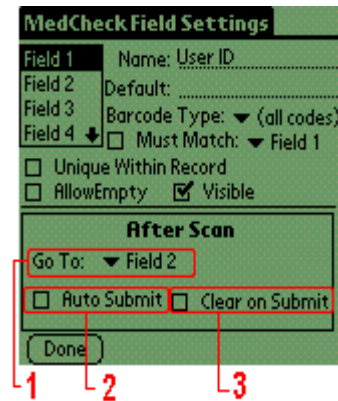
When selected the field can be left blank.

8) Visible

This option is normally selected and allows a field to be viewed or not viewed in the data entry screen. A field's visibility should be turned off when it is not being used in a session. **Visible** may also be turned off when a **Default** value exists and **Read Only** is selected.

5.1.1 After Scan Settings

After Scan field settings are designed to increase data entry speed and accuracy. Repetitive data capture situations such as inventory audits lend themselves to the efficiencies of these settings. It is strongly recommended that these features be activated



1) Go To

This option allows the user to control the tab order for the selected field. After a user performs a successful scan while in the focus of the selected field, the system sets the focus to whichever field is selected in this area. The user typically uses this feature to control the *'flow'* of the data entry. Alternatively, the **Down Arrow** key represents an *'After Scan'* event for those PDAs that are not bar code enabled

2) Auto Submit

This option represents whether or not to automatically submit this record after an *'After Scan'* event. If this option is chosen for the selected field, the system automatically submits the record and sets the focus to the field selected in the **Go To** prompt for the selected field.

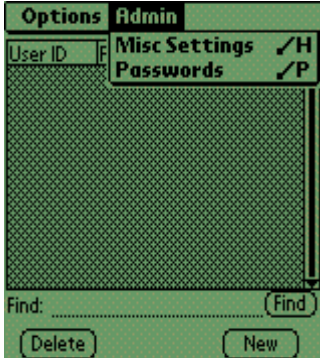
NOTE: An *'After Scan'* event includes both a completed barcode scan as well as pressing the **Down Arrow** key on your PDA.

3) Clear On Submit

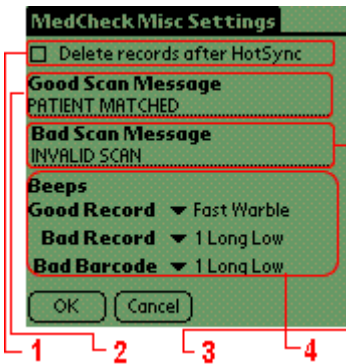
This option is used to tell the system whether to clear the selected field after submitting the current record in the Entry screen. If the current record is submitted as a result of an *'After Scan'* event or by clicking the **Submit** button, all the fields with this option selected are cleared. If the field has a **Default** value, that value is used instead of a blank entry

5.2 Administrator Settings

MedCheck Administrator settings enable an organization to add their own customized settings including, customized messages, alarm sounds, HotSync Settings and Passwords. To access the **Admin** section of MedCheck tap Admin on the Menu Bar.



5.2.1 Miscellaneous Settings



1) Delete records after HotSync

Select **Delete Data after HotSync** if the data should be removed from the PDA after a successful HotSync.

2) Good Scan Message

The message entered will appear every time a **Good Scan** occurs.

3) Bad Scan Message

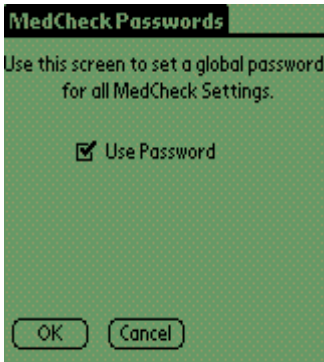
The message entered will appear every time a **Bad Scan** occurs.

4) Beeps

MedCheck can be set with unique audible tones for different scan results. **Good Record Beeps** occur when a good scan occurs. **Bad Record Beeps** occur when a bad scan occurs. **Bad Barcode Beeps** occur when a wrong bar code type is scanned.

5.2.2 Setting Passwords

Once sessions are configured it is customary to implement password protection so field personnel cannot easily alter the session settings. When a **Password** is set a user will be required to enter this **Password** to access **Field Settings**. Follow the steps below to set **Passwords**.



- 1) Select **Passwords** in the Grid Screen
- 2) Select **Use Password**
- 3) Enter your **Password**
- 4) Select **OK**

Chapter 6: Registration

6.1 Registering MedCheck

MedCheck is an application that requires registration for full functionality. The trial version of MedCheck limits the number of records entered on the PDA to twenty and transferred to the PC to five. The registered version does not contain this limitation.

PTS encourages all users who benefit from MedCheck to register their copy. To register MedCheck, we only require your Palm User ID and an Email address. We generate a unique serial number based on your Palm User ID so it is important that you send this information *exactly* as it appears on the MedCheck Splash Screen. This user ID can be found in the splash screen of MedCheck. Alternatively, it can be found in the upper right hand corner of the HotSync Application

Steps for online Registration

1. Go to <http://www.ptshome.com> or authorized MedCheck reseller.
2. Follow the link for MedCheck.
3. Click on the **Register** button.
4. You are now prompted for your **Palm User ID** and an Email Address.
5. Once you submit your user name and Email address, you will be sent to a PTS secure on-line purchase area.
6. Once credit card information is completed and verified, your registration code will be e-mailed to the address provided. This process usually takes approximately one hour but we ask that you allow one business day in the event of heavy traffic or any other delay.

6.2 Entering your registration code

1. Run the MedCheck application on your PDA.
2. Press the **Register** button in the MedCheck Splash Screen..
3. Enter your Registration Code at the **Registration Code** prompt.
4. If the Registration is valid, you will receive a **Thank you for Purchasing MedCheck** message.

6.3 MedCheck Support

As a registered MedCheck user, you are entitled to free email support for one year. PTS is available to answer questions regarding MedCheck as well as any general bar coding questions you might have. Feel free to contact our Support Center with any questions or comments at support@ptshome.com. Please allow us 24 hours to respond although it is often much faster.

Chapter 7: PC Operations

MedCheck comes with a conduit allowing easy transfer of collected data via the standard **HotSync™** synchronization process. This chapter outlines all of the features available for PC processing.

7.1 Importing collected data *from* PDA

MedCheck transfers all collected data to the PC via the standard **HotSync™** process. This data is contained in a folder called **MedCheck**. This folder typically resides under the assigned username's designated folder but this may vary depending on the specific desktop synchronization application you are using.

For example, if your PDA username is John Smith, you would most likely find MedCheck data in a folder called **C:\Palm\SmithJ\MedCheck**. However if John Smith is using a Visor you would most likely find MedCheck data in a folder called **C:\Handspring\SmithJ\MedCheck**

This data is stored in a standard comma delimited text file. This widely accepted format allows for easy import of MedCheck data into most standard database systems. Many users also find it an extremely easy format to import into MS Access or MS Excel.

Appendix A

This section contains the default settings for MedCheck. These settings are what we expect to be the most commonly used. Please refer to this table if you ever need to return to the default values.

Field Settings

Field ID	Setting	Default Value
Field 1	Name	User ID
	Default Value	
	Barcode Type	(All codes)
	Must Match	False
	Unique Within Record	False
	Allow Empty	False
	Visible	True
	Goto Field	Field 2
	Auto Submit	False
	Clear On Submit	False
Field 2	Name	Patient ID
	Default Value	
	Barcode Type	(All codes)
	Must Match	True – (Field3)
	Unique Within Record	False
	Allow Empty	False
	Visible	True
	Goto Field	Field 3
	Auto Submit	False
	Clear On Submit	True
Field 3	Name	Bottle ID
	Default Value	
	Barcode Type	(All codes)
	Must Match	False
	Unique Within Record	False
	Allow Empty	False
	Visible	True
	Goto Field	Field 2
	Auto Submit	True
	Clear On Submit	True
Field ID	Setting	Default Value

Field ID	Setting	Default Value
Field 4	Name	Date/Time
	Default Value	[*DATETIME*]
	Barcode Type	(All codes)
	Must Match	False
	Unique Within Record	False
	Allow Empty	True
	Visible	True
	Goto Field	Field 1
	Auto Submit	True
	Clear On Submit	True
Field 5	Name	Status
	Default Value	[*STATUS*]
	Barcode Type	(All codes)
	Must Match	False
	Unique Within Record	False
	Allow Empty	True
	Visible	False
	Goto Field	Field 1
	Auto Submit	True
	Clear On Submit	True

Misc Settings

Area	Setting	Default Value
General		
	Delete Records After HotSync	False
	Good Scan Message	PATIENT MATCHED
	Bad Scan Message	INVALID SCAN
Beeps		
	Good Record	Fast Warble
	Bad Record	1 Long Low
	Bad Barcode	1 Long Low

Admin Settings

Area	Setting	Default Value
General		
	Use Password	False
	Password	