

# PedCath 7 Release Notes

Revised 25 August 2010

## **Version 7.7.3**

- Improved the **Import Into Current Cath** feature. You can now run the Direct Data Import Utility from the Edit Cath screen at any time to bring in any missing data for the current case, or bring in document/image resources that were not available when the report was first started. PedCath will allow you to check off the desired sections to bring in and set overwrite options for cath and hemodynamic level data fields.
- Added institutional Staff ID field.
- Better support for mixed language workstation environments.
- Added option to prevent users from adding staff on the Cath Edit screen.

## **Version 7.7.2**

- Added Atlas Web update module.
- Added 2 x 3 layout for report images.
- Fixed issue where the Image Manager editor would not always load the selected image (issue with 7.7.1 only).
- HL7/XML fixes. Greater support for exporting to HIS systems.
- Several hemodynamic import fixes/improvements.
- Extended radiation dosage field to the thousands place (xxxx.xx).\*

*\* If you are currently at version 7.7.1 you will need to rerun the 2.6.2 database upgrade to get the radiation dosage field extension. Choose the "Clear DB Version Data" option in the Administrative Console maintenance section, and open PedCath to run the update.*

## **Version 7.7.1**

- Enhanced report options
  - Ability to select what Image Manager images will appear on the report and retain those choices for future printouts.
  - Option to print the hemodynamics rather than calculations on summary pages with more than one associated hemostat. Also added the ability to hide empty hemodynamics grids.
- New cath-level radiation dose field. The account number is also now shown on the Edit Screen.
- Support for additional Atlas variations for every diagram (Left SVC to Right Atrium, Left SVC to Coronary Sinus, and Right Aortic Arch). An updated atlas library is required to use this feature.
- For AE users: Ability to enter a description for unlisted adverse events.

### **Version 7.7.0**

- MAGIC improvements
  - Batch submission tool
  - Summary report.
  - Ability to edit MAGIC studies in a resizable window.
  - Support for additional controls
- Added Direct Data interface for Horizon Cardiology Hemo system.
- Added configurable age-based default to the Oxygen Consumption calculator.
- Administrative Console 1.1.5
  - Ability to set up an institutional-wide upgrade. By specifying an update file, PedCath will update itself upon startup, everywhere on the network. You can also block users from upgrading to a later version on their local machine. PedCath 7.6.9 or later is required for the updates to be installed automatically.
  - Batch case lock feature gives you the option to lock your cases only, where you had a given role.
- Update Wizard 2.0.9
  - Ability to install an update silently.
- Fixed issue where the account number may have an initial value when creating a new cath report.
- Added the ability to save any report page as a clipboard image.
- Cleaned up Options dialog.
- Account Number shown on report, if used.
- Added the ability to add multiple images at once into the Image Manager.

### **Version 7.6.8**

- Added ability to manually send out files configured on your auto-export list. This can be useful to send out a preliminary report or to resend locked reports. This feature can be found on the File menu on the Edit Screen.
- Added ability to move a cath report from one patient record to another. This can be useful if a patient was imported with incorrect demographics. This feature can be found on the Edit menu on the Browse screen and requires administrative privileges.
- Added option to prompt for password to lock a case. A different user may also lock the case. Options for these features can be configured from the "Cath Locking" section of the administrative options.

- Added ability to retry a failed database operation and to disconnect/reconnect before retrying.

### **Version 7.6.7**

- Diagram recovery feature.
- Several changes to the HL7 export. Please refer to the HL7 specification for details.
- Added a data field for the Account Number. This field can be set through the Edit menu on the Cath Edit screen. This number can be brought in through a hemodynamic import and there is an administrative option to require this field be set before an export.
- Option to print diagnosis and comments only once.
- Fixed staff filter for Camtronics and Philips hemodynamic system imports.

### **Version 7.6.6**

- Support for the new Mullins alternate/wide diagrams with extended pulmonary arteries.
- Added ability to install supplemental atlas diagrams directly from the web or a package file.
- Manual save now uses the same file name format as the auto-export
- Fixed issues with the auto-increment cath number feature.
- Added the ability to link or embed the PDF in the XML and HL7 files. The embed feature will encode the report in Base64 and requires that Internet Explorer 6 is installed.
- Fixed issues when importing more than one Word document during a hemodynamic import.
- Fixed issue with cath number when multiple cases are imported.

### **Version 7.6.5**

- Expanded command line options.
- Fixed image imports from the MacLab (issue with earlier versions of 7.6 only).

### **Version 7.6.4**

- PedCath now supports the ability to run in a multi-user application server/remote desktop type environment (such as over Citrix Presentation Server). Several options must be set to enable this functionality.

### **Version 7.6.3**

- The auto-export feature can be configured to export the report both when it is saved and when it is locked (rather than one or the other).

### **Version 7.6.2**

**Turn Calculation of Qep On/Off for All Users:** PedCath Administrators can set the Calculate Qep option on or off for all users and control whether individual users can override the global setting.

**Global Export Path:** A PedCath Administrator can set an export path that will be used by

each installed PedCath application at the institution. Doing so will prevent non-Administrators from changing the path. Please note that it is the Administrator's responsibility to ensure that the path is valid on each machine where PedCath is installed.

**Dual-Logo Header Layout:** You can now have a custom logo appear on either side of the header on PedCath's printed reports.

**Improved Siemens Sensis Import:** Users of the Siemens Sensis hemodynamic monitoring system can now import key images and wave forms into PedCath's image manager.

**Improved International Support for Imports:** We can now configure PedCath's import utility to recognize non-English strings in the import file.

**Miscellaneous fixes and minor features:**

- Fixed bug 126-9: Error reading an import file if it contains an empty hemodynamic set.
- Fixed bug 125-381: Invalid property array index when reading import files.
- Fixed bug: if upgrading from version prior to 7.5, the database upgrade will fail the first time. Running it a second time it should go through successfully. The errors the first time don't cause any problems.
- Fixed bug: Qp and Qs values were not showing up in the extended calculations.
- Fixed bug: HL7 export - some OBX segments started at 2 instead of 1
- Added ability to extend cath number field length. Contact Scientific Software for more information.
- Repositioned controls on Oxygen Consumption Calculator and View Calculations Window.
- Fixed bug: XML auto-export was saving the version 1.0 XSL file

**Version 7.6.0**

**Diagnosis/Procedure Comments:** You can now enter free-text comments on the Diagnosis/Procedures Window. You can choose to print the comments or the list of diagnoses/procedures, or both. There is a new 'Copy' button to the right of the selected items list that will copy the entire list to the clipboard.

To configure printing options:

Report Setup Window > Options tab > Dx/Comment Options... button

**Improved Data Import:** We've improved the default mappings for importing data from Siemens, Witt, Camtronics and GE hemodynamic monitoring systems. We've also made changes to the way the Import Utility tracks individual user preferences.

There is a new Administrator option to "Allow user mapping" (Tools > Options > Administrator tab > Import). This feature is now disabled by default, due to problems caused by the format of the hemodynamic data export files. In most cases, user preferences are handled sufficiently by the improved default mappings.

Please contact us for updated import maps if you're having trouble importing data.

**Longer Usernames:** PedCath usernames (a.k.a Logins) may now be up to 20 characters in length.

**Advanced FTP Export:** PedCath can now send the cath report via FTP in HTML, PDF and plain text formats in addition to XML and HL7. PedCath now supports Secure FTP, public key authentication, and proxy servers.

The Export Options (Tools > Options > Administrator tab > Export) have changed. The available export formats are listed in a table. There is a column of checkboxes to enable (checked) or disable (unchecked) 'Save As...'. If 'Save As...' is enabled for a particular export format, users will be able to save the report in that format by clicking 'Save As...' on the Report Setup Window. There is also a column for Auto Export. If Auto Export is enabled for a particular format, that format will be exported when the cath report is saved or locked, according to the 'Auto export is triggered when...' configuration option.

To configure FTP export profiles, click the FTP button (under 'Advanced Export Options'). You can now have as many FTP export profiles as you want. You can set any FTP export profile to auto export. If FTP auto export is enabled, then all FTP export profiles set to auto export will be triggered when auto export is triggered. If Save As FTP is enabled, then users will be able to manually export a cath report using any of the available FTP profiles, regardless of the profile's Auto Export setting.

**XML Export Version 2.1:** A PedCath administrator can configure the XML export engine to export diagrams and images with the XML file. Links to the exported files are included in the XML document. The administrator can choose to export diagrams and images in JPEG, PCX or PNG format and specify size constraints. Version 2.1 includes all data for a case, including additional fields added in this release.

XML Export Version 2.1 includes extra data: Adverse Events (MAGIC participants only), Diagnosis/Procedure comments and references to exported images and diagrams when applicable.

Version 2.1 is backward-compatible with version 2.0. All sections and elements found in version 2.0 are still included in version 2.1.

To configure the XML export, go to Tools > Options > Administrator tab > Export > XML button. You can export cath images (viewable in the Image Manager) and/or heart diagrams. For each, you can specify:

- the image format: PCX, JPEG or PNG
- for JPEG, the quality
- maximum height and/or width in pixels (aspect ratio is always preserved)

The image/diagram filenames are the same as the XML file itself, except that "-tx" is appended, where t is the type ("i" for image, "d" for diagram) and x is the order ("1",

"2", ...). These additional files are also referenced in the XML document, along with their dimensions. Please contact us for the XML Export v2.1 Specifications.

**Auto-Increment Cath Number:** A PedCath administrator can configure PedCath to automatically use the next cath number when a user creates a new cath record. The administrator can specify the Cath Number prefix, suffix and minimum length.

To configure the Auto-Increment Cath Number feature, go to Tools > Options > Administrator tab > Misc. If this feature is enabled, users cannot edit the Cath Number. PedCath will automatically enter the next number in sequence when a user adds a new cath. Due to the fact that the Cath Number field may be alpha-numeric, there is no way for PedCath to accurately determine the largest cath number in the database. Therefore, you must manually enter the next cath number when configuring the feature.

You may specify an alpha-numeric prefix and/or suffix for the cath number. The 'Next No.' field must be an integer value. You can also specify a minimum length for the cath number. PedCath will insert zeros in front of the integer portion of the cath number if the cath number is less than the minimum length value.

**Standardized Adverse Event Codes:** PedCath now includes a standardized Adverse Event code list based on the [EPCC code set](#) and pending [IPCCC](#) standards. This option is automatic for [MAGIC](#) study participants, available by request to other multi-center collaborations.

In earlier versions of PedCath, it was possible to require that each new cath report have at least one complication code ('Force complications'). This option was required to be enabled for MAGIC users. In version 7.6.0, Adverse Event codes are required the same way that complication codes were required before.

Complication codes remain in the various code sets for backward compatibility. Each user is warned that the complication codes are obsolete upon opening the Diagnoses/Procedures Window.

PedCath functions exactly as it did before for non-MAGIC participants.

**Multiple Study Groups:** A study can be associated with one or more multi-center collaborations (rather than just MAGIC), and each group has its own export settings. Configuration and reporting tools are now available in the administrative options. You must obtain a group configuration file to be a member of a particular group.

MAGIC and other collaborations require a license file from Scientific Software. Please contact us if you are interested.

**HL7 Changes:** We have made changes to PedCath's HL7 export format. If you are using the HL7 export, please contact us for details.

### **Miscellaneous fixes and minor features:**

- Philips hemodynamic interface available
- Systeria HeartSuite interface available
- Checks to make sure that the export filename format string does not exceed the maximum storable length (50 characters)
- Additional data fields included in HTML, XML 2.1, XML 1.0, plain text and HL7 export formats and the printed report/PDF
- Timestamp now appears correctly in the HL7's MSH segment
- Improved support for running different versions of PedCath on the same machine
- Improved Philips and Camtronics interfaces
- Diagrams (if they exist) are associated with hemodynamic sets when importing hemodynamic data into an existing cath report.
- Error reports are now assigned a Case Number
- Staff role list populates correctly after adding a new case
- Document Manager can now import plain text files (\*.txt)
- Document Manager can now import documents with 0-width margins
- Data Reports allow searching on RECORD\_ID and PAT\_ID
- Comments textbox now has a vertical scrollbar
- Fixed problems with the hemodynamic set printing options

### **Version 7.5.8**

- Camtronics interface
- Fixed issue where the first procedure log section was not showing up in the document log import from Witt hemodynamic systems

### **Version 7.5.7**

- Added ability to run the Direct Data Utility to import hemodynamic data into an existing case. This will allow you to create diagrams and enter other case data before your hemodynamic system import.
- Added Batch Cath Lock feature to the Administrative Console (2.0.7). Locks all catheters within a given date range.
- Updates to Witt hemodynamics procedure log document.
- Option to strip leading 0s from MRN on Import.
- Batch Export date range fix.
- Fixed issues with FTP manual export.

### **Version 7.5.6**

- Added Batch export feature for all export file types allowing you to export all cases at once with a specified date range.
- Fixed bug where export trigger type resets to "Cath is Locked" when you load the PedCath Options dialog and save.

### **Version 7.5.5**

- PedCath XML data export v2.0 is now available. This version is turned on by default. The old version is still available in the administrative options under the export section.
- Locked cath reports are now indicated as such on the browse screen.
  - Added ability to create an updated report even if you are within the 24 hour grace period for locking.
- Staff are now displayed as 'last\_name suffix, first\_name' in the personnel listing rather than by the display name.
- Option to add the calculation override note to the expanded calculations on the report.
- Users of the short Dx code set now have the option to force complication codes to be entered on the Dx screen . This can be configured on the Dx section within administrative options.
- Ability to add documents to the hospital or staff archive after a document item (rather than having to click on a folder name).

### **Version 7.5.4**

- Hemodynamics table added as an optional component for the procedure log import (currently for Witt imports only).
- Fixed issue where you are prompted to save the cath report when nothing has changed.
- Greater collaboration/study support.
- Ability to import diagnosis from the prior cath even if the one you are editing is not the latest cath.
- When sorted by cath or staff on the browse screen, the patient's full name is now displayed correctly.
- After deleting a cath on the browse screen the selection will stay on the current patient rather than jumping to the first patient.
- Fixed issue of overlapping diagnoses and comments sections on the report.

### **Version 7.5.3**

#### **New Features/Enhancements**

- Added ability to use staff-name filters for the Direct Data Import utility.

#### **Issues Fixed**

- Fixed lockup problem when studies are triggered by diagnoses.
- Hemoset selection button would be grayed out for cases entered manually.
- Fixed issue where calculations are blocked for new hemosets until the report is saved.

### **Version 7.5.2**

#### **New Features/Enhancements**

- Added ability to reactivate inactive staff.

#### **Issues Fixed**

- The 'Me' button now correctly adds your staff record to the cath report.

## **Version 7.5.1**

### **New Features/Enhancements**

- Improved collaboration functionality and fixes.

## **Version 7.5.0**

### **New Features/Enhancements**

- Added ability to lock the cath report. No one can edit the report after it has been locked. Designated personnel involved in the cath may unlock it within 24 hours to make changes. If it is required to make changes to the cath report after this period, a backup of the current cath data is made and a new record is appended. The original cath data may be viewed at any time. Auto-export can be configured to trigger either when the cath is saved or locked (default).
- Added ability to FTP the cath report to any number of FTP servers manually or during Auto-Export. You can specify the file type (HL7 or XML) and options (such as stripping out patient identifying information) for each configuration. A license is required for this feature.
- New Administrative Console program. This program allows administrators to run database maintenance, view who's logged in and remove them from the login table, view/print HIPAA logs, and view/edit staff members.
- Added ability to save HL7/XML files directly.
- Added ability to add status-post modifier for diagnosis codes. Surgeries and procedures from previous cases will be imported with status post set automatically. This is currently only applicable to the short coding set.
- Added ability to add -22 modifier for billing CPT codes.
- Added ability to print the report on the browse screen.
- Calculations may be blocked by typing 0 for a mean or saturation on the calculation override screen.
- You can search by Cath ID or Patient ID from the Find dialog on the Browse screen.
- Administrative option to hide percent normals for extended measurements. By default, they are not shown.

### **Issues Fixed**

- Hemoset/diagram relationships are now updated when hemosets are deleted.
- Qep is not calculated if ThermoCO is used.

## **Version 7.4.4**

### **Issues Fixed**

- Images now show correctly in Image editor (issue with 7.4.3 only).
- Problem with certain image types would cause edits not to save.

## **Version 7.4.3**

### **New Features/Enhancements**

- More flexibility over how the hemodynamic mappings are populated on the import

screen. Can be configured from the main menu Tools > Options... on the User tab.

- Greater support for Sensis imports.

## **Version 7.4.2**

### **New Features/Enhancements**

- Ability to export the cath report in HL7 format. A license is required for this feature.
- Ability to work with documents in Japanese and other Eastern Asian character sets. The document manager now stores files in an internal format, and we have added the option to export the files to RTF and DOC formats.
- PedCath has the ability to include the date and time in the export file names. The format is yyyy-mm-dd-hhmm.
- Better handling of Images in the Document Manager. PedCath allows you to right click images to perform operations such as resize, remove, cut and paste or view the image properties.
- More functionality added to the Diagram manager:
  - Added the function to add a patient diagram directly from a file.
  - Option to change a user diagram's titles and the Mullins Atlas ID number.
  - Preview and print functions to the Mullins and Mayer Atlas selection screen to print any diagram directly.
  - Click the user diagram image preview to edit it and Double click a Mullins atlas or user atlas name to add it to the Cath report.
  - Find/Find Next functions on the Mullins Atlas screen now update the diagram preview when a new diagram is selected.
- Option to leave out calculation labels when the associated calculations are missing. This applies to the pdf report and exports.
- Option to set page numbering format as either "Page X" or "Page X of Y" on the PDF report.
- The diagnosis and billing code set synchronization dialogs will now only show the first time PedCath detects the files are different (these dialogs tell you if the master tables on the network differ from what is used by PedCath.) You can force PedCath to show this dialog on the next startup through the Administration settings. This check is now based on a file version number rather than the file date, as occasionally the file dates will change when performing database maintenance functions.

## **Version 7.4.1**

- When upgrading PedCath from a CD rather than from an update file through Update Wizard, PedCath will be able to upgrade the database to the current version if you are using an earlier version of the database on the network.

## **Version 7.4.0**

### **New Features/Enhancements**

- New Document manager allows each staff member to keep his or her own document archive to pull from. In addition there is a hospital-wide archive that all PedCath users have access to. We provide over 20 documents for the hospital document archive to get

you started. PedCath administrators can modify the hospital-wide archive.

- Added the ability to convert images to jpegs or reduce the image dimensions within the Image Manager. This can be a helpful tool if you need to conserve disk space on the PedCath network share. You have the option to convert the images automatically (or be prompted) when importing images if the file size is greater than a configured size (default 2MB) or you can convert images already present in the Image Manager. Please note that the JPEG format is a lossy format meaning it loses image quality when saved. You can configure the JPEG quality in the Image Manager Settings – the default is 75%.
- The Database Maintenance Utility now has the ability to remove internal database record locks and patient locks.
- Mullins Identifier now shown on Diagram Manager and Diagram Edit screens.
- If you import patients from a floppy drive, the path will now be remembered.

### **Issues Fixed**

- Occasionally when you import Word documents that import correctly into the Document Manager, they may have some formatting issues when printed with the report. We have changed the way our report manager prints the documents, which fixes the formatting issues.
- Fixed email error “127-32057: Cannot perform action, no recipients”. Happens when your PedCath settings are set to use the Windows address book and your default email client is Microsoft Outlook.
- Deleting import files now also deletes associated images and documents (or renames with bak extension)
- Fixed some date issues for users with a date separator other than a slash (/). The calendar control would sometimes read the date incorrectly. Also when creating a new patient occasionally the date would show up with 1899 as the year on the edit cath screen. This has all been fixed.
- If you are using the Dissolved O2 adjustment term: In earlier versions, an O2 saturation range would not be used if the range high was greater than 100, but this has been fixed.
- Rp and Rs are not calculated if any dependencies are missing.

## **Version 7.3.0**

### **New Features/Enhancements**

- Direct Data Import Improvements:

#### **MacLab users:**

- Ability to import MacLab preliminary report as a document into the document manager.
- Ability to import snapshots into the Image Manager.

#### **Witt, CathCor/Sensis, and Q-Cath Users:**

- Ability to import procedure notes and other data from the import file into a document. Each tag is imported as a section of the document (currently CathCor and Q-Cath imports can recognize only the procedure notes tag, however this can be expanded later). You can configure which type of data will be included and the ordering within the

document by opening up the "Direct Data Import Utility" (Tools >> Import Cath Data). Click the Mapping button to bring up the Import Mapping dialog and then click "Document Mappings".

- New compound mapping tags allow for related pressures to appear on the same line on the import screen. PedCath will check whether a single pressure tag is part of a compound pressure (for example RA Awake is the first pressure of the compound RA pressure tag) and if so will combine them on one line. You can edit the new compound pressure mappings shipped with PedCath 7.3.0 or add your own by clicking Mapping from the "Direct Data Import Utility".

- Import filter options moved from options dialog to the Direct Data Import Utility dialog.
- The default mappings are loaded automatically on the import screen.
- Support for UNC paths for the import location.
- Support for staff email addresses up to 80 characters.
- PedCath now allows for an Oxygen Consumption Adjustment term (requested by the Mayo Clinic) when calculating Oxygen Content when PO2 is not entered into the calculation override screen.

When this option is turned on, Oxygen concentration will be calculated as follows:

$$O2\ Cont = O2\ Cap \times O2\ sat + O2\ Cons\ Adj.$$

You can specify the value of the O2 Cons Adj. term by entering ranges of O2 Sats and the value of the adjustment term for each range.

If PO2 is measured however, the calculation will not include the O2 Cons Adj. term and will be calculated normally as follows:

$$O2\ Cont = O2\ Cap \times O2\ sat + (.003 \times PO2)$$

You can configure this setting going to Tools > Options... > Administrator > Calculations. This option is turned off by default and when turned on the values and ranges are set to those suggested by the Mayo Clinic as follows:

O2 Sat Range	Dis. O2 Adjustment
> 95	0.30
(85, 95]	0.25
(75, 85]	0.10

- Ability to print your local hospital's billing codes on the billing codes printout next to the standard CPT/ICD9 codes.
- Billing codes are now sorted alphabetically and categorized into CPT and ICD9 groupings on the printout.
- Button to clear the Database version. This can be used to force PedCath to update the databases to the latest version the next time it is run. This will also allow you to move to an earlier version of PedCath although this is not recommended.
- PedCath now uses the same margins for documents on the report as from the document manager so the layout will match the original in most cases.
- PedCath now gives the user a choice whether to update the billing or diagnostic codes from the network if they are different than what is stored in their local folder.

- XML Changes
  - Removed Current Date from XSL which tells when the style sheet was created, because it was being confused with the cath date.
  - Created `<exportdate>` tag that tell when the xml file was exported.
  - Changed roles in XML and XSL so that PedCath doesn't create a new style sheet whenever the printed roles are changed.

### **Issues Fixed**

- Fixed email issues (error 32002) with MS Outlook.
- For users using a date format other than (month/day/year) for the Windows settings and that use a hemodynamic system import:
  - Under certain circumstances it may be possible for the Birthdates & Cath dates to have been imported incorrectly in earlier versions of PedCath (only for these date formats). It is possible for the month and day to be swapped during the import if the month and day could be confused with each other (i.e. both are less than or equal to 12). When the day is greater than or equal 13, then the month and day will not be confused and you won't get this problem. A manual check of your existing data is recommended.
- Fixes for dd/MMM/yyyy short date format.
- Fixed some permissions issues where PedCath can not remember the net path even for Power Users.
- Fixed grid sorting error on the import screen when only one hemodynamic value is imported into a hemonet.
- Fixed Billcode update script error when someone else is currently logged on.
- Fixed imports not importing values such as Height, Weight, and Saturations for users with a decimal separator other than a period (.).
- Fixed image import problem where the path will not be saved correctly if greater than 40 characters.
- PedCath now handles XML reserved characters (such as &) in free-form text fields such as artery and vein in the XML export.
- Fixed the "Some Calculation Values Overriden" label above the calculations so that it always shows correctly when working on the override screen.
- Long Codes from some Dx code sets would overlap the right column on the report. It will now wrap to the next line.

### **Version 7.2.0**

- Updates the PedCath database to version 2.2.0
- Added logging for patient reports and data reports when printing, exporting, or emailing for better HIPAA compliance.
- Staff administrative features moved to the Personnel dialog (on the PedCath Main Browse screen, select "View" >> "Personnel...").
- Added the option to print the staff listing.
- Added ability for users with "Full Edit" access (as well as Admin's) to create new Referring MD's (or other personnel with "No Access" privileges) while on the edit screen.
- Added option to copy database files locally during data reports to improve performance.
- Removed Qs & QP labels when using Thermo Cardiac Output on the PedCath edit and

browse screens, printed reports and exports.

- Added ability to choose which diagrams and associated hemosests are printed on the report. On the "Cath Report Setup" dialog, click the "Options" button and then click "Diagram/Hemosest Options..."
- Added "1 over 1" option to the report setup that displays 2 images per page.
- Added option to roll comments or Dx to second page.
- Added option to print comments before Dx.
- Larger font and more white space for patient name on report.
- Added ability to paste image from the clipboard in Image Manager
- Added ability to edit an image in Image Manager
- Fixed superscripting for HTML exports.
- Added ability to update the Billing codes with a script file (Billcode.upd).
- Fixed issue where images would show up smaller on the printed report if certain options were chosen.
- Fixed issue where default roles would be printed when less than 3 roles are selected to be included on the report.
- Default role shown automatically on import screen when selecting staff.

#### **Version 7.1.4**

- Ability to customize the roles that appear on the cath report.  
"Tools" >> "Options..." >> "Global" => check the roles to appear on the report.
- Ability to import images based on existing Mullins and Mayer Atlas diagrams. This allows hemodynamic values to be automatically embedded on the diagram edit screen by clicking the embed button.

The Mullins and Mayer Atlas supplement is available at <http://www.pedcath.com/>  
To import pictures from the supplemental atlas, download the desired pictures to your hard drive and note the reference number.

To import a Mullin's supplemental diagram:

- From the PedCath "Edit Cath Report" screen, click the Diagram Manager button within the "Report Components" group or press F6.
  - Click the Add Diagram button, which will bring up the "Select Diagram" dialog.
  - Click the "Other Diagrams" tab, and click "Add New".
  - Browse for the diagram on your hard drive and click "Open"
  - Enter a diagram title and the reference number from the web site and click OK (when importing a diagram that is not from the supplemental atlas, leave reference field blank).
- Printed date has been moved to the bottom right of report page. An option to turn this on and off is included within the report setup.
  - Fixed integrity issues when deleting hemosests under certain conditions.
  - Administrator Setting: Added option to actually delete import files or to rename them with a .bak extension.

"Tools" >> "Options..." >> "Administrator" tab >> "Import"

- Administrator Setting: Added ability to schedule database maintenance every X days. After X days have passed, the next administrator to log in will be prompted to run the database wizard. To configure this feature go to:

Tools" >> "Options..." >> "Administrator" tab >> "Maintenance"

### **Version 7.1.3**

- Added option to use the Anderson nomenclature for the Mullins and Mayer Atlas.

"Tools" >> "Options..." >> "User" Tab

- Fields that are used in the hemodynamic calculations appear with blue highlights on the edit screen.

### **Version 7.1.2**

- Fixed Single User Lockout problem. Single licensed users may now get back into PedCath after an abnormal program termination. Issue with versions 7.1.0 and 7.1.1.

- For Administrators: More functionality and logging added to database maintenance utility.

### **Version 7.1.1**

- PedCath now has the ability to update the network database to the latest format. The Database version number can be viewed by selecting "About" under the Help menu.

- For Administrators: Upgraded the database maintenance utility with an integrity check, the ability to remove deleted records, and the ability to rebuild missing index files.

### **Version 7.1.0**

- Added Data Report Utility. To use: Open PedCath and choose "Data Reports" from the Tools menu.

- Comments and Diagnosis displayed only on the first summary page of the report.

- Added Cardiac Index on Report for thermodilution measurements

- Fixed Windows network caching issue with single user license version

- Age at cath added to summary page

- Support for New Diagnostic Code Sets: Added support for sets with codes containing non-numeric characters. AEPC, Edmonton, others.

- Revision number portion of the version number is no longer included in version checking.

(The version number has three parts: <major>.<minor>.<revision>) So, for example: If someone at your institution updates to version 7.1.1 then copies of PedCath version 7.1.0 **will not** require the update. If someone then updates to version 7.2.0, however, all copies of PedCath will be require the update.

### **Version 7.0.99**

- Added support for ANSI date format (yyyy-mm-dd)

### **Version 7.0.98**

- You may load template text into the Comments Window.
- The Update Wizard can now update from the web automatically.
- Fixed problems with international date formats.
- You can resize Diagnoses / Procedure Window.

### **Version 7.0.97**

- Added administrator option for deleting import files:
  - Always delete
  - Never delete
  - User's choice
- More information is provided when users attempt to edit restricted data.
- Additional information in error report
- "Delete File After Importing" renames file \*.bak regardless of index setting
- F3 shortcut for Find Next on Select Diagram Window.

### **Version 7.0.96**

- Export Filenames:
  - Administrators can set the filename format for export files. (Tools > Options > Administrator > Export) This format will be the same for all machines and all users.
- Require Unique Cath Number is optional.
- Under General Options, users can choose the folder to which auto export files will be saved. This is a local machine setting.
- Users can delete import files without importing them first.
- View release notes from the Help menu.
- DB Maintenance Utility saves changes to Options before exiting.

### **Version 7.0.95**

- Database Maintenance Utility: repairs and prevents problems with the database files.  
TO USE: Tools > Options > Administrator > Other Tools > Database Maintenance

### **Version 7.0.93 / 7.0.94**

- Mullins and Mayer Atlas search capability
- Atlas Utility: allows user to edit and add new atlas diagrams
- 'Send' report may be enabled on individual machines by checking box on the General Tab of the Options Window
- Users can save their preferences on the network for font settings on the Edit Diagram Window
- "Fast Draw" option on Edit Diagram Window for slower computers

- Display calculations in edit window regardless of data entry order.
- Enable automatic embed for template diagrams
- Supports comma as decimal separator
- Improved single concurrent user login
- License files can be replaced by putting new versions in the Data Folder
- Patient data refreshes correctly when edited via the Edit Cath Report Window
- Personnel data refreshes correctly when edited via the Edit Personnel Window
- Database keys are displayed on some forms in white. This is for locating files and debugging.
- Software License can be viewed from within the program (Help > About)
- Embed enabled on Template diagrams
- Auto Export feature gives better feedback
- Reduced the scary invisible moment before loading the Document and Diagram Edit Windows

### **Version 7.0.92**

- Age at Cath is now displayed on the Browse (Main) Window.
- Added Export function:
  - If enabled by Administrator, users can save the cath report in the following formats:
    - PDF (previously available)
    - HTML
    - Text
  - If enabled by Administrator, cath reports will be saved in one or more of the following formats when the report is saved to the database:
    - PDF
    - HTML
    - Text
    - XML (additional cost)
- If a Cath Number is entered, it must be unique.
- Allow all legal passwords.
- Added utilities to the Program Menu (accessed by clicking Start on the Windows Taskbar):
  - PedCath Update Wizard: makes updating to a new version of PedCath easier
  - PedCath Registry Tool: used for debugging when PedCath cannot be accessed
- Comments no longer print on top of the diagram when there are no diagnostic codes associated with the cath.
- All report pages have at least minimal identifying data (name / mrn / cath date).
- Made several changes to the Direct Data Import Utility to make it easier to "map" fields from the import file to fields in PedCath.
- Improved default import map files.
- Send button temporarily removed from the Report Setup Window until internet and mail connection issues can be sorted out.
- Edit All permission level can now delete patient and cath reports.