



Product Update

Picis Perioperative and Critical Care 8.6 MR3

© Picis Clinical Solutions, Inc. All Rights Reserved. **Picis** and the **Picis** logo may be trademarks or registered trademarks of **Picis, Inc.**, and/or its affiliates in the United States and/or other countries.

Picis Clinical Solutions believes the information in this document to be accurate and much care has been taken in its preparation. However, Picis Clinical Solutions does not accept any responsibility for the use or reliance on the information contained herein. The user should exercise care to assure that the use of the product and its related documentation is in full compliance with the laws, rules and regulations of the jurisdictions in which they are used.

Trade Secrets and Proprietary Notice: This material contains valuable confidential information of Picis Clinical Solutions and/or its affiliates and shall at all times remain the property of Picis Clinical Solutions. This material may not be copied, photocopied, reproduced, translated, or converted to any electronic or machine-readable form in whole or in part without the prior written approval of Picis Clinical Solutions.

Picis Clinical Solutions reserves the right to make changes to any product described in this document to modify its functionality or design. Picis Clinical Solutions is committed to duly notify its customers of any changes to product functionality or design which may affect the product performance or application. The information contained herein is subject to change and revisions may be issued from time to time. For current information, please contact Picis Clinical Solutions.

Intended Use: Picis Clinical Solutions software patient information system compiles an electronic medical record utilizing commonly available hardware. A patient record is populated with information from various sources, such as healthcare professionals, medical devices connected to the system, and data that arrives via hospital and laboratory information systems. The application stores this information in a database and may analyze and/or display the data in different formats for evaluation by healthcare professionals for informational purposes. The product is intended for use by healthcare professionals.

HIPAA Compliance: Picis Clinical Solutions has put considerable effort into providing the capability to protect and audit access to patient personal health information in its products. It is highly recommended that those responsible for implementing the software fully utilize the delivered security functionality in order to ensure that only authorized users have access to the data. Picis Clinical Solutions supports configuration that will permit authorized users to restrict access to certain features and functions, to allow view-only rights to protected information and to define editing rights. Also, native audit features and reports can be utilized periodically in order to monitor changes or particular instances of access to data.

Caution: The data displayed on Picis Clinical Solutions applications are for informational purposes only. Picis Clinical Solutions recommends that users always refer to primary devices for diagnosis and treatment.

Hardware Requirements: Detailed hardware requirements are provided during the contract process. Please contact your System Administrator or Picis representative should you require additional information.

Nomenclature: The expressions "real-time data", "real-time variables", "real-time fluids" etc. are Picis expressions that refer to near real-time data collected from connected devices.



Picis Clinical Solutions, Inc.

100 Quannapowitt Parkway, Suite 405, Wakefield, MA 01880 USA

Phone: 781-557-3000 • Clientcenter@picis.com • <http://www.picis.com/>

Unique Device Identifier (UDI)	For UDI information, refer to the <i>Release Notes</i> .
--------------------------------	--

Contents

1.	Introduction	7
2.	Minor Release 3 (MR3) Enhancements	7
2.1.	Picis Hub – A New Tool for Access to Picis Applications	7
2.2.	OR Manager Enhancements.....	8
2.2.1.	Filter Surgeons/Anesthesiologists by Facility when Booking	8
2.2.2.	Flag for preserving preop data when starting a case record for a patient created in OR Manager	8
2.2.3.	Crystal Reports Scheduler	8
2.2.4.	Automatic Email Notification when Booking	8
2.2.5.	Flag for disabling patient context limitations for certain scheduling staff.....	9
2.3.	Printouts Builder Enhancements.....	9
2.4.	Implementation Enhancements.....	9
2.5.	Surgery Elite Add-on Package	10
2.5.1.	Coded Elements	10
2.5.2.	Medication Interaction Checking	10
2.5.3.	Body Maps.....	11
2.5.4.	Document Viewer	12
3.	Enhancements Carried Forward from 8.6 MR2	13
3.1.	Windows 10 Support and Other Implementation Enhancements	13
3.2.	Preop Manager Enhancements.....	13

3.3. Anesthesia Manager, PACU Manager and Critical Care Manager Enhancements	13
3.3.1. Printouts	13
3.3.2. Notes	16
3.3.3. Patient Summary.....	16
3.3.4. VA Site Enhancements.....	16
4. Enhancements Carried Forward from 8.6 MR1	16
4.1. Enhancements Impacting All Applications	16
4.1.1. Picis Rebranding.....	16
4.2. Anesthesia Manager, PACU Manager and Critical Care Manager Enhancements	17
4.2.1. Printout Builder Additions.....	17
4.2.2. Clinical Enhancements	17
4.2.3. SmarTrack for VA	18
4.2.4. Analytics Enhancements	19
5. Enhancements Carried Forward from 8.6	19
5.1. Enhancements Impacting All Applications	19
5.1.1. Prevent Future Documentation of Milestone Events	19
5.1.2. Software Support Additions	19
5.1.3. Remote Desktop Services.....	19
5.2. 8.6 OR Manager Enhancements	20
5.2.1. Create a PAT Booking off a Reservation	20
5.2.2. Time Printed Field Added to Booking Sheet	20

5.2.3.	Booking URN Standard Field in Case Record	20
5.2.4.	Hide Inactive Entries	21
5.2.5.	Additional Standard Fields Available	21
5.2.6.	Process Header/View Header.....	22
5.2.7.	Clearing Field Values after a Condition is Unmet	23
5.2.8.	Search by SSN/HCN in Manage Bookings & Case Records	24
5.2.9.	Filters for Tables and User-Defined Fields.....	25
5.2.10.	Case Record # on Implant Record	26
5.2.11.	Procedure Dictionary Search.....	27
5.2.12.	Close All Sections of Case Record Icon	27
5.2.13.	Stock Dictionary	28
5.2.14.	Complex Case Averaging.....	29
5.2.15.	Preference Cards.....	30
5.3.	SmarTrack Enhancements	31
5.3.1.	PAT Tracking	31
5.3.2.	Telephony	32
5.3.3.	Lengthen Location Staff Assignment	33
5.4.	Security Manager Enhancements	33
5.4.1.	Allow Use of Special Characters in Passwords	33
5.5.	Anesthesia Manager, PACU Manager and Critical Care Manager Enhancements	34
5.5.1.	Continuous Fluids In Documentation/Display	34
5.5.2.	Fluids Out Documentation/Display	36

Contents

5.5.3.	Prevent Documenting Events in the Future	37
5.5.4.	Ability to Document a Treatment by clicking a Treatment Name	38
5.5.5.	Required/Recommended Fields.....	38
5.5.6.	Treatment Display Order.....	38
5.5.7.	Bag Level Prompt on Transfer	39
5.5.8.	Multifacility Filter	39
5.5.9.	Printout Builder –Replacement for Excel-Based Printouts	40
5.6.	Analytics Enhancements	43
5.6.1.	Perioperative Dashboard	43
5.6.2.	Analytics Control Portal	46

1. Introduction

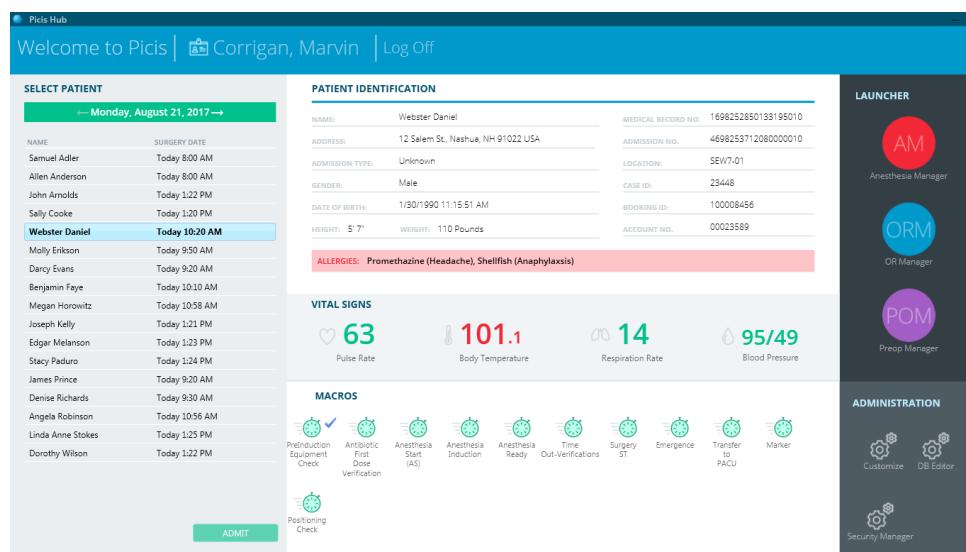
The Product Update offers an overview of the *principal* new and improved functionality in the latest release of Picis Perioperative and Critical Care. For further details of all new and improved functionality, see the user guides. For details of defect fixes, see the *Release Notes*. The guide also includes the updates made in 8.6, 8.6 MR1 and 8.6 MR2.

2. Minor Release 3 (MR3) Enhancements

2.1. Picis Hub – A New Tool for Access to Picis Applications

This release includes Picis Hub, a new tool that provides the following features:

- Easy access to Picis applications using a single signon
- Different views for clinicians and schedulers
- A list of patient bookings for a chosen day
- A list of upcoming surgeries for “today” and “tomorrow”
- Basic demographics and allergy data for a selected patient
- For patients currently in “Anesthesia Manager” sessions, the latest vital signs and the ability to run event macros
- For patients booked in OR Manager, the ability to quickly open the booking for editing and the ability to start a case record



Example screenshot showing the clinician's view

2.2. OR Manager Enhancements

2.2.1. Filter Surgeons/Anesthesiologists by Facility when Booking

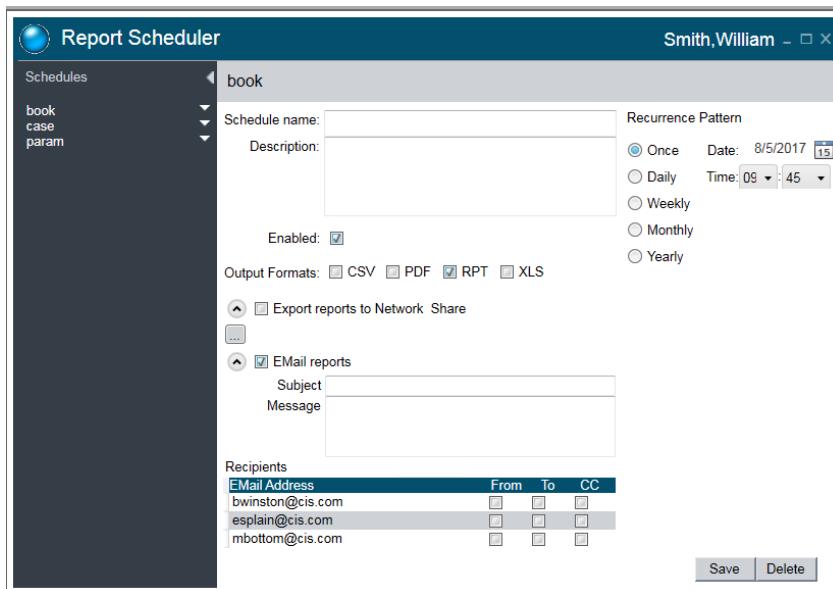
A new system flag causes the booking window to list only the surgeons and anesthesiologists authorized for the current facility during the booking process. Another system flag can be set to perform checks when the facility is changed and indicate if assigned surgeons and anesthesiologists do not have permission for the newly selected facility.

2.2.2. Flag for preserving preop data when starting a case record for a patient created in OR Manager

When initiating a case from a booking for a patient that was created directly in OR Manager, users are able to choose an MRI patient that exists, merge the MRI patient data with existing patient data, and now also retain any preoperative evaluation data that was already created. (Previously, if a case record was initiated from a booking for an OR Manager-only patient using an MRI patient, any associated preoperative evaluation data would be lost.)

2.2.3. Crystal Reports Scheduler

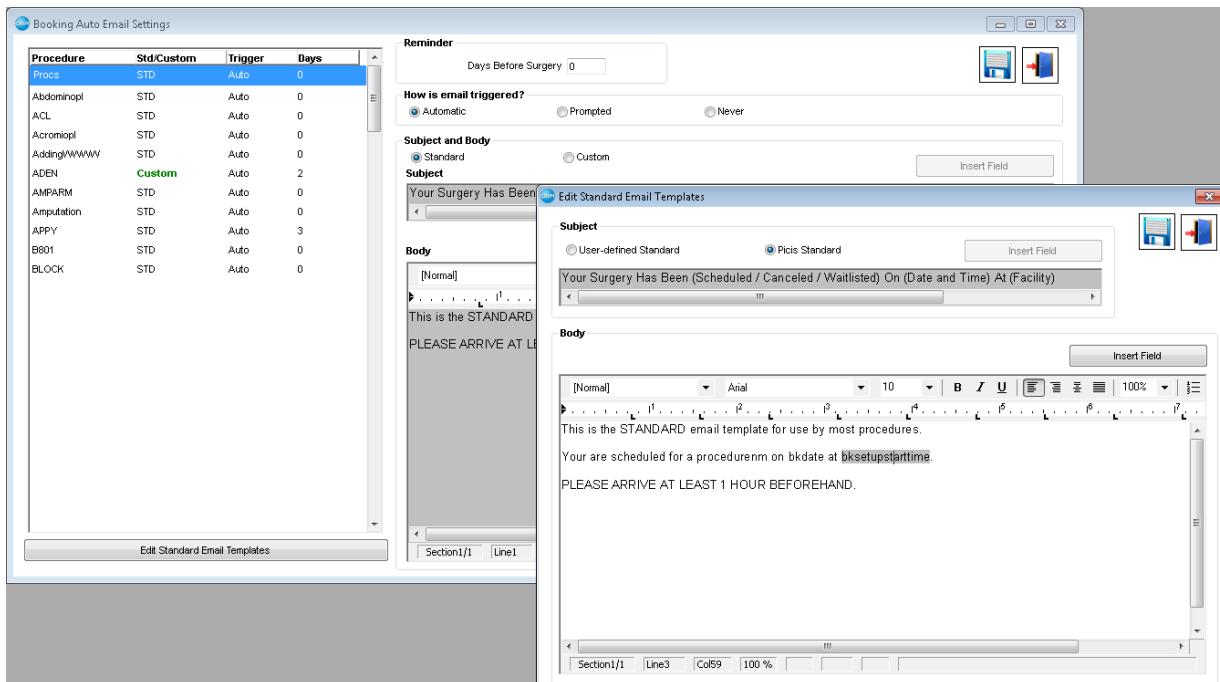
The Report Scheduler lets you define a schedule for running Crystal Reports rather than having to run those reports manually.



2.2.4. Automatic Email Notification when Booking

A new feature gives you the ability to send notification emails to patients and surgeons automatically when a surgery is booked or the booking is edited. A system flag determines whether you can configure

emails based on the booking's procedure or based on the booking's surgeon. For example, if the flag is set for procedures you can configure the email to use when a particular procedure is specified in the booking. (Note: There may be an additional charge for this feature.)



2.2.5. Flag for disabling patient context limitations for certain scheduling staff

Depending on the system configuration, schedulers without rights to use clinical applications may now be able to open multiple booking sheets at a time. (Ordinarily, a user can only open one booking at a time.) (Note: There may be an additional charge for this feature.)

2.3. Printouts Builder Enhancements

- You can now set a period of user inactivity after which the printout being edited in the "Printouts Builder" is automatically saved.
- You can now rename fields in the "Demographics" block

2.4. Implementation Enhancements

Release packages can now be made available to sites via the "Picis Connect" hosted system. The system is intended for use by Picis personnel. For more information, please consult your Picis implementation representative.

2.5. Surgery Elite Add-on Package

For an additional charge, the “Surgery Elite” package can be included as an add-on to 8.6 MR3. The package includes the following:

- Coded Elements
- Medication Interaction Checking
- Body Maps
- Document Viewer

For more information, see the following subsections.

2.5.1. Coded Elements

This release includes a Mapping Tool that sites can use for the following:

- To set up a “Medication Interaction Checking” system (as described in the next section)
- To exchange coded terms with external systems (for example, the exchange of nationality data with the HIS or the exchange of medication data with a Pharmacy system)

Vendor	Concept	Local Version	Current Version	Last Import	Last Edit	Last Published	Is MIC	Locked By
FDB	MEDICATION	20170503_1	20170503_1	7/1/2017 03:16	7/1/2017 03:16	7/1/2017 03:20		
FDB	TREATMENT	20170503_1	20170503_1	7/1/2017 03:16	7/2/2017 10:35	7/2/2017 10:35		
LOINC	TREATMENT	201604_2	201604_2	7/2/2017 08:28	7/2/2017 08:29	7/2/2017 08:30		
LOINC	MEDICATION	201604_2	201604_2	7/1/2017 05:56	7/2/2017 06:49	7/2/2017 06:50		

2.5.2. Medication Interaction Checking

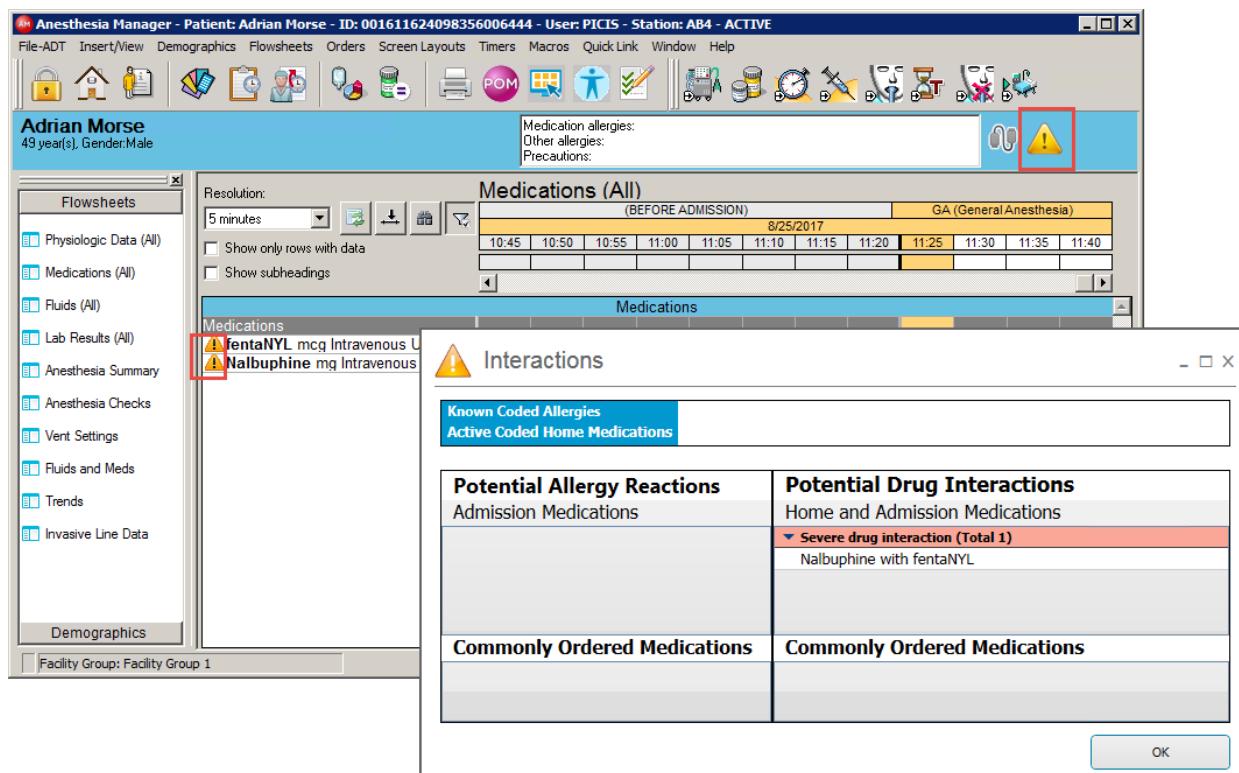
Using 3rd party terminology catalogs and the Mapping Tool (see previous section), Picis systems may now be set up to automatically check for the following interactions:

- Interactions between documented medication allergies and medications
- Interactions between different medications

Checking is carried out for home medications as well as medications that appear on flowsheets.

Potential interactions are shown to users in the following ways:

- On flowsheets, an icon appears next to the name of any medication with a potential interaction. The user can hover over the mouse above the name to see details.
- The **Potential Interactions** icon on the Patient Information Band changes color. The user can click the icon to see details in the Interactions window.
- When a protocol is prescribed manually or added automatically as a default protocol
- When an order is prescribed
- When an order is documented



2.5.3. Body Maps

OR Manager, Anesthesia Manager, PACU Manager and Critical Care Manager can now be configured to include "Body Maps". This functionality allows clinicians to view and annotate images of body systems related to patients. Sites can create a library of underlying images using a new tool embedded in Customize and (in "TPA" systems) in Picis Security Manager.

••• Body Maps Administrator

Picis BodyMaps Admin

Upload

BODYMAP TEMPLATE LIST

- Arm Muscles
- Internal-Body-Parts
- Lower Body grid
- Thorax bone structure
- cardiovascular-system
- muscular-system
- digestive-system-female

Arm Muscles Internal-Body-Parts Lower Body grid

cardiovascular-system... muscular-system digestive-system-female

2.5.4. Document Viewer

OR Manager, Anesthesia Manager, PACU Manager and Critical Care Manager can now be configured to include a “Document Viewer”. This functionality is used to store and display 3rd party documents, images and videos related to the patient.

••• Document Viewer

Picis Document Viewer ← John Davies

ADMISSIONS

Search documents

Admission: 4696776168033000010

CaseNotes.txt

Chest_XRay_P122320.jpg

Other patient documents

Smith,Mary

Patient Id: 1696776167845000010
AdmissionId: 4696776168033000010

Upload

CaseNotes.txt Chest_XRay_P122320.jpg

3. Enhancements Carried Forward from 8.6 MR2

3.1. Windows 10 Support and Other Implementation Enhancements

- This release includes support for the **Windows 10 (64 bit)** operating system.
- Technical implementation staff can now add third party (non Picis) files to the installer for easy distribution throughout the hospital.

3.2. Preop Manager Enhancements

You can now configure the **File** menu to hide or show the following commands:

- New Patient
- OR Information
- New Evaluation

(The underlying functionality invoked by these commands has not changed.)

3.3. Anesthesia Manager, PACU Manager and Critical Care Manager Enhancements

3.3.1. Printouts

The Printout Builder in Customize has been enhanced as follows:

- You can hide deleted models in the Printout Model Selection window
- You can create a new printout model or version by copying another (without having to export and import).
- You can “unpublish” a published version.
- You can set up a global header or footer for the entire printout.
- You can copy configured blocks/containers from one section to another
- You can fine-position a block/container using keyboard arrow keys

- You have more control over the formatting of blocks.

Allergy	Reaction	Last Reaction	As of	Comments
Amoxicillin	reaction Amoxicillin	as a child	13/03/2017 08:43	comment 1
Apple	reaction Apple	as a child	13/03/2017 08:43	comment 4
Papaya	reaction Papaya	as a child	13/03/2017 08:43	comment 5
Penicillin	reaction penicillin	as a child	13/03/2017 08:43	comment 2
Propofol	reaction propofol	as a child	13/03/2017 08:43	comment 3

- For the following blocks you can now select the columns that you want to be displayed in the block:
 - Allergies
 - Diagnoses
 - Precautions
 - Procedures
 - Events
 - Medication details
 - Scores (when in tabular mode)
- For the Demographics block, you can now select the columns that you want to be displayed.
- For the Assessments and Scores blocks, you can specify the families you want to be displayed.
- For the Events block, you can specify that you want events to be grouped by their event type.
- For the Scores block, there is now a setting for showing items beneath score totals.

- For the following blocks, you can specify the number of columns in the block:
 - Allergies (csv or single line view),
 - Anesthesia Plan
 - Assessments
 - Body Systems
 - Diagnoses (csv or single line view)
 - Precautions (csv or single line view)
 - Procedures (csv or single line view)
 - Events (csv or single line view)
 - Fluids detail (csv or single line view)
 - Medication details (csv or single line view)
 - Nursing care details (csv or single line view)
 - Query blocks (csv or single line view)
 - Scores (non-tabular mode)
 - Vital Signs
- For the Fluids In, Fluids Out and Medication blocks, you can specify whether or not you want to print a blank row for undocumented orders.
- For tabular blocks that do not represent flowsheet data, you can adjust the width of each column.
- For blocks representing flowsheet data...
 - you can adjust the width of the first column
 - the choice of intervals now includes 120 (minutes)
- The last published date/time is now displayed for printout model versions
- You can use the CTRL S key combination to save a model

The **Workstation > Printout Viewer configuration** window in Customize has also been enhanced:

- You can now configure a default printout model and viewing period for end users.

End users can now cancel the loading of a print preview in the Printout Viewer.

3.3.2. Notes

- Users can now access other parts of the patient record while the Note Editor is open (in other words its behavior is now non-modal).

3.3.3. Patient Summary

- Users can now copy an entire patient summary note to the clipboard (previously, this could only be done section by section).
- Users can now hide or show patient summary notes that have been deleted. (When visible they still appear in strikethrough text as before.)

3.3.4. VA Site Enhancements

- You can now configure the default tab that opens when you access the census window – **Search in VistA** or **Search Picis System**.
- TIU Notes now include medication totals.

4. Enhancements Carried Forward from 8.6 MR1

4.1. Enhancements Impacting All Applications

4.1.1. Picis Rebranding

As a part of our rebranding efforts, we have gone back to our former name of Picis, and with that reverted to the Picis life drops, icons, and splash screens. We have also changed the names of our products.

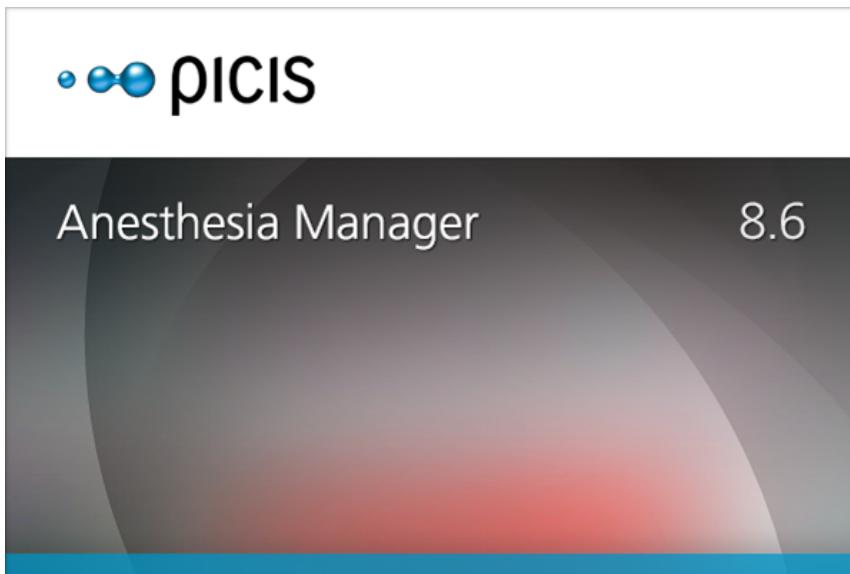
Here are a list of the product name changes:

- Optum Anesthesia Manager to Anesthesia Manager
- Optum Critical Care Manager to Critical Care Manager
- Optum Preop Manager to Preop Manager
- Optum PACU Manager to PACU Manager
- Optum Content Library Installer to Content Library Installer
- Optum eView to eView.

The desktop icons will be as below:



Splash screens will go back to the Picis branding and will display the Application name and version number of the software as below:



4.2. Anesthesia Manager, PACU Manager and Critical Care Manager Enhancements

4.2.1. Printout Builder Additions

Additional functionality was added to the Printout Builder. The purpose was to give users more abilities when configuring a printout. Some of the additional features include:

- Ability to export a printout to the HIS as a print option
- Nursing Care items as an available component
- Labs as an available component
- Patient Summary Notes as an available component

4.2.2. Clinical Enhancements

We added additional functionality to the clinical products in this release aimed at giving you a better user experience. Two of these features center around the use of Patient Summary. We made the Patient Summary window non-modal. This allows the user to move the window into another viewing area, or

minimize the Patient Summary window so that you can see other areas of your chart. This allows you to do any documentation needed with the Patient Summary window open and in view or even in a minimized tray. The second addition deals with the displays in the Patient Summary window. In the past if a Web Service failed, there would not be any patient information displayed in the Patient Summary. Now, the Patient Summary will display any information returned and will give a warning message to the user for a particular web service that fails. The text of the warning message to be displayed is: "*It was not possible to retrieve data from [Web Service Name] Web Services. Please try again later or contact your System Administrator.*"

4.2.2.1 Clinical Notes

This feature was functionally frozen in 8.3.2. We are bringing this back in MR1 of 8.6 with some modifications. Clinicians enter notes in templates that have been created to capture the needed clinical information. Multiple clinicians can apply their notes, numerous times, to a single patient record. The Clinical Notes System (CNS) is a utility which enables clinicians to document the various events associated with a patient's visit:

- Admission Notes
- Progress Notes
- Consultations and Discharge Notes

In the past, this feature required a SharePoint server to house the templates once published. The requirement for SharePoint server has now been removed as templates are now stored in the database. There also was a need for a Clinical Notes Server, this too has been removed. The reasons for these changes are as follows:

- Improved performance
- Easier deployment
- Reduced client cost due to removal of SharePoint and CNS server requirements

4.2.2.2 eView

In 8.6, we added the same Patient Summary view into eView that is configured in the application. In MR1, we added the ability to choose your viewing period of the Patient Summary. This viewing period is an option that can be selected by the user and changes the information that is displayed in the Patient Summary.

4.2.3. SmarTrack for VA

SmarTrack is now available for the VA. SmarTrack is a patient tracking solution that tracks the status and locations of patients and resources, and compares their progress to user-defined carepaths and critical

checkpoints. SmarTrack proactively notifies staff when a patient is not moving predictably through the perioperative process.

4.2.4. Analytics Enhancements

An enhancement was made to the Block Utilization report to show the difference between Case Minute Overlap during block time and Case Minute Overlap before and after block time.

The drilldowns for the Picis Perioperative Dashboard (PPD) released in 8.6 will now be able to be filtered based on the filters of the dashboard. If a user wants to see a drilldown for one of the indicators of the PPD and the user has the filters set to a specific facility, room group and/or service, the drilldown will reflect the user's selected filters.

5. Enhancements Carried Forward from 8.6

5.1. Enhancements Impacting All Applications

5.1.1. Prevent Future Documentation of Milestone Events

All TPA applications will no longer allow clinical documentation into the future for milestone events.

5.1.2. Software Support Additions

There have been several software support enhancements for feature release 8.6. These support enhancements are listed below.

- Internet Explorer 11
- SQL Server 2012
- Microsoft Office 2010
- Crystal 2011

5.1.3. Remote Desktop Services

Continuing on the enhancements in 8.4 to expand support for thin-client deployment options via Citrix environments, in version 8.6, support for Remote Desktop services has been introduced providing yet another thin client deployment option for clients with full application functionality.

The implementation follows the advances for Citrix support including:

- Full user and patient context support for all applications

- Users can now use the full Optum TPA suite in a Remote Desktop services environment instead of only OR Manager.
- Users can configure Remote Desktop services to stream device data through the virtual com ports defined by the remote session.

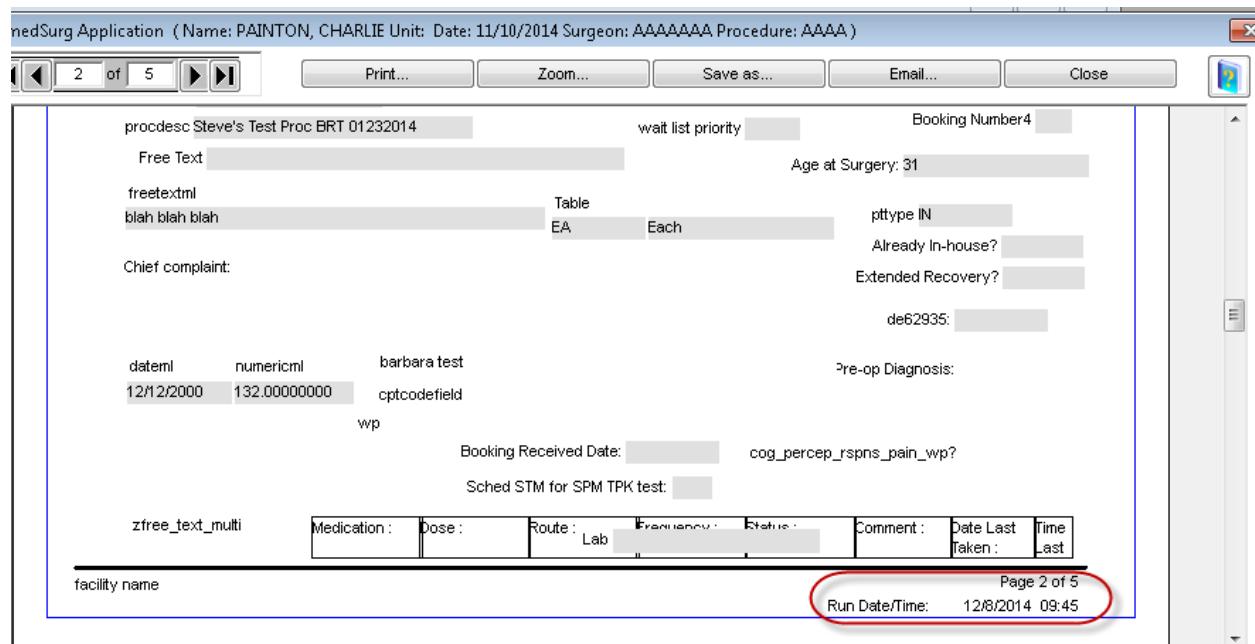
5.2. 8.6 OR Manager Enhancements

5.2.1. Create a PAT Booking off a Reservation

The user is now able to create a PAT Booking off of a Booking that is in Reservation 'V' status.

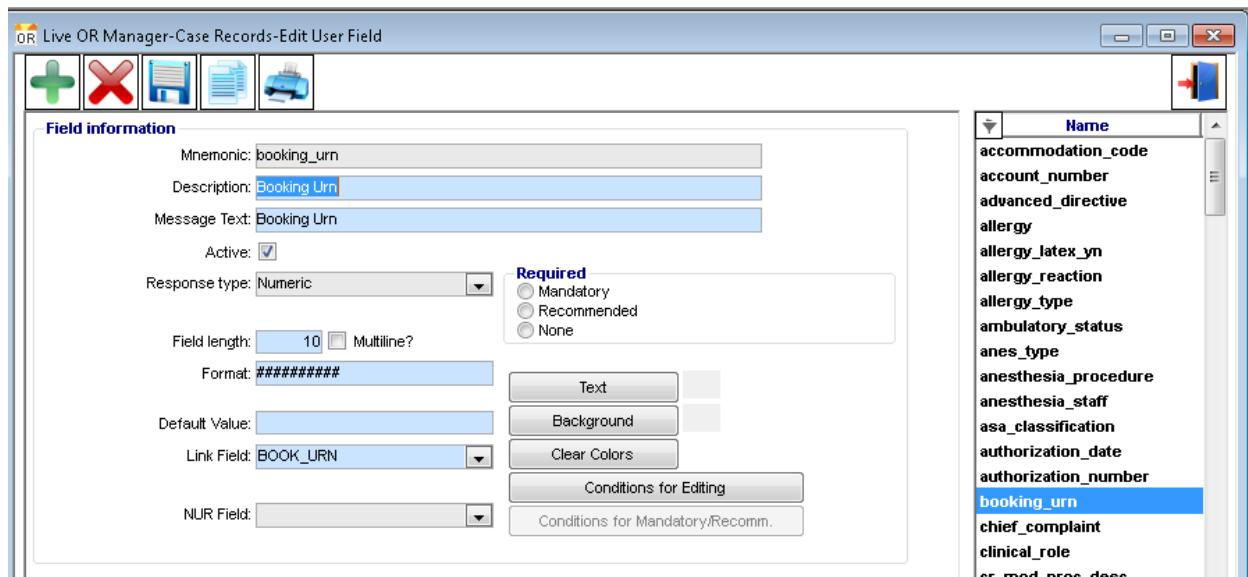
5.2.2. Time Printed Field Added to Booking Sheet

The time that a booking sheet is printed has now been added to the printout at the bottom right corner of each page. Previously only the date would show.



5.2.3. Booking URN Standard Field in Case Record

The Booking URN is now a standard field in the Case Record.



5.2.4. Hide Inactive Entries

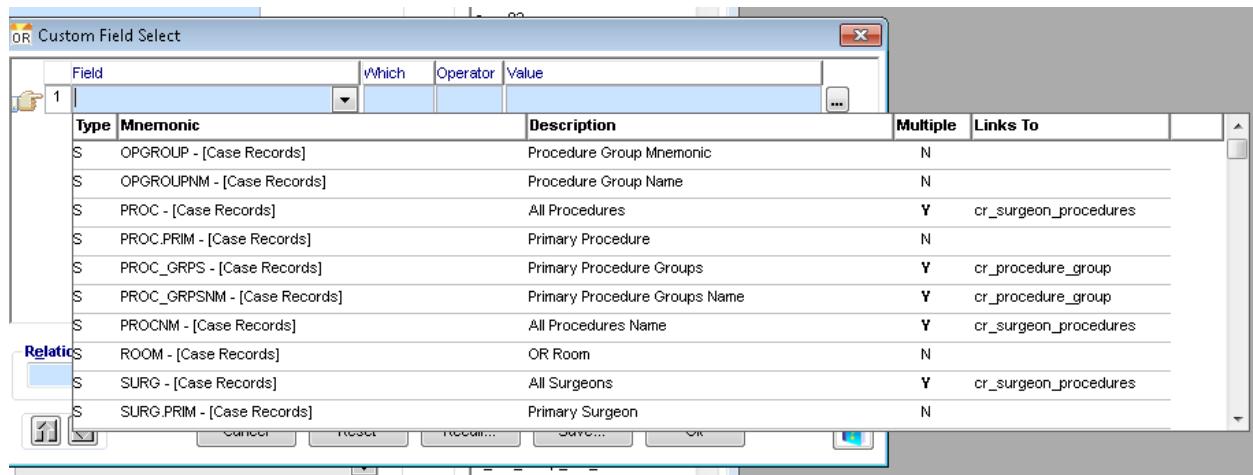
Inactive entries will no longer appear in all drop-downs in the Booking screen and Case Record screens.

The existing flag 'select_inactives' will continue to work when there are inactive entries in an existing booking or case record.

5.2.5. Additional Standard Fields Available

Additional standard fields are available in the custom select fields when making conditions for editing and conditions for mandatory/recommended fields in the case record. The following additional standard fields are available:

PROC	All Procedures
PROCNM	All Procedures Name
PROC_GRPS	Primary Procedure Groups
OPGROUP	Procedure Group Mnemonic
OPGROUPNM	Procedure Group Name
PROC_GRPSNM	Primary Procedure Groups Name
ROOM	Room

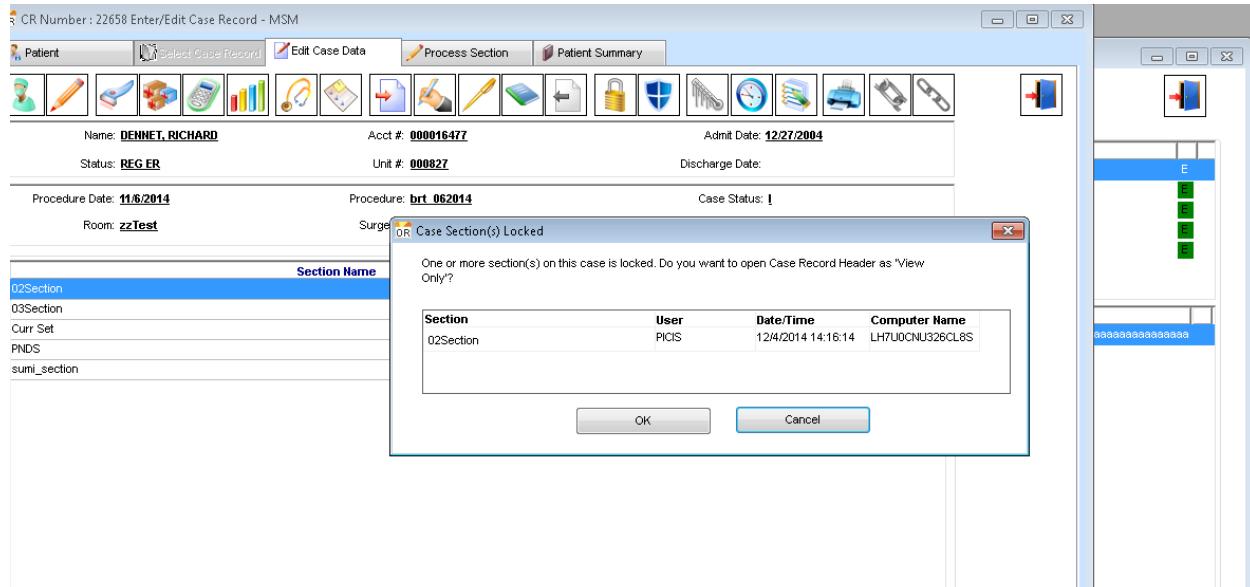


5.2.6. Process Header/View Header

Several enhancements were made to the Process Header and View Header.

Previously: When a user would access the process header when there was a section of the case record open, the process header would appear to be editable when it actually was not. The user would receive a prompt when trying to save edited information that the information could not be saved due to a section of the case record being open.

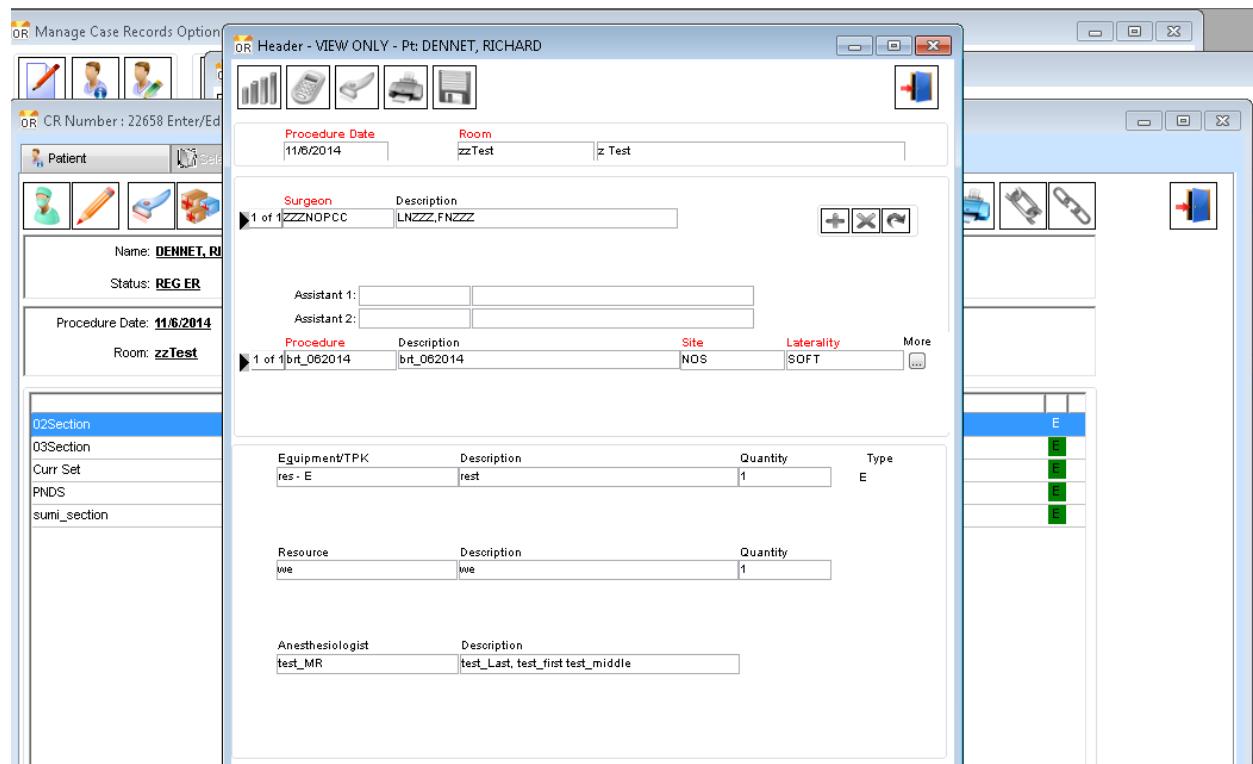
Now: When a user has a section of the case record open and tries to open the process header, the user will receive a prompt informing them that there is a section of the case record open, the process header will open as a 'View Only'. Fields in the process header will not be editable.



There is now a label over the ellipses [...]: More.

Previously: The View Header only included the Surgeon(s) and Procedure(s).

Now: The View Header displays all header information.



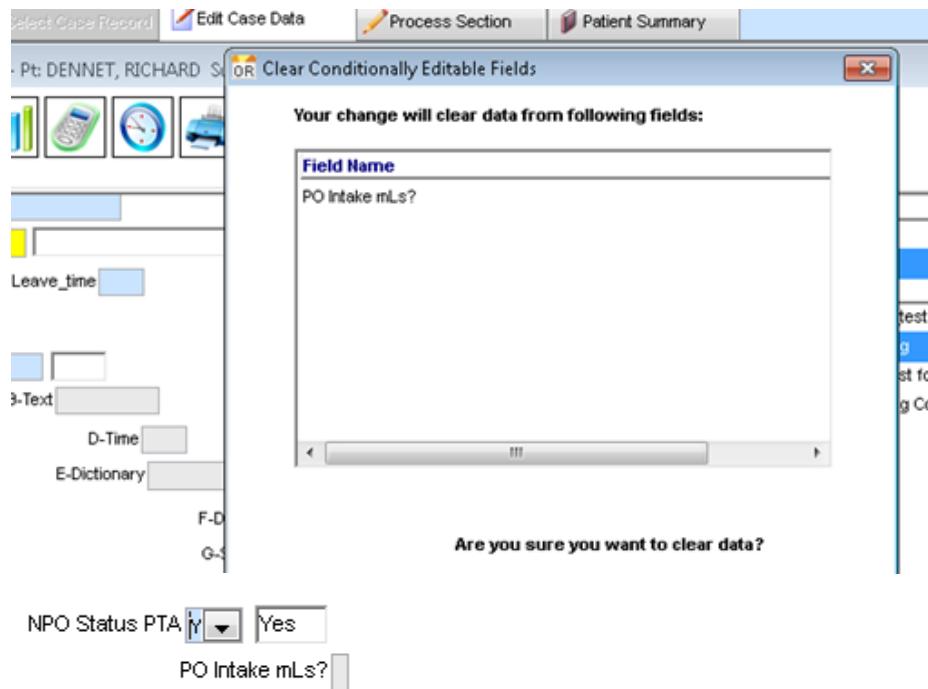
5.2.7. Clearing Field Values after a Condition is Unmet

Field values will now clear if the condition is 'unmet'.

Previously: When a user would fill out conditional fields and then 'unmeet' the condition, the child fields would still keep the information even though the condition was unmet.

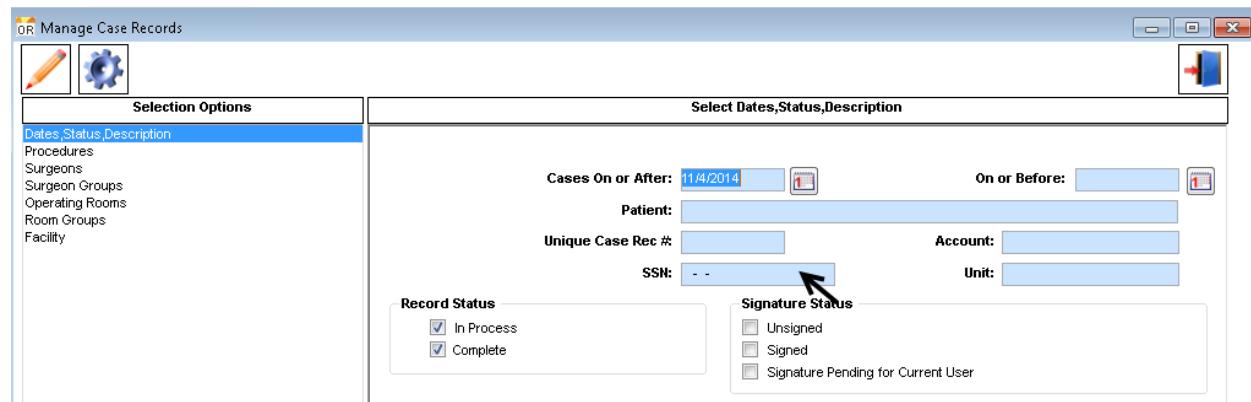
NPO Status PTA	<input type="button" value="N"/>	<input type="button" value="No"/>	NPO Status PTA	<input type="button" value="Y"/>	<input type="button" value="Yes"/>
PO Intake mLs?	<input type="text" value="3"/>		PO Intake mLs?	<input type="text" value="3"/>	

Now: When a user fills out a conditional field and then goes back and changes it and 'unmeets' the conditional field, the user is given the option to clear the child fields associated with the condition.



5.2.8. Search by SSN/HCN in Manage Bookings & Case Records

Users can now search by SSN or HCN in Manage Bookings and Manage Case Records.



There is also a flag setting to enable/disable this feature:

The screenshot shows the 'PSM Application Parameters' window. At the top, there are two search boxes: 'Select Application' (containing 'ORM' and 'OR Manager') and 'Select Category' (containing 'ALL' and 'All Parameters'). On the right side, there are several buttons: 'Audit Trail', 'Save', 'Print', 'Export', and 'Close'. The main area is a table with the following data:

Parameter Name	Parameter Value	Category	User Last Edit	Edit Date/Time
search_by_ssn_hcn_nhs_on_manage_routine	Y	SYS	picis	7/1/2014
search_cr_discharges	N	CR		
select_inactives	Y	SYS	GORKE	7/12/2012
selectedfac_booking	N	CR		
Semi_use_msm_stock	N	MM		
send_booking_email	Y	SYS		
set_default_surgeon_qty_on_pref_card	Y	SYS	default	6/19/2008
setup_teardown_averaging	Y	BK		
show_book_urn	Y	BK		
show_cost_on_picklist		MM		
show_cr_urn	Y	CR		

Below the table, it says 'Row 207 of 268'. There are three expandable sections: 'Description' (Allows user to search by SSN on Manage Booking and Manage Case Record screens), 'Valid Values' (Y - SSN field will be visible on Manage screens. N - SSN fields is not visible for user to do search on. Default = N), and 'Extra Info' (Same parameter is used for Canadian site (HCN Search) and for UK sites (NHS Number Search)).

5.2.9. Filters for Tables and User-Defined Fields

Filters are now available in User-Defined Tables, User-Defined Table Entries, and User-Defined Fields that lets users filter the content on these screens to 'Standard', 'Custom', 'Content Library', and 'TPA Shared'.

The top screenshot shows the 'Enter/Edit User Defined Tables' window. A table named 'ACCO_CODE' is displayed with columns 'Table Mnemonic' and 'Accommodation Code'. A filter dialog box is open, showing options for 'Standard', 'Custom', 'Content Library', and 'TPA Shared'. The bottom screenshot shows the 'Edit User Field' window for a field named 'a_time_pt_in_rm'. It includes fields for Mnemonic, Description, Message Text, Active status, Response type, Field length, Format, Default Value, Link Field, and NUR Field. A filter dialog box is also open here, and a list of names on the right side of the screen shows entries starting with 'a_time_pt_in_rm'.

5.2.10. Case Record # on Implant Record

The Case Record # will now appear in the Implant Record header so that it will appear in the printout of the implant record.

The screenshot shows the 'Case Record Supplies and Billing List : Implant Only' window. At the top, it displays patient information: Name: DENNET, RICHARD, Case Rec. No: 22641 (with a red arrow pointing to it), Procedure Date: 11/6/2014, Account No.: 000016477, Procedure: brt_062014, Surgeon: LNZZZ,FNZZZ, and Room: zzTest. Below this is a table titled 'Supplies' with columns for Use Area, Inventory, Stock Number, Description, Card Qty, Actual Qty, Hold Qty, Waste Qty, Bill Qty, Cost, and Procedure Code. A single row is shown for PREOP with values: 11, 63 11049, 63 11049, and so on. The total supply cost is \$0.00.

5.2.11. Procedure Dictionary Search

Users can now search a 'Previous' item instead of only going to the 'Next' item during a search. This enables users to go back if they accidentally clicked 'Next' when they didn't want to.

The screenshot shows the 'Search for Procedure' dialog box. On the left, under 'Search By', the 'Procedure Description' radio button is selected. In the center, there is a 'Procedure Description' input field containing the letter 'f'. To the right, there are four buttons: 'Next' (highlighted in blue), 'Previous', 'New Search', and 'Close'.

5.2.12. Close All Sections of Case Record Icon

Users can now close all sections of a Case Record with just one click of a new icon. If a user does not have permission to close certain sections of the Case Record, the icon will allow the user to close only the sections the user has permission to close.

Section Name	Section Status
02Section	<input checked="" type="radio"/> Open <input type="radio"/> Closed E
03Section	<input checked="" type="radio"/> Open <input type="radio"/> Closed E
Curr Set	<input checked="" type="radio"/> Open <input type="radio"/> Closed E
PNDS	<input checked="" type="radio"/> Open <input type="radio"/> Closed E
sumi_section	<input checked="" type="radio"/> Open <input type="radio"/> Closed E

5.2.13. Stock Dictionary

Improvements to the Stock Dictionary included:

- Warning message when creating a duplicate stock dictionary item for Manufacturer Catalog Number and Vendor Catalog Number.

Item Number: 12344 Active:

Contain Latex: Yes No N/A

Description:

Description2:

Common Name:

Comment:

Category:

Vendor Cat No:

Primary Vendor:

Manufacturer:

UPN1:

Pick Units: CS Order Units: BG Pick Units Per Order Unit: 1

Item Bill Code:

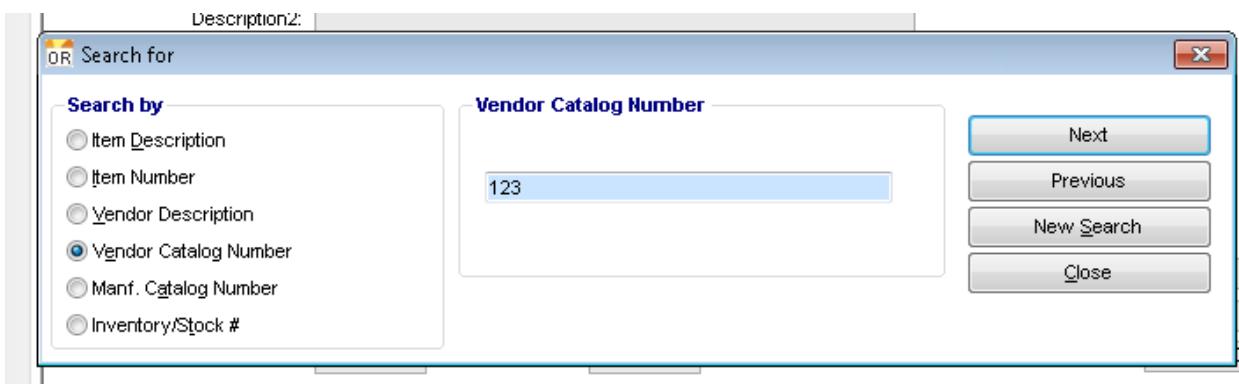
Implantable: Yes No

SMDA: Yes No N/A

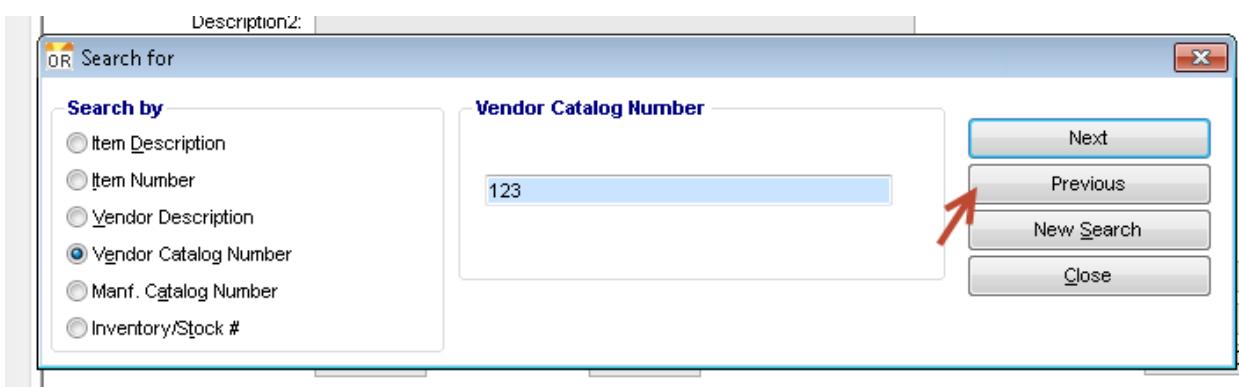
Implant Type:

Add Delete Save Print Close

- Ability to search by Vendor Catalog #



- Ability to search 'Previous'



5.2.14. Complex Case Averaging

OR Manager can now do averaging for complex cases. The Surgeon/Procedure combination needs to be exactly the same. The averaging works exactly the same as it does for simple procedures. User can toggle between the 'Simple' case average and the 'Complex' case average when there is a complex case averaged. The Complex Case averaging section will appear as long as the Surgeon/Procedure combination has been performed at least one time prior for viewing, but will not use the average until the specified number of cases has been performed.

The screenshot shows the Booking module interface. On the left, there's a 'Surgeon' section with a dropdown for 'Name' (BOWLER, ELIZABETH) and an 'Offset' field (0). Below it is a 'Procedure' table with two rows: APPY (Appendectomy of what? BR...) and ADEN (Adenoectomy New BRT_20...). To the right, a red box highlights the 'Complex Surgeon/Procedure Stats' section, which includes fields for '# Performed' (6), 'Setup' (0), 'Teardown' (0), and 'Procedure' (285). It also shows 'Last 5' values and a 'Complex Average All' value of 279. At the bottom, there are sections for 'Equipment', 'Resources', and 'Anesthesiologists'.

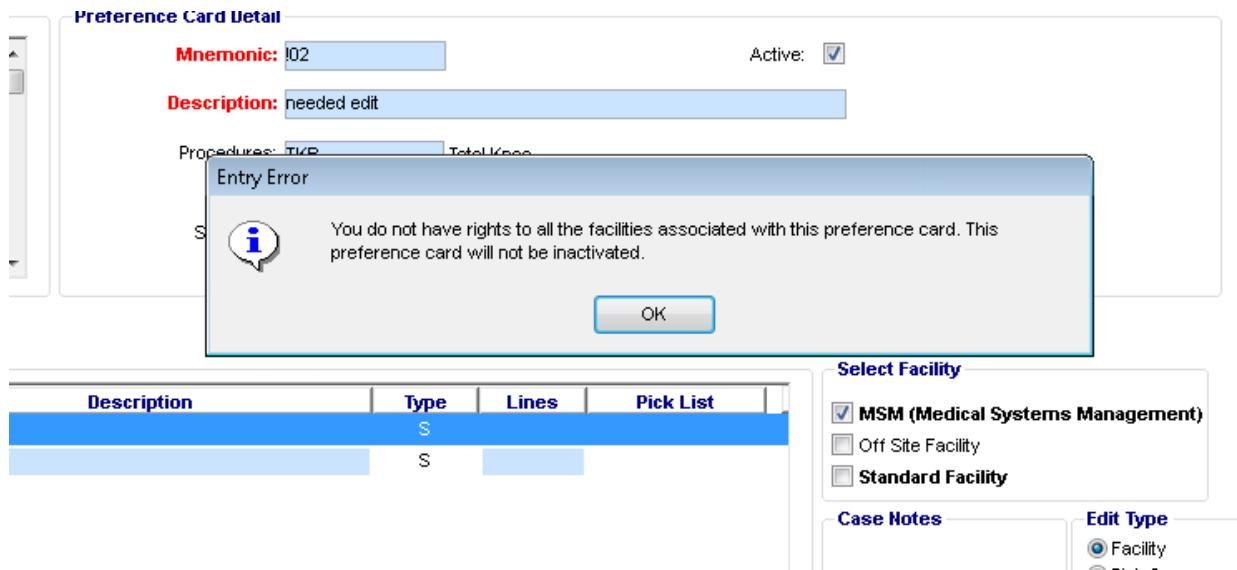
5.2.15. Preference Cards

Several enhancements were made to preference cards.

- Users will now receive a warning message when they try to deactivate a preference card that is associated with more than one facility.
- Users will now be able to see all the facilities associated with a preference card. This will be indicated by 'bold' font for the associated facilities.

The screenshot shows the Preference Cards module. On the left, a 'Preference Card List' table shows several entries like I01, I02, and 1Test. The main area displays a 'Preference Card Detail' form with fields for 'Mnemonic' (1Test), 'Description' (needed edit), and 'Procedures' (TKR, Total Knee). A red box highlights a warning dialog box titled 'Live OR Manager' with the message: 'This preference card is associated with more than one facility. Are you sure you want to deactivate this preference card?'. At the bottom right, a 'Select Facility' section shows checkboxes for 'MSM (Medical Systems Management)' (which is checked), 'Off Site Facility', and 'Steve's Facility for testing Sort Ord'. Another red box highlights the checked 'MSM' checkbox.

- Users will not be allowed to deactivate a preference card that they do not have facilities rights to.



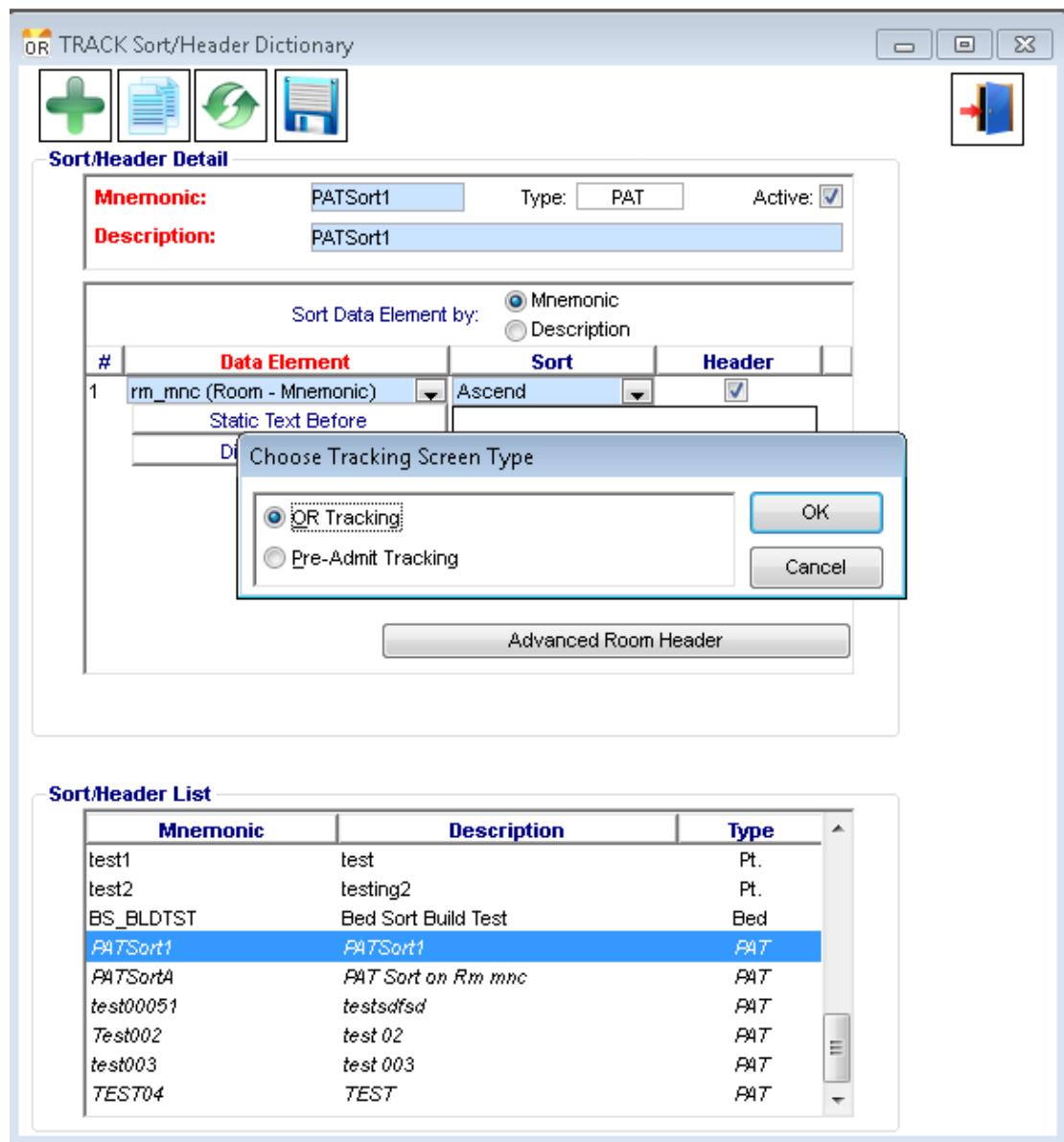
- Extended Cost and Account Number will now be standard fields in the Picklist field options so that they can be viewed on the Picklist Report. The extended cost display in the Picklist Report will follow the flag setting 'display_cost_in_exception_noting'. When set to 'N', the Extended Cost will be masked if it is on a Picklist Report. The Account Number also applies to the Worksheet.

5.3. SmarTrack Enhancements

5.3.1. PAT Tracking

As part of the 8.6 release there have been several enhancements made to Patient Tracking. Patient Tracking will now display PAT Bookings. Users will now be able to create/view specific Tracking Screens for PAT Bookings.

The PAT Tracking functionality is flagged. When the flag is turned on, users will be able to select between PAT and OR Tracking configurations, and the users will be able to view PAT specific tracking screens.



Sort/Header List

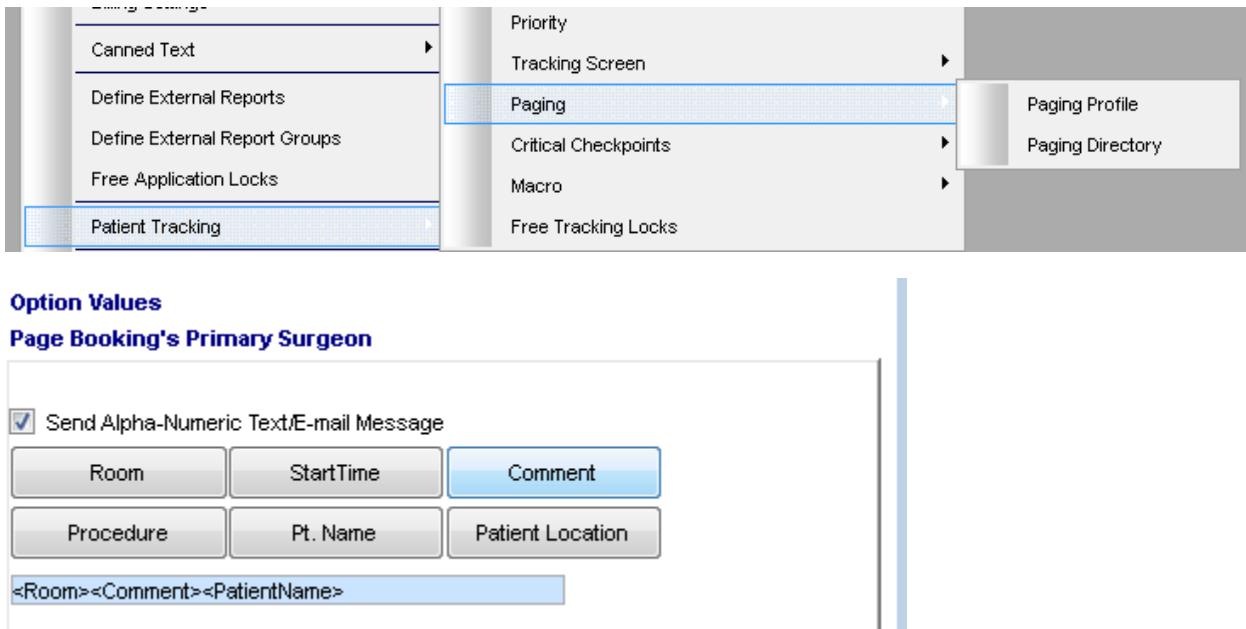
Mnemonic	Description	Type
test1	test	Pt.
test2	testing2	Pt.
BS_BLDTST	Bed Sort Build Test	Bed
PATSort1	PATSort1	PAT
PATSort4	PAT Sort on Rm mnc	PAT
test0051	testsdfsd	PAT
Test002	test 02	PAT
test003	test 003	PAT
TEST04	TEST	PAT

5.3.2. Telephony

As part of the 8.6 release there have been cosmetic changes and additional macro actions added to Telephony related items in Patient Tracking.

- 'Telephony' changed to 'Paging'
- 'Beeper' changed to 'Paging Directory'
- 'Beeper Profile' changed to 'Paging Profile'
- 'Beeper Detail' changed to 'Paging Detail'

- ‘Beeper List’ changed to ‘Paging Directory’
- Ability to add Booking Comments action to the available Paging Macro Actions.
- Ability to add Patient Location action to the available Paging Macro Actions



5.3.3. Lengthen Location Staff Assignment

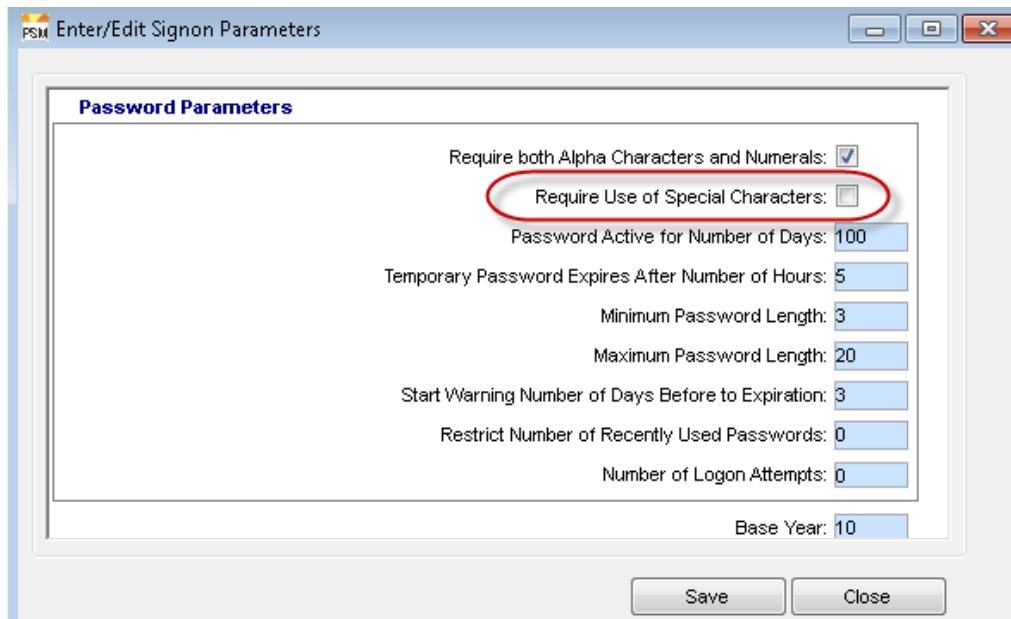
The Sort/Header in Patient Tracking can now support up to 150 characters. This will enable the user to see all staff assigned without cutting off text.

5.4. Security Manager Enhancements

5.4.1. Allow Use of Special Characters in Passwords

Changes were made in Security Manager to include the use of special characters in passwords. The following special characters are now supported by the applications: ~ ` ! # \$ % () { } ' . @ * < > ? / \ - + = _ and space

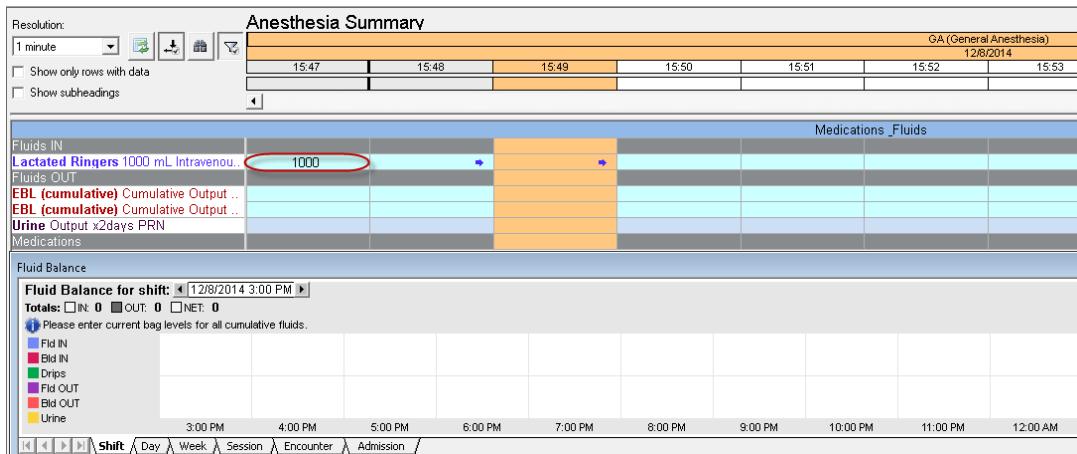
Security Manager has a new sign-on parameter that can require users to use special characters.



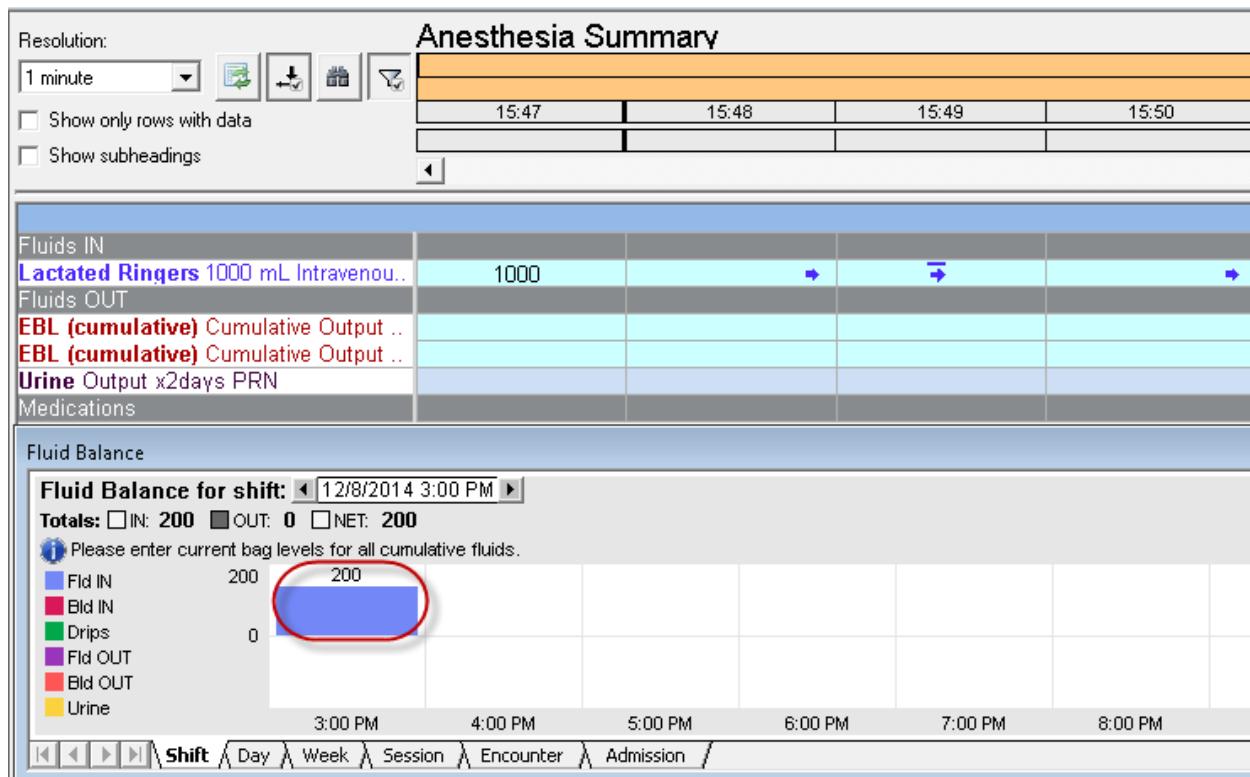
5.5. Anesthesia Manager, PACU Manager and Critical Care Manager Enhancements

5.5.1. Continuous Fluids In Documentation/Display

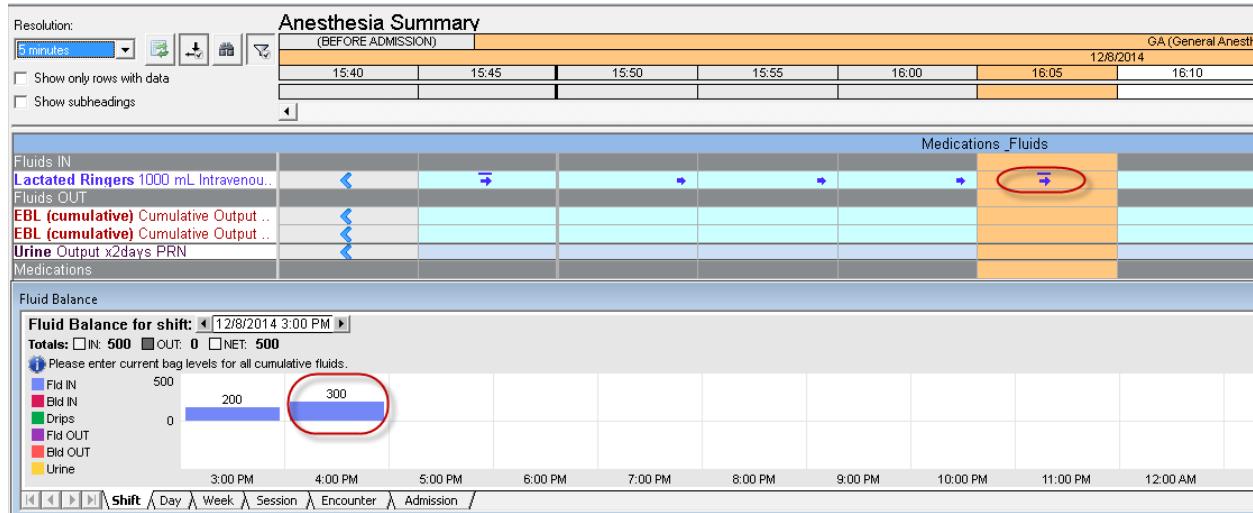
A design change was made to make the Fluids-In documentation easier to read for clinicians. A continuous bag of fluid is hung with 1000 ml. Users see the normal display:



A bag level of 800 ml is documented and users see the normal bag level symbol of in the application. Users see a credit of 200 ml in the Fluid balance window.



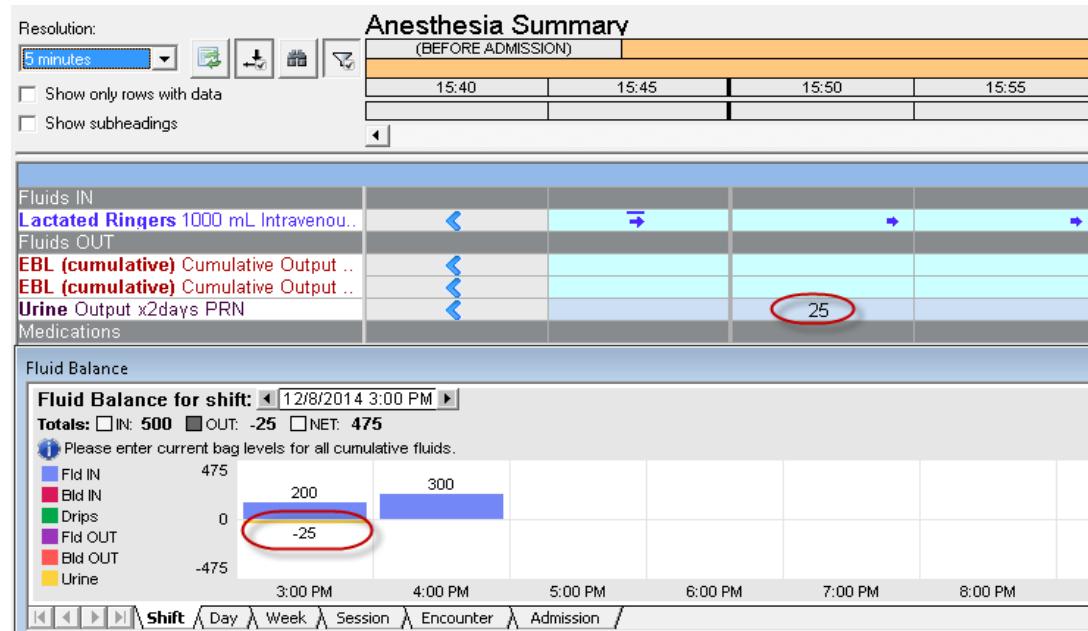
When bag levels go across the hour, the application will separate the credits in the fluid balance window accordingly. A bag level of 500 ml is documented at 1605 and the fluid balance window shows credit of 300 ml's for the 4:00 PM time period.



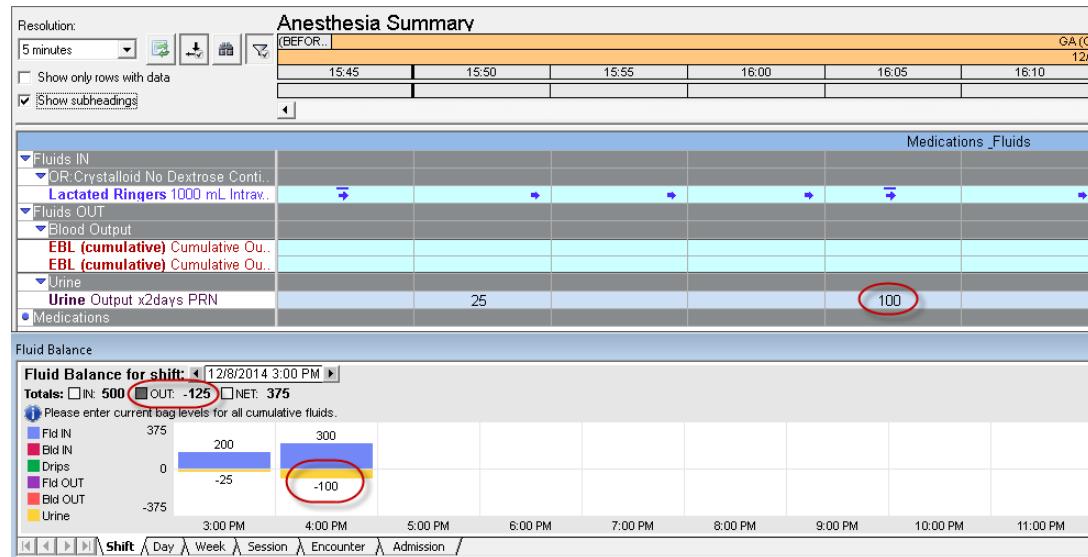
Note: The documentation and display of Periodic Medication Infusions, Combined Medications, and Drips will remain the same.

5.5.2. Fluids Out Documentation/Display

A design change was made to make the Fluids Out documentation easier to read for clinicians. Urine amount of 25 ml is documented at 15:50, the fluid balance window displays 25 ml's of Fluids out.

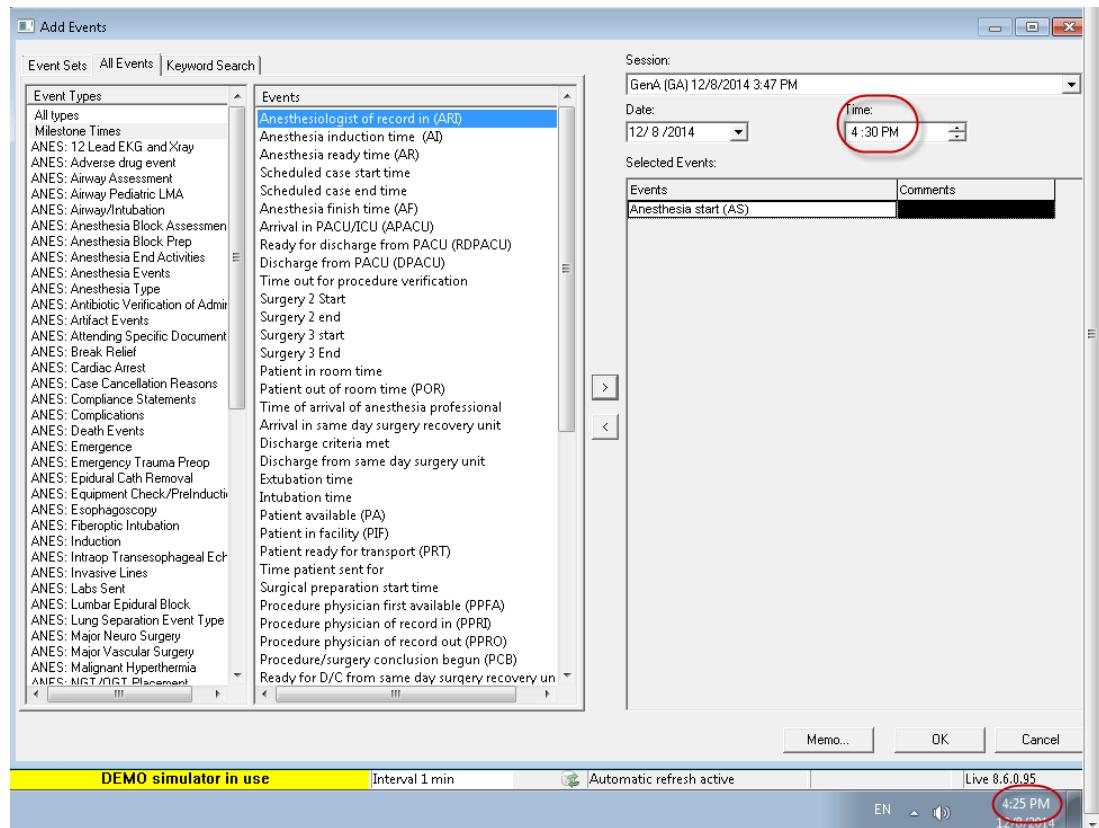


When the fluids out documentation spans across the hour, the application will separate the credits in the fluid balance window accordingly. Fluids out of 100 ml is documented at 1605 and the fluid balance window shows credit of 100 ml's for the 4:00 PM time period and a running total of 125 ml.

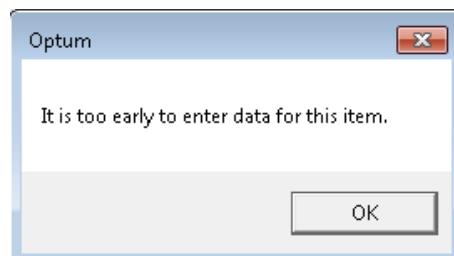


5.5.3. Prevent Documenting Events in the Future

A change was made that no longer allows for events to be documented in the future. If the current time is 1625 and the user attempts to document an event in the future (1630) they will be notified with a warning message that they cannot complete this action.



The warning message that is displayed is as follows:



When the user selects the OK button they are taken back to the event documentation window so they can make needed adjustments.

5.5.4. Ability to Document a Treatment by clicking a Treatment Name

Users now have the ability to open the documentation by clicking on the treatment name in the application. When the documentation window opens, it opens to the current date and time in the application. The user is able to alter the time just as they were before.

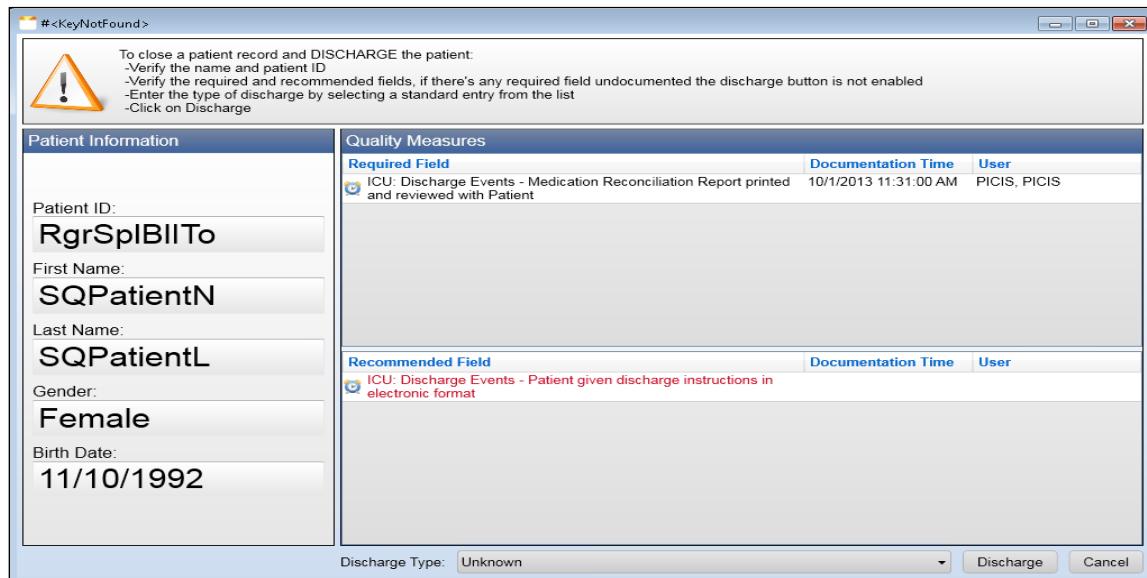
5.5.5. Required/Recommended Fields

The required fields enhancement is designed to improve patient care introducing some required and recommended fields that should/may be documented before transferring or discharging a patient.

Additional required/recommended fields were added to cover the following areas:

- Event Type

Each hospital will be able to configure which of those fields are required or recommended on every specific template. Additionally the physicians/nurses can check the status of those fields at any time from an additional window that collects all those quality measures. Navigate to Insert/View > Quality Measures to access Quality measures.



5.5.6. Treatment Display Order

Prior to v8.4 only Assessments could be indexed in the database. A change was made in v8.4 that extended this functionality to other order types under these families: Nursing Care, Medications, Fluids In, Fluids OUT and Scores. This allows for the following:

- Allowed for indexing of a subset of the families
- Families indexing was maintained whether or not the 'Show subheadings' box is checked

- Families followed the indexing first and then alphabetical sort

This was confusing to end users. A change was made that allowed for a configuration parameter that allows for AlphaTreatmentConfiguration in the Advanced Configuration Editor. When alpha sort is the chosen parameter, and the families have been indexing, the families indexing is not considered unless show subheadings is a chosen parameter as well. This allows for the Treatments to display in the desired method (Alpha or indexed) for the end users.

5.5.7. Bag Level Prompt on Transfer

A requested enhancement was made that would automatically present the end user with the opportunity to conduct a bag level when transferring a patient's record. Now when a record has a continuous fluid order with volume remaining in the bag, the end user will be prompted for a bag level prior to transferring the record.

5.5.8. Multifacility Filter

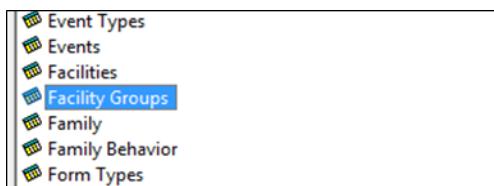
A change was carried forward from v8.3.2 and the VA code line (this is a code line that was created for our VA customers) that's main purpose is to restrict the patient records in the Census List that a user may access. In order to achieve this, two main concepts are defined:

- Facility Group: A group of facilities defined in DbEditor.
- Facility Right: Provides access to the patients in a specific facility.

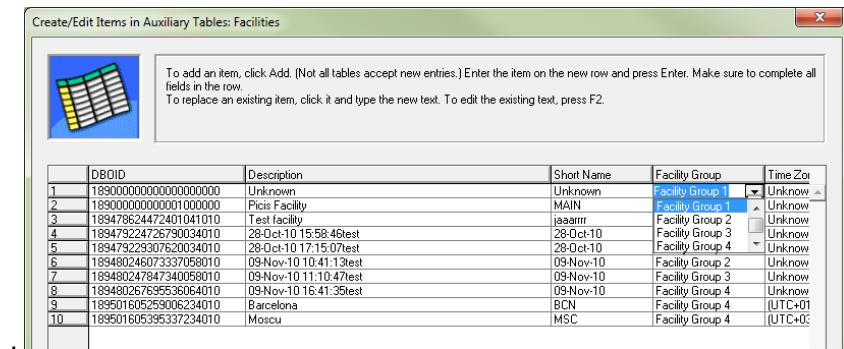
A user will be able to access patients if these two conditions are met:

- Are admitted in / transferred from / discharged from / had a previous admission in a facility belonging to the selected facility group.
- The user has a Facility Right for the facility where the patient is admitted/transferred/discharged.

In order to be able to define the Facility groups, a change was made in DbEditor for all customers. A new entry was made in the Auxiliary Tables folder, named Facility Groups. This is where Facility groups are created.



Multiple facilities can be added to the same Facility Group for the management of access to records through the Facilities table.



In a bed side workstation, the Facility Group that filters the Census List is the one associated with the workstation (or home) facility. The workstation facility is the one associated with the current location. The location is determined by the computer name. In multi bed non-VA, in order to determine the Facility Group to be used, a list of Facility Groups will be shown to the user before the login window is displayed. The header of this new dialog will read '**Please select from the following Facility Groups**'.

5.5.9. Printout Builder –Replacement for Excel-Based Printouts

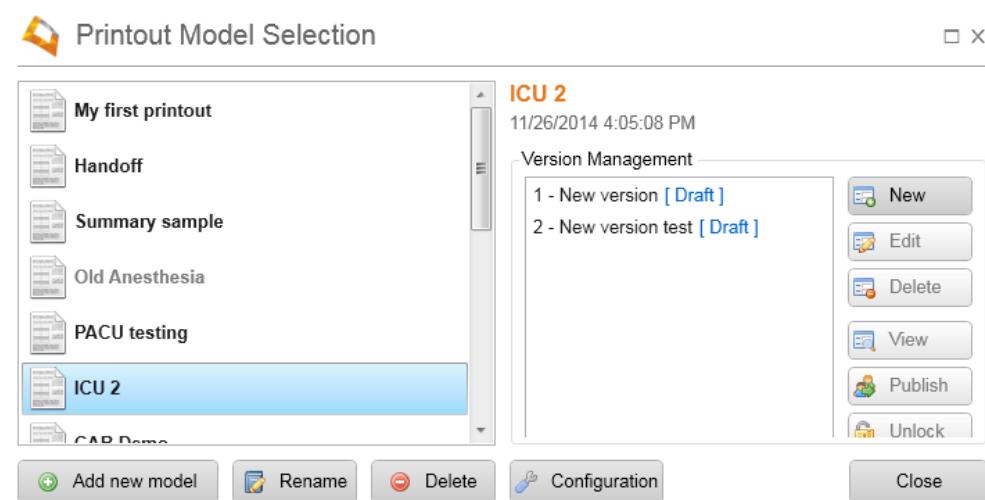
Printout Builder is the replacement for the MS Excel printout format with the goal of becoming a multi-use platform for building forms in the clinical applications. Below are some highlights from the new implementation:

- Maintain all primary functionality has been maintained including
- Silent & scheduled printing
- Printing to PDF and exporting PDF to external systems including custom PDF file names
- Printing on Discharge/Transfer
- Printouts models are stored in the database thus no longer requiring local files on the workstation.
- The CPS is no longer needed since printing will use natively installed printers managed by the customer IT departments.
- New “what you see is what you get” designer window similar to popular applications to drag/drop component blocks (Demographics, Fluids IN, Physiologic variables, etc.) and configure them accordingly. Models can also be previewed during design therefore eliminating unnecessary printing

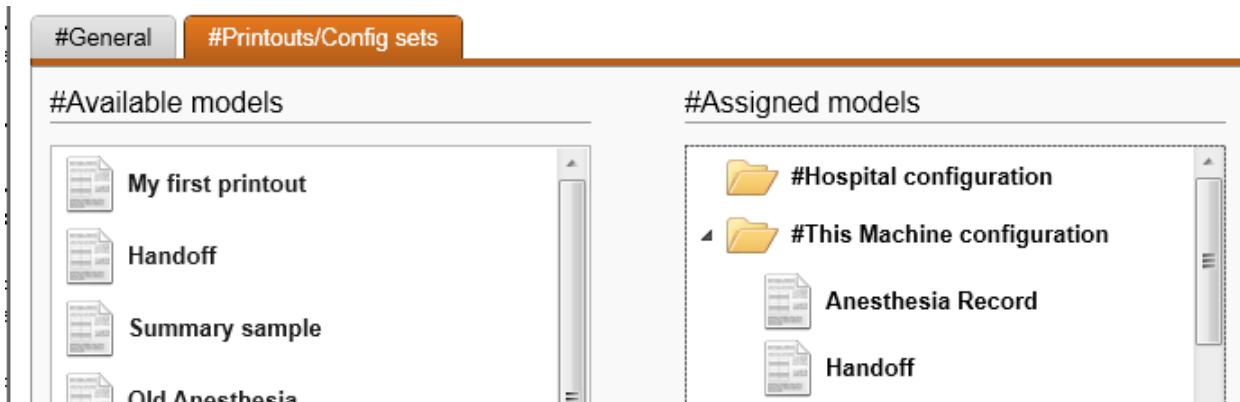
to paper to see the final result.

The screenshot shows the PICIS Printout Designer software interface. At the top, there's a toolbar with buttons for Home, Printout, Section, File (Open, Save, Rename, Publish, Close), Print Preview (Short case (4 hours) dropdown, Preview button), Standard Libraries (#Query Blocks, #Images), and a preview window showing a line graph of heart rate (HR) over time with values 71, 72, 52, 98, 7, 1, 62, 51, 42, 49. Below the toolbar is a sidebar titled "Available blocks" containing icons for #Query Blocks, Admission Data, Scores, Trends, Physiological Variables, Basic Blocks, Barcode, Image, Label, Demographics, Medical Profile, Diagnoses, FluidsIn, FluidsOut, Events, and Panels. The main workspace contains several sections: "Demographics" with patient information (Name: John Doe, Patient ID: AAAA-88888, DOB: 07/05/1982, etc.); "Trends" showing the HR graph; "Physiological Variables" with tables for HR, ABP-D, and PAD at times 8:11, 8:16, 8:21, 8:26, 8:31, 8:36, 8:41, and 8:46; "Fluids In" and "Fluids Out" tables; "Scores" section with RT Scores (Glasgow Coma Scale) and Events table showing timestamp, user, event name, and comments (Anesthesia End, Intubation, Anesthesia Start).

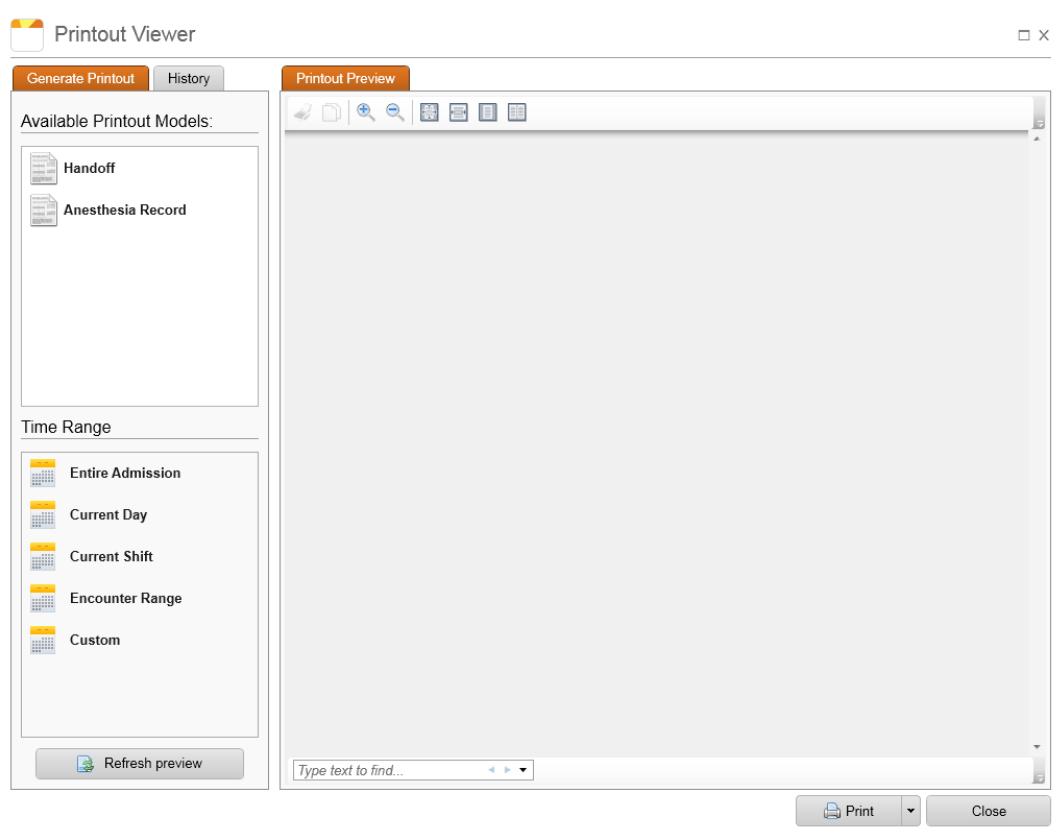
- New overflow tools, including “AutoFit” & “AutoGrow” components, to allow a client to manage how a printout looks when data overflows beyond the configured size of the component.
- Delivered component blocks that query data from the database so clients do not have to update queries if there are future database changes.
- Clients will be able to import their existing INI files to use their custom query blocks in the new printout model
- Printout models can be created with version control within the designer instead of manually creating and managing files.



- Assign printout models to configuration sets similar to "configuration to database"



- Printout models can be previewed prior to printing.



5.6. Analytics Enhancements

5.6.1. Perioperative Dashboard

The Perioperative Dashboard (OPD) has been revamped. It will now reside in Optum Intelligence (Business Objects). The OPD will now also include detailed Drill Down Reports for the current day. The following indicators are new to the OPD:

- Operating Room Utilization
- % First Case Late Starts
- % Delayed Cases
- Average Delay Length
- Average Processing Times
- Waiting Room
- Pre-Op
- Operating Room

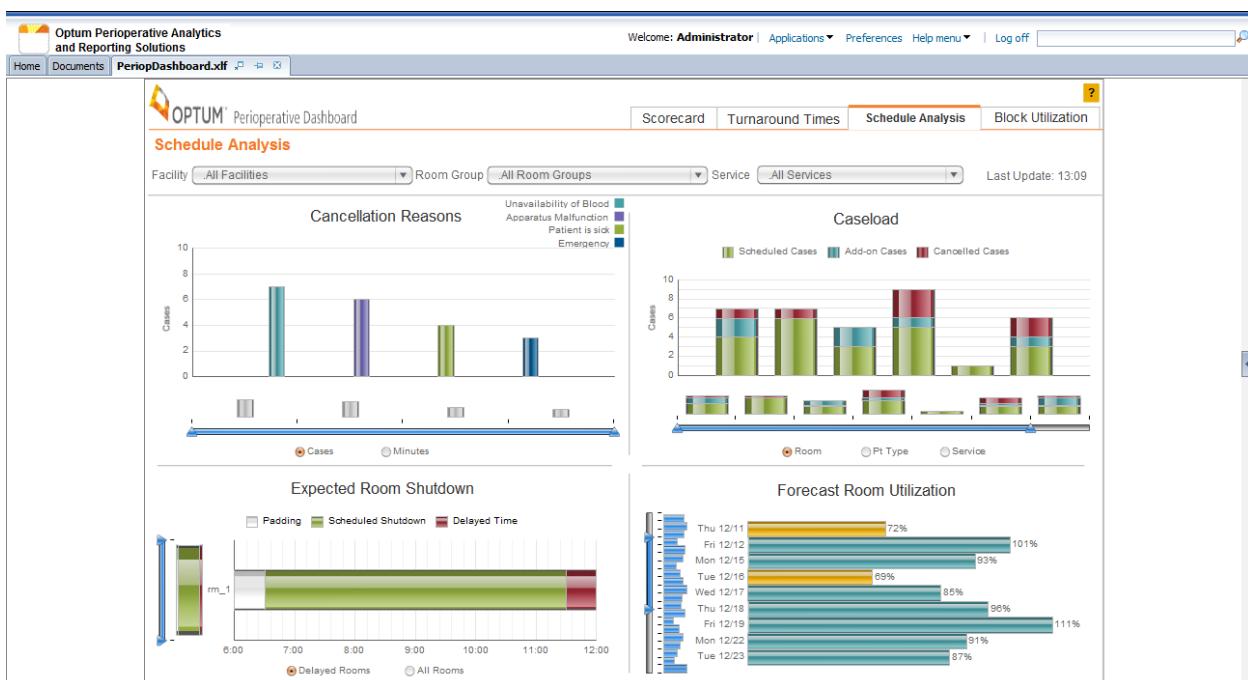
Enhancements Carried Forward from 8.6

- PACU
- Phase II
- Block Utilization

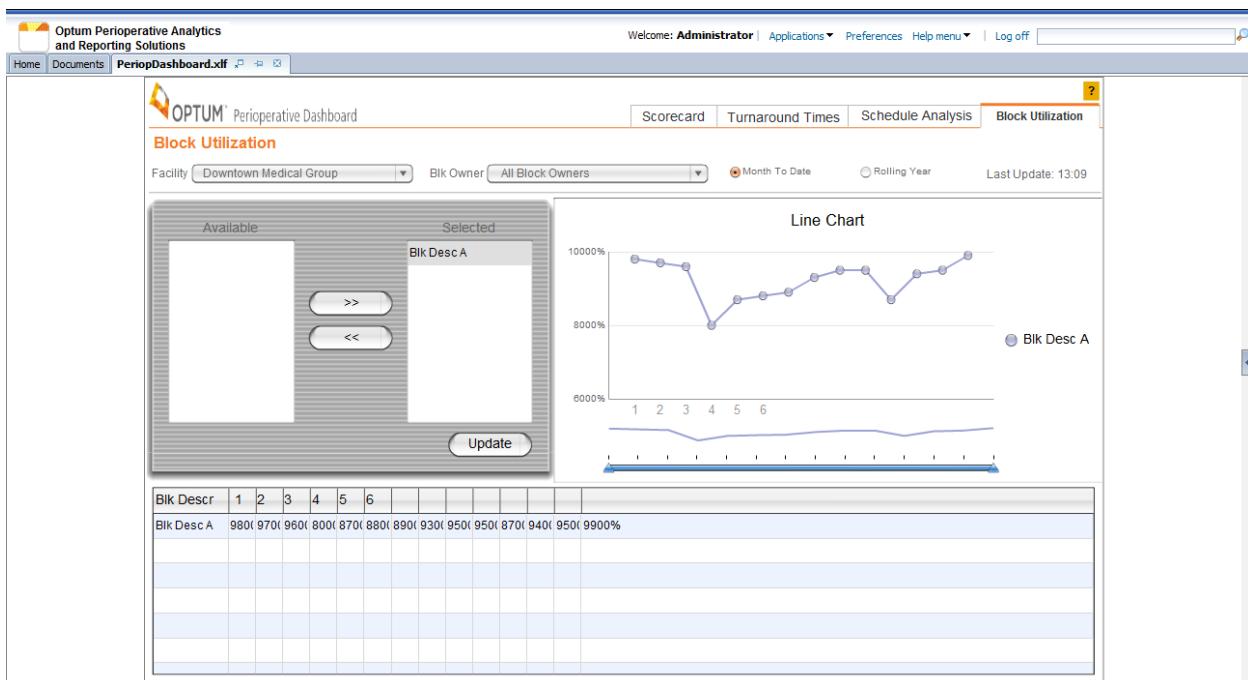
The following existing indicators are included in this release:

- Current Case Delays
- Delay Reasons
- Room Turnaround Times
- Room & Procedure Turnaround
- Room Turnaround by Case
- Cancellation Reasons
- Caseload
- Expected Room Shutdown
- Forecast Room Utilization





Enhancements Carried Forward from 8.6



5.6.2. Analytics Control Portal

The Analytics Control Portal, formerly known as Quality Reporting Portal (QRP), had a name change in order to reflect its ability to encompass more tools. ACP will include AQI and the Dashboard Mapping Tool. Quality Measures from QRP will no longer be available.



Optum Analytics Control Portal

Silver 37

Dashboard Mapping Tool picis Log out

General

- Excluded Rooms
- Excluded Procedures
- Cancellation Reason Source**
- Delay Reason Source
- Cancellation Reason Selections
- Delay Reason Selections
- Max Acceptable Minutes Before Case is in Delay
- Time Patient in the Room
- Time Patient Out of Room
- Time Threshold for Add-on Cases
- Include Weekends
- Pre-op Treatment Area Mnemonic
- Circulating Nurse Name
- Clinical Role User-Defined Field
- Clinical Role Mnemonic for Circulating Nurse
- Clinical Role Mnemonic for CRNA
- Caseload Patient Type User-Defined Field
- Time Actual Procedure Start User Defined Field Mnemonic
- Time Actual Procedure End User Defined Field Mnemonic
- Include set-up/tear-down times
- Turnaround Outlier

Average Processing Times

% First Case Late Starts

Operating Room Utilization

% Delayed Cases

Average Delay Length

Current Case Delays

Forecast Room Utilization

Source

Cancellation reason (pl_cancel_reason)

Save