PARTNERS®
H E A L T H C A R E

FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL
AND MASSACHUSETTS GENERAL HOSPITAL

OBIX Site Training

Reference Guide

MGH

July 10th, 2018

Introduction

- Purpose
  - Provide resources to aid Site Biomed in addressing OBIX related issues

- How to use this Guide
  - If you encounter a problem in production, this guide can give you basic instructions on how to resolve the issue, or where to find more resources
  - If you need more details, the official documentation is listed in the contents *in italics*
  - All additional information can be found in the OBIX Training folder in the BMDI SharePoint

Contents

Additional Information can be found in the Documents listed in italics

| Issue	Additional Information/sections	Page #
"I'm not seeing my patient's trace on OBIX surveillance"	• Data Flow Diagrams • In-room setup	5-9
"I'm seeing the trace in OBIX, but I'm not seeing vital signs in Epic, or notes in OBIX"	• Checking Ensemble	10-13
"The workstation isn't showing surveillance/patient manager"		14
"I'm having trouble during an Epic Downtime"	• *HIS Downtime Tips* -> All	15
"I'm having trouble admitting Triplets"		16-17
"I admitted my patient in Epic, but can't see them in OBIX"		18
"I Can't Find My Patient"	• *OBIX User Manual* -> Searching for Patients • *Merge Message Tip Sheet*	19
"Someone Manually entered a patient in OBIX incorrectly"		20

Partners *e*Care

Contents (Cont)

Issue	Additional Information/sections	Page #
"My patient name in OBIX doesn't match Epic"	Incorrectly manually entered or transferred patient	22
"How do I set up the Fly Cart?"	*Fly Cart tip sheet (three – consolidate?)*	23-28
"How do I sync NTP during Daylight Savings?"		29
"OBIX Patient Manager, Central Surveillance, and Bedside surveillance all failed at the same time!"	FMDM Failover Document	30
"How do I give a new User Access?"	*OBIX Manual ->Administrative Tasks*	31
"I've done everything I can, how do I open a ticket to BMDI?"		32

Partners *e*Care

PARTNERS®
HEALTHCARE

"I'm not seeing my patient's trace on OBIX surveillance"

- If the nurse isn't seeing their Electronic Fetal Monitor trace for only one patient's bed on the OBIX bedside or central, but all other beds are working, there must be a broken connection somewhere between the Fetal monitor and the surveillance screen.

- The following diagrams show the normal flow of data so you can determine where there is a break

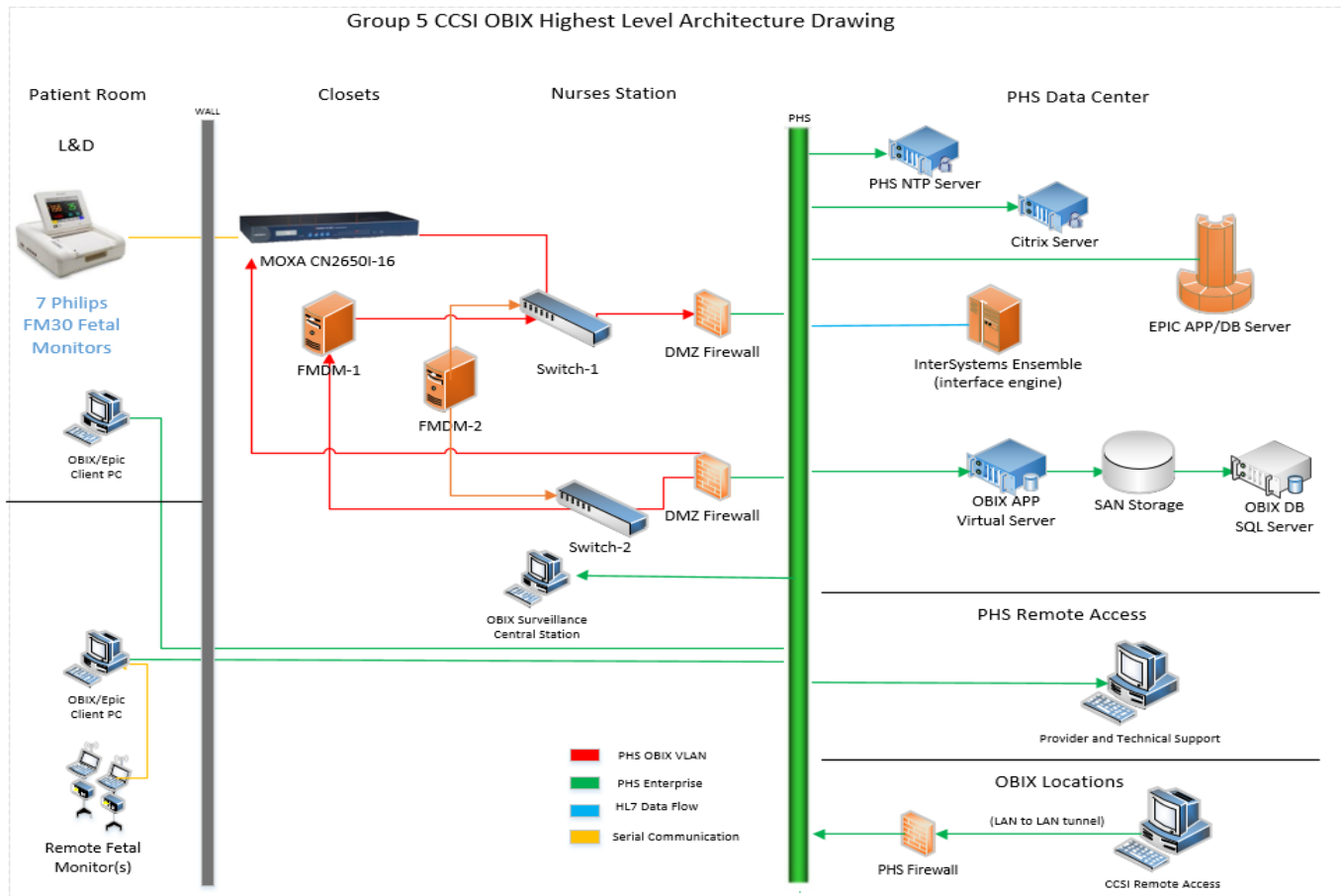# "I'm not seeing my patient's trace on OBIX surveillance"
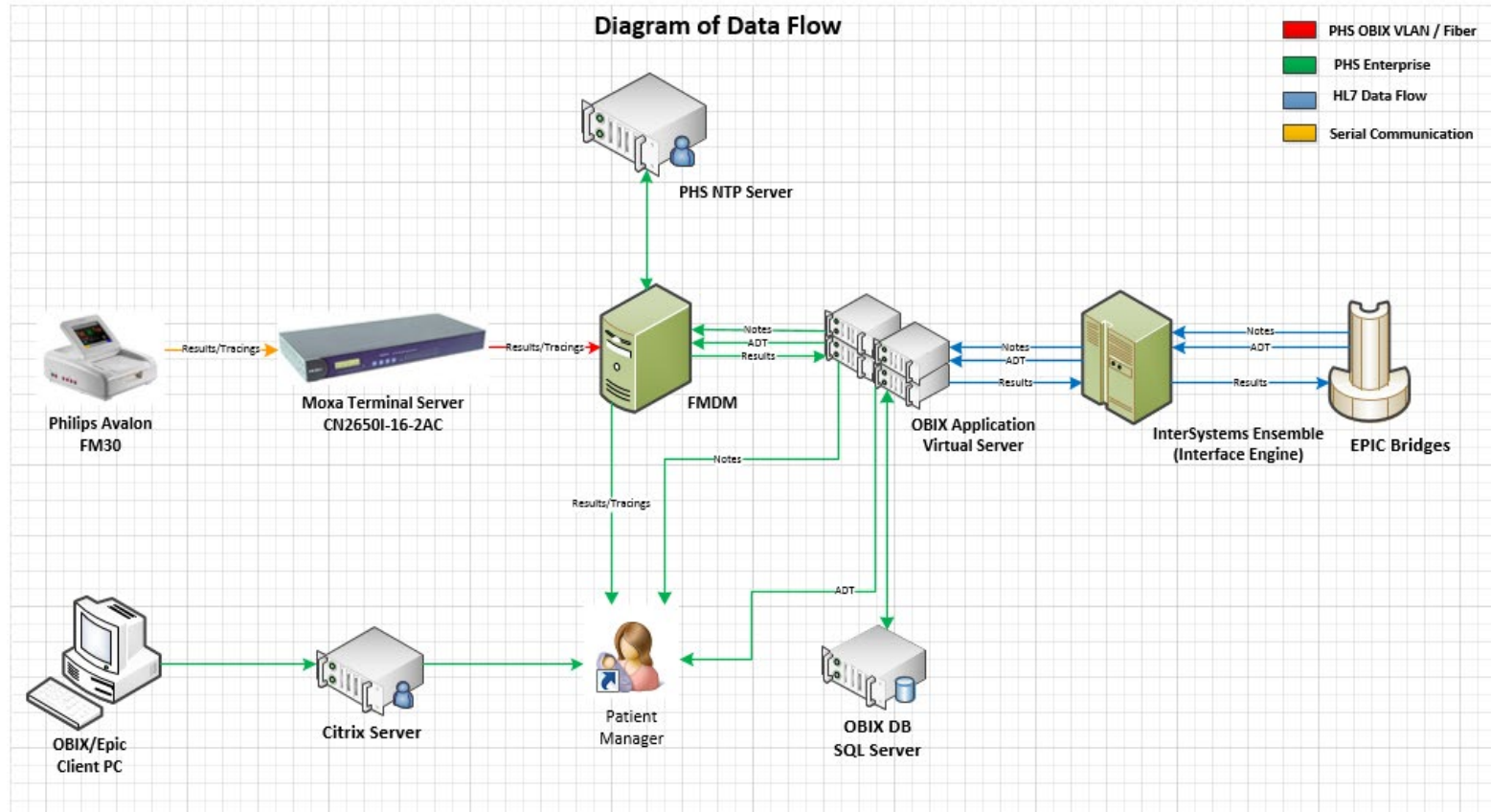
Data Flow Diagrams

- This diagram shows the data flow, from left to right
- The EFM, MOXA, and FMDM are on site
- The Application Server and SQL Server are in the datacenter

Partners *e*Care

"I'm not seeing my patient's trace on OBIX surveillance"
Data Flow Diagrams

Group 5 CCSI OBIX Highest Level Architecture Drawing

- All of the connections to the left of the Green bar are onsite
- If OBIX isn't working, site biomed can check these first

"I'm not seeing my patient's trace on OBIX surveillance"

In-room checks

- First, let's make sure you're ready to test
  - ❑ Is the desktop restarted and connected to the network?
  - ❑ Is the Surveillance screen (top screen) selecting the bed you're working on?
    - ❑ If surveillance isn't showing at all, go to "The workstation isn't showing surveillance/patient manager"
  - ❑ Can you see the correct patient on OBIX surveillance? Are they in the same bed in Epic?

- Next, let's make sure data can get to OBIX
  - ❑ Did you restart the EFM?
  - ❑ Is the green ethernet jack plugged into the EFM and the correct biomed jack?
    - ❑ If you are using a Corometrics with a powered wall adapter: Is the white dot pointing towards the wall?
  - ❑ Is the Toco connected? Are you tapping on it?
  - ❑ Are any of the cables frayed or crushed?

- If you aren't sure what the cabling should look like, you can always look at a bed that is working correctly for reference

"I'm not seeing my patient's trace on OBIX surveillance"

In-room checks

- If everything in the room is set up correctly, but you still aren't seeing anything in OBIX surveillance:
  - ❑ Take note of the Biomed jack the EFM is plugged into
  - ❑ Go to the network closet and make sure that that jack leads to the correct MOXA port
    - ❑ If it's not labeled on the MOXA, you may need to check the site Workbook
  - ❑ Are the MOXA and FMDM powered on?
  - ❑ If everything is configured correctly at the site, but traces still aren't visible, open an Incident ticket to Biomedical Device Integration – pec ("I've done everything I can, how do I open a ticket to BMDI?")

"I'm seeing the trace in OBIX, but I'm not seeing vital signs in Epic, or notes in OBIX"
Checking Ensemble

- Do you see the correct patient in Epic? Do you see the same patient, in the correct OBIX bed? Do they show up on OBIX surveillance?
  - If there is an issue, see "My patient name in OBIX doesn't match Epic"

- If Traces are showing up, but vital sign data isn't, we know that the EFM is plugged in to the MOXA correctly

- If the patients are correct, we need to see if there is a problem at the FMDM/App server, or on the Epic side

- We're going to look in Ensemble, the point that connects the OBIX infrastructure and the Epic infrastructure

"I'm seeing the trace in OBIX, but I'm not seeing vital signs in Epic, or notes in OBIX"
Checking Ensemble

- If you don't see site data in Ensemble, most likely the issue is on the site side
- If you see data in Ensemble, but not to Epic, BMDI will field the ticket.
- You can access ensemble here:
  - http://ensutils.partners.org/MDEV/Recipients.aspx

"I'm seeing the trace in OBIX, but I'm not seeing vital signs in Epic, or notes in OBIX"
Checking Ensemble

For Production issues, select "Prod"

Here is where you will select which data you'd like to see. For OBIX, select '1438_OBIX_ORU_HL7_IN'

"I'm seeing the trace in OBIX, but I'm not seeing vital signs in Epic, or notes in OBIX"
Checking Ensemble

Ensemble Utilities

| PeC-OUT | PeC-IN | PeC-MDEV | Tools | Links |

MDEV Message View Page

Environment: PROD ▾
Application: ALL ▾
Service: 1438_OBIX_ORU_HL7_IN ▾
Event Type: ALL ▾
Recipient: ALL ▾
Status: ALL ▾

Start Date: 4/20/2018   End Date: 4/20/2018
Start Time: 00 ▾ : 00 ▾ : 00 ▾   End Time: 23 ▾ : 59 ▾ : 59 ▾

Filter String: [_____]   [Filter/Reload]

If you have the patient's Name or MRN, you can enter it here. You can also enter your site name (BWH, MGH, NWH, NSM, MVH, NCH, or CDH)

Recipient Messages

Inbound Message ID	Application Service EventType	Recipient	Date/Time Received Date/Time Sent	Pat_Name (PID-5) Pat_Id_List (PID-3) Device	Recipient_Message_Status
6245325934	OBIX 1438_OBIX_ORU_HL7_in ORU^R01^ORU_R01	541331_Epic_HL7_TCP_out Target Message Target Response	██████ PM ██████ PM	██████ ████BWH ███901^^^^EPIC ██5^^^^MGH BWH_CWN5LD^L04^L04-1	*Sent*

"The workstation isn't showing surveillance/patient manager"

- The workstation should automatically open OBIX Bedside Surveillance on the top screen when it is powered on

- There should be and OBIX Patient Manager icon either in the start menu or on the desktop, for when there is an Epic downtime and end users cannot use the Launch EFM button

- If there are problems with these, Open an INC to site techs to rebuild the workstation

"I'm having trouble during an Epic Downtime"

- In the Event of an Epic downtime, either planned or unplanned, OBIX can continue to monitor patients

- Patients will not be linked in Epic and OBIX, so if a patient is moved physically from one room to another, they need to be manually moved in OBIX (ADT -> Transfer)

- If you can't find your patient or new patient is admitted during the downtime, they need to be manually admitted in OBIX
  - To manually admit a Patient, click Patients->Search->New
  - Be sure to enter the exact First Name, Last Name, DOB, and MRN that you see in Epic.
  - At the end of the downtime, for each manually entered patient you need to click Patients-> Match to HIS so they will be automatically transferred or discharged, if you do those actions in Epic

- Additional OBIX Downtime tips and details can be found in the *'HIS Downtime Tips'* document

"I'm having trouble admitting triplets"

- A single fetal monitor can only measure and send data to OBIX for two fetuses and one mother. In the case of triplets, a second fetal monitor is required to measure and send the fetal tracings data of the third fetus to OBIX.

- You can only monitor triplets in beds that have been designed for triplets. Speak to your unit manager to determine this bed.

- The second fetal monitor must be plugged into the wall jack and turned on. To record data for the mother and all three fetuses in OBIX, you must admit the mother into Epic like normal and also create a "Temporary" Patient Record in OBIX for the third fetus. After the mother is discharged, the clinician will select Patients-> Match To HIS to match this temporary record with the mother's record.

- You can create this "Temporary" Patient Record in the case of triplets after the Epic launch EFM button has been pressed and Patient Manager is open.

"I'm having trouble admitting triplets"

- You must create a triplet record in OBIX. This requires the creation of a "temporary" patient name
  - Patients-> New. Name should be mother's last name (first name optional – depends on your site procedure) and fetus C as first or middle name
  - ADT->Assign Bed-> Triplet bed (usually L01 – 1**T)**
  - In Bedside surveillance, show beds L01-1 and L01-1T

- When the mother is discharged from the hospital (out of Epic and OBIX), the clinician can merge the triplet record with the mother's record by selecting Patients-> Match To HIS and searching for/selecting the mother.

"I admitted my patient in Epic, but can't see them in OBIX"

- There might be multiple patients in OBIX that match the Epic patient's Identifiers, like name, DOB, and MRN. Maybe this patient has been manually admitted before, or had a name change.

- If your patient is in the correct bed in Epic but not in OBIX, Search OBIX (Patients –> Search) for the first three letters of the patients first and last name as they appear in Epic. Find the patient in OBIX that matches Name, DOB, and MRN.

- Put the correct patient in the correct bed, the same bed you admitted the Epic patient to (ADT-> Assign Bed)

- Select Patients->Match to HIS. Search and select the correct version of the patient in OBIX. They will have a matching Name, DOB, and site MRN.

- When you click ok, go to Patients-> In Unit to check if they are matched. If they are not, transfer the patient out and then back to the correct bed to trigger an update and then select correct Account number and CSN for the OBIX patient to match them to Epic (Patients-> Account Number).

"I Can't Find My Patient"

- You can search for a patient in OBIX by selecting Patients-> search.

  - Type in the first three letters of the first and last name, if typing in the full name does not produce results

- It is possible that you will have two different versions of a patient in OBIX – one for one facility, and one for another

  - When you see two versions of a patient in search, always pick the patient that matches the information for the facility where you are located

- If you find a patient with an incorrect name, but all other info is correct, check Epic to make sure the name you are seeing was correct at one point.

  - If you admit that patient, you can match to HIS (Patients->Match to HIS)and OBIX will update that patient's name with the information from Epic

  - If you don't see a patient matching your search terms, and you've confirmed they're correct, you will have to manually admit your patient

- To manually admit a Patient, click Patients->Search->New

  - Be sure to enter the exact First Name, Last Name, DOB, and MRN that you see in Epic.

"Someone manually entered a patient in OBIX Incorrectly"

- If someone enters a name or DOB incorrectly, the patient will not auto-match with Epic and vitals will not get to the flowsheet

- Put the correct patient in the correct bed, the same bed you admitted the Epic patient to (ADT-> Assign Bed)

- Select Patients->Match to HIS.

- Search and select the correct version of the patient in OBIX. They will have a matching Name, DOB, and site MRN.

- When you click ok, go to Patients-> In Unit to check if they are matched. If they are not, drag and drop the patient out of that bed in the Epic L&D map, wait one minute, and then move them back to the correct bed to trigger an update. Then select the correct Account number and CSN for the OBIX patient to match them to Epic (Patients-> Account Number, Patients -> Match to HIS).

"Someone manually entered a patient in OBIX Incorrectly"

- Note: If someone has manually entered a patient with incorrect information into OBIX or the patient was merged in Epic, there is conflicting information in OBIX, multiple patients with the correct name but different MRNs, or vice versa
  - You can check to see if the patient was merged in Epic by looking for Aliases under the Demographics section in Epic

- This means that, even if you match the patient to HIS, the communication between the two will not work for Vitals or Notes

- The only way to fix this is by sending a Merge message, but Partners does not support sending Merge messages because of how they are communicated between OBIX 7.1 and Epic

- Only manually enter patients in OBIX when it is necessary

- If you have a merged patient, manually admit, transfer, and discharge them in OBIX

"My Patient Name in OBIX Doesn't match Epic"

- If a patient is manually admitted or there is a network miscommunication, a patient in Epic might be moved, but they might stay in the same OBIX Bed.

- If Patient A is in Epic Bed 1 and physically in Bed 1, but Patient B is in OBIX Bed 1, Patient A's Tracing data will flow into Patient B's OBIX Record. If this occurs, there is no way to get A's tracing on the correct record. The clinician should make a note in both charts that Patient A's trace can be found in Patient B's record, as well as the start and end times. Save the paper strip for this period.

- If Patient C is moved to Bed 2, but Patient D is already there in OBIX because they were manually admitted, Patient C will go to the Assessment list. If the clinician doesn't notice, the above scenario could occur.

- In either scenario, you will need to make sure the patients are correctly matched in Epic and OBIX, and are then moved to their correct locations

- Update the locations and account numbers of bedded patients in OBIX first, then do the same for patients in the assessment list. Make sure all patients are matched correctly.

"How do I set up the Fly Cart?"

- Prerequisites:
  - Make sure in-room IS Jack is active!
  - Confirm fly cart is set up correctly (correct workstation build, fetal monitor is connected properly, etc)
  - Connect patient to the fetal monitor and turn on all devices

- Click on the Windows icon in the bottom left corner of the screen, then click on Patient Manager to launch OBIX

- Log into OBIX

- There are 3 possible ways to find your patient:
  - Assessment list – if your patient was admitted to the L&D and then transferred to another unit (see slide 25 for next steps)
  - Search – if your patient was not transferred from the L&D (see slide 25 for next steps)
  - Manual admit – if you can't find your patient on the Assessment list or through the Search function (Slide 26)

"How do I set up the Fly Cart?"

Finding your patient in the Assessment List
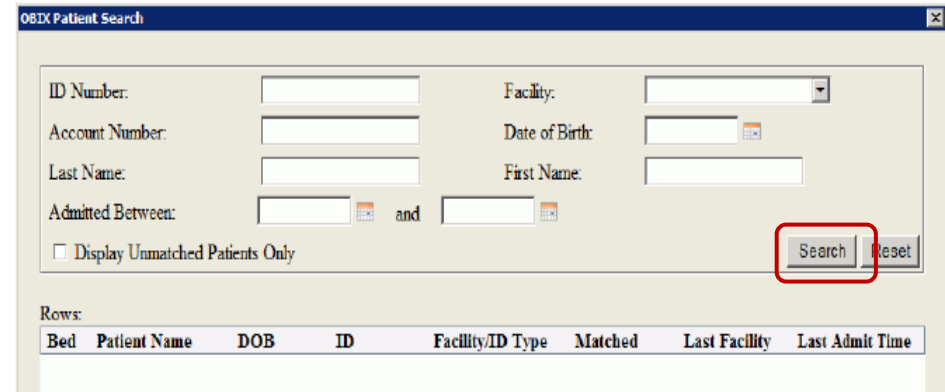
- Click **Patients**

- Click **Assessment**

- Click on their name to highlight, click **Select**

- Assign the patient to a bed (see slide … for next steps)
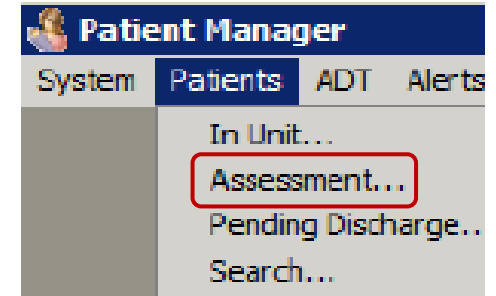
"How do I set up the Fly Cart?"

Finding your patient with the Search function

- Click **Patients**

- Click **Search**

- Enter, at the very least, 3 letters of last and first name, limit search criteria to as little information as possible.

- Click **Search**

- A list of patients that match your search criteria appears.

- To select a patient click anywhere in the patient's row to place them in focus, then click **Select**

- Assign the patient to a bed (see slide 27 for next steps)

- If you can't find the patient, go onto the next slide to manually admit them. If you can, skip the next slide.
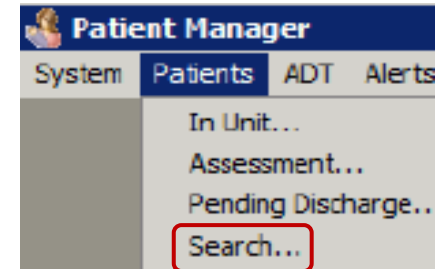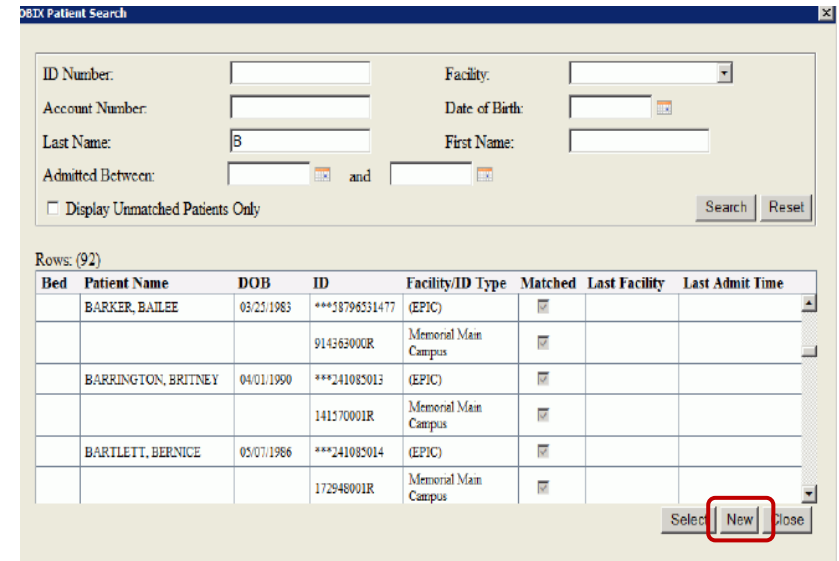
"How do I set up the Fly Cart?"

Manually admitting your patient

- If you can't find the correct patient, use this process

- From the patient search window (as seen in slide 25), click **New**

- After you have clicked **New,** the **OBIX Patient Registration window opens.**

- Type the patient's Last Name, First Name, Middle name, site MRN, and Date of Birth.

- Click **OK** when data entry is done

- If you have entered a patient that is known to the OBIX system , you will get a pop-up message.

- Click **OK** if this is the correct patient, if not click **Cancel**

- Assign the patient to a bed (see slide 27 for next steps)

"How do I set up the Fly Cart?"

Assigning your patient to a bed

- After a patient is registered and in focus, click **ADT> Assign Bed**

- The Assign Bed screen opens

- If necessary, select the appropriate account number for this encounter from the Account Numbers list

- Scroll through the list and assign the patient to the bed labeled "Fly Cart"
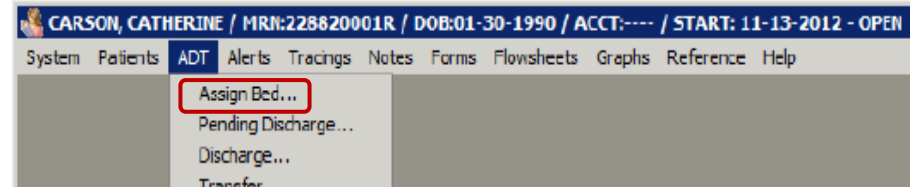
"How do I set up the Fly Cart?"

- After admitting your patient into a bed, confirm your patient is tracing by clicking on Tracing -> Display

- If there is no tracing, then try the following troubleshooting steps:

  - Unplug USB cable between the fetal monitor and workstation and plug it back in

  - Reboot the workstation

- If these steps don't work, you may have to reconfigure the USB to Serial Cable

  - Log out of the workstation and log in as yourself. Search for the device manager in the start menu and open it. Open "Ports (COM and LPT)". Right click on "Prolific USM-to-Serial Com PORT (COMX)" where X is a number. Select Properties. Select the Port Settings tab and click advanced. Click on "COM Port Number" and select COM4. Restart the workstation.

  - The instructions for setting up the Fly cart were designed by Arian Dhimogjini and site techs have access to it. Defer to this document with any other fly cart issues.

- Once tracing is complete, then discharge your patient in OBIX (Patients-> Discharge) or, if they are not being discharged in Epic, move them to the Assessment list

"How do I sync NTP during Daylight Savings?"

- During Daylight savings, you may see a "Display Updating" error pop up on surveillance screens.

- You can re-sync the EFM time with the FMDM by turning off the EFM for 1 minute, and then turning it back on.

- If all the monitors on the floor display this and restarting them is not working or not feasible, open a P1 to BMDI. We will reset them all at the same time by restarting the FMDM's MDI service.

"OBIX Patient Manager, Central Surveillance, and Bedside surveillance all failed at the same time!"

- In OBIX 7.1, if the FMDM has a critical failure, you will see Patient Manager, Central Surveillance, and Bedside Surveillance all go blank simultaneously.

- Each site will have identified resources trained to move the Hard Drives from the Primary (P1) FMDM to the Secondary (P2) FMDM, if they are onsite. For MGH, site biomed will complete this step, if necessary.

- If no resource is onsite or able to move the Hard Drives, OBIX will rebuild production on the P2 FMDM manually

- Please refer to the OBIX FMDM Failover Process Training instructions in the OBIX Training section of the BMDI SharePoint folder

"How do I give a new user access?"

- Prerequisite:
  - The person giving access must be a keygiver

- Site Key giver is responsible for adding new user to the PAS (Partners Authorization System) group

- Once a user is in the correct site PAS group, they can be given access in OBIX

- In OBIX Patient Manager, the new user's manager will select System -> Administrative -> User Management

- Make sure "Inactive" is checked off in the page and select Sync Users. The button will gray out until the sync is complete (will take a few minutes)
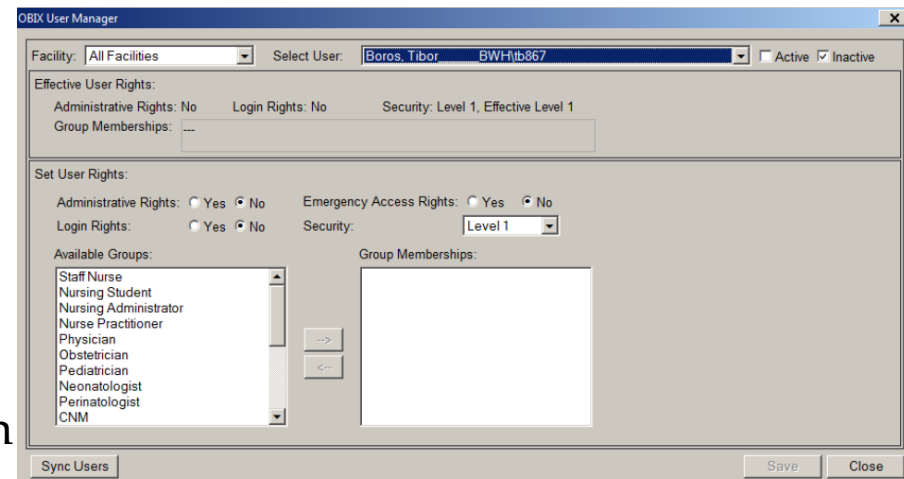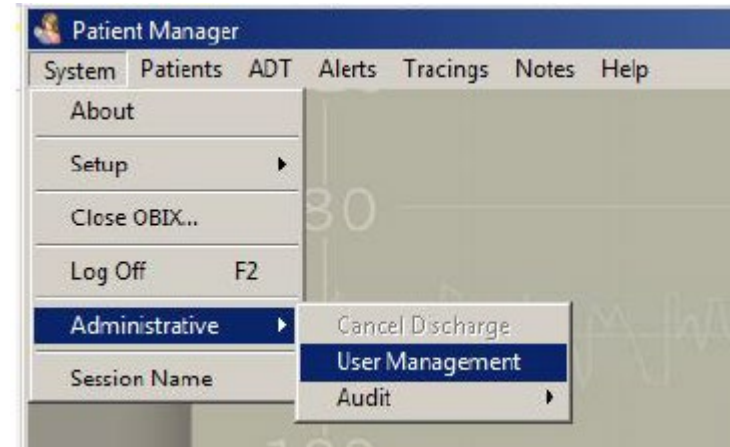
"How do I give a new user access?"

- When sync is complete, choose your facility and select the user you would like to activate. Set the user rights according to the following guidelines:
  - Unit Coordinator – Level 4
  - Care Provider – Level 4
  - Staff Nurse – Level 5
  - Super Users/Nurse Mangers – Level 9
  - Biomed Engineer – Level 9
  - Biomed Tech – Level 5
  - HIM – Level 4
  - Administrative rights – Allows users to set security levels and roles, and maintain group lists
  - Emergency Access rights – Allows users to access patients at different hospitals. Care providers and all nurses should have emergency access rights.
  - Group Memberships – choose a group for the user
  - Log in Rights – all users will need log in rights
  - Please see OBIX Manual for a detailed description of the Security Levels (Chapter 9 pgs 9-6 and 9-7)

- Click "Save" and the user will be saved as active

Partners *e*Care

PARTNERS®
HEALTHCARE

"I've done everything I can, how do I open a ticket to BMDI?"

- If you've done all you can and determined there is no issue with anything at the site, open up ServiceNow to reach out to PeC BMDI.

Scroll down on left to "Service Desk" then click on "Incidents"
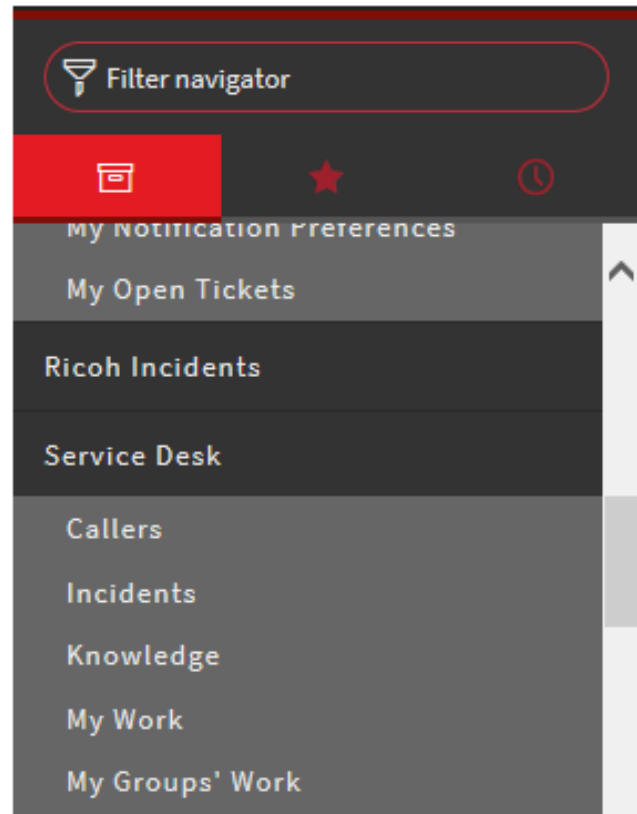
"I've done everything I can, how do I open a ticket to BMDI?"

Click on the "NEW" blue button

"I've done everything I can, how do I open a ticket to BMDI?"

Category must be set to "Partners eCare"

Subcategory must be set to "Technology"

This is in order to find your configuration item.

"I've done everything I can, how do I open a ticket to BMDI?"

In Description:

•Enter a description of the issue. Include DEV record name, Biomedical device control number if applicable, location, time of issue, connectivity solution, etc.

•PHI Encrypted Field: Include any patient identification information such as MRN, Date of Birth, etc. in this field if necessary

•Watch List

  •Watch List users get an email every time any new work notes are added to the incident ticket

Site	Assignment group	Configuration item
PeC BMDI	biomedical device integration - pec	Biomedical Device Integration - pec
MGH	Biomed support mgh - pec	Biomedical Device Integration - pec