Clinical Scenario #2: Operating Room to Intensive Care Unit

Part 3: Analysis of Current State Workflow

Working Draft Version 3.1

Quantum Medical Device Interoperability (QMDI) Project

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and

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Contents

Description	
Clinical Workflow Analysis	4
Zachman Framework	4
Data Model Detail	
OR to ICU As Is Workflow	
Estimated Time of Arrival in ICU	
getPhysData(patientID, vitals)	
manualProcess: Nurse Assigns ICU bed Location	
End Transfer	
Post Patient ICU Set-up	
X-ray Procedure	
X-ray Vent Procedure	12
getISData(patientID, history)	
manualProcess: Clinical Examination	
manualProcess: Complete Communications Sheet	27
manualProcess: Ensure Lines and Cables are Prope	
manualProcess: Hand-off Communications	
manualProcess: Patient in Transport	35
manualProcess: Post Patient ICU Set-up	
manualProcess: Pre-Patient ICU Set up	46
manualProcess: Transfer patient to ICU	
manualProcess: Untangle lines and cables	
setISData(patientID, transfer, time, fromLocation, to	
setObservationData(ABG)	
setObservationData(IVLines)	
setObservationData(disposables)	
setOrders(patientID)	
setOrders(patientID, bloodRequest, dripRequest)	
setOrders(patientID, deviceRequest)	
Begin General Care	
ICU Staff	
Patient in ICU	
Patient in OR	
Arterial Lines Connected	
Blood Products	
Central Venous Lines Connected	
Connected Disposable	
DNR Status	
Drugs	
Family Contact or Representative	
Identify Diet Restrictions	
InformationItem1	01

Infusion Pump	91
Meds/Drips	91
Monitor	91
On Ventilator	92
Other Device	92
PIC	92
Past Hospitalization	
Patient Consent Forms	93
Patient Identification Information	93
Previous Medical History	94
Provider	
Pulmonary Artery Lines Connected	
Ventilator	
Vitals	
X-ray Needed	96
getlSData(patientID); getOrders(patientID)	
A. OR to Pre-Patient Setup Sequence Diagram	
B. Transport to ICU Post-Patient Setup Sequence Diagram	
=	

Clinical Workflow Analysis

- Diagram Boxes in Green signal a Manual Clinical Process (i.e. a nurse hangs an IV bag)
- Diagram Boxes in Red signal that a Comparison between two data points is required (compare dose on pump with dose in Order)
- A ∞ at the bottom of a workflow block signals that there is an additional page of workflow.

Zachman Framework

1. Scope

- a. What: Patient transfer/handoff data, essential patient information, Care orders, medication orders, timing, patient, medical device data, medical devices, patient history, type of procedure, complications in OR, family contact information, care plans
- b. How: Delivery of care orders, compile device checklist, assure checklist is completed, verbal communication, nurse-to-nurse/nurse-to-physician/physician-to-physician handoffs
- c. Where: Locations within Hospital (i.e. OR to ICU), Military transport
- d. Who: Patient, physician, nurse, respiratory technicians, therapists, family, pharmacist, auxiliary staff (i.e. orderly), materials management, OR staff, ICU staff, PACU staff, intensivist, anesthesiologist, surgeon, BMET's, IT, CE's, hospital management
- e. When: post-surgery, patient status change
- f. Why: Surgery completed, patient's status changes, change in therapy, change in care

2. Conceptual

- a. What:
 - i. ICU Nurse
 - 1. Care plan, previous assessments/patient status, orders, last 20 minutes of activity in OR, allergy list, medications list, time of arrival, device list, complications, labs, family contact info, EKG
 - ii. Respiratory Tech
 - 1. Vent orders
 - iii. Pharmacist
 - 1. Medication orders, allergy list
 - iv. Auxiliary staff
 - 1. Time of patient transfer
 - v. Materials Management
 - 1. Device list, disposables list
 - vi. OR staff
 - 1. Patient status, patient assessments, medications list, care plan, family contact info,
 - vii. Intensivist
 - 1. Type of operation, previous assessments/patient status, orders, last 20 minutes of activity in OR, medications list, complications, labs,
 - viii. Anesthesiologist
 - 1. Patient status, allergy list, medications list, complications, type of operation, type of anesthesia, EKG
 - ix. Surgeon

- 1. Patient status, medications list, potential complications, labs, type of operation,
- x. BMET's
 - 1. Device list
- xi. CE's
- xii. IT
- xiii. Hospital management
- b. How
 - i. Communications sheet (sent from anesthesiologist to ICU)
 - Patient status, vent settings, IV assessment, diagnosis, type of operation, medications, anesthesia, allergies, patient ID, DNR status, vitals, complications, concerns/risk
 - ii. Verbal communication (between anesthesiologist and ICU/OR staff and ICU)
 - Information/observations during moving of the patient, complications, concerns/risk
- c. Where
 - i. ICU nurse receives all information in the ICU. Handoff conversations occur in the ICU.
 - ii. Pharmacist receives medication orders in pharmacy
 - iii. OR staff performs patient assessments in OR
 - iv. Intensivist has conversation with anesthesiologist in ICU
 - v. Anesthesiologist fills out communications sheet in OR. Conversation with intensivist and ICU nurse occurs in ICU.
 - vi. Surgeon fills out post-op orders in OR
- d. When
 - i. ICU nurse receives post-op orders and 20 minutes of OR activity prior to patient arrival. All handoff information is received at patient arrival. Device settings are transferred at patient arrival. Patient care plan is written after handoff.
 - ii. Respiratory Tech transfers vent settings at patient arrival.
 - iii. Pharmacist receives medication orders after the surgeon places them.
 - iv. Auxiliary staff is notified of patient transfer towards end of surgery.
 - v. Materials management receives device/disposables orders when they are entered.
 - vi. OR staff performs patient assessments post-op.
 - vii. Intensivist has handoff conversation with anesthesiologist at patient arrival in ICU.
 - viii. Anesthesiologist fills out communications sheet at end of surgery. Handoff conversation occurs at patient arrival.
 - ix. Surgeon fills out orders after surgery is complete.
- e. Why
 - ICU nurse needs post-op orders to prepare the ICU to receive the patient. Last 20
 minutes of OR activity is necessary to understand patient status and any significant
 events that occurred in OR.
 - ii. Pharmacist receives medication orders prior to patient arrival so medications are prepared and ready for administration.
 - iii. OR staff performs patient assessments to help ICU prepare for patient.
 - iv. Intensivist communicates with the anesthesiologist to understand the patient
 - v. Anesthesiologist uses the communications sheet to summarize the case and prepare for the transfer.

3. Logical

- a. What
 - i. ICU Nurse
 - 1. Type of operation, type of anesthesia, IV fluids, urine output, patient status and assessments, post-op orders, care plan, labs, complications, significant events in OR, drains, device list, medication list, allergies, family contact, code status, last 20 minutes of activity in OR, ETA of patient, EKG
 - ii. Respiratory Tech
 - 1. Vent mode, tidal volume, inspiration time, frequency, O₂ concentration, inspiration pressure, pressure support, pressure rise time, other settings applicable to the mode
 - iii. Pharmacist
 - 1. Medications, dosing, allergies, drug interactions, ETA of patient
 - iv. Auxiliary Staff
 - 1. Time of transport, location (to/from)
 - v. Materials Management
 - Device list, disposables list, time/frequency of disposables replacement, ETA of patient
 - vi. OR Staff
 - 1. Patient assessments (IV/disposables), patient status, medications list, dosing, allergies, ABG, labs
 - vii. Intensivist
 - Type of operation, type of anesthesia, complications, significant events in OR, post-op orders, patient status and assessments, medications, last 20 minutes of activity in OR, drains, EKG
 - viii. Anesthesiologist
 - 1. Patient status, type of operation, type of anesthesia, IV fluids, medications, allergies, complications, fluid output, blood loss, vent mode, vent settings, code status, EKG, significant events
 - ix. Surgeon
 - 1. Patient status, medications list, potential complications, labs, type of operation,
 - x. BMET's
 - 1. Device list, device locations, device status
 - xi. CE's
 - xii. IT
 - xiii. Hospital Management
- b. How
 - i. Communications sheet (sent from anesthesiologist to ICU)
 - 1. Physician, allergies, type of operation, code status, family contact, patient assessment (IV/disposables), labs, pain score, medication list, drains, concerns/risks, ventilator settings, pre-op condition,
 - ii. Verbal (between anesthesiologist and ICU/OR staff and ICU)
 - 1. Concerns/risk, patient ID, type of operation, significant events during moving of the patient,
- c. Where

- i. ICU nurse receives all information while in the ICU. Information exchange between OR nurse and ICU nurse may occur in OR or ICU. Handoff conversations between nurses and anesthesiologist occur in the ICU.
- ii. Pharmacist receives medication orders and allergy list in pharmacy
- iii. OR staff performs patient assessments in OR. Lab results are reported back to the OR.
- iv. Intensivist receives communications sheet and has conversation with anesthesiologist in ICU.
- v. Anesthesiologist fills out communications sheet in OR. Conversation with intensivist and ICU nurse occurs in ICU.
- vi. Surgeon fills out post-op orders in OR

d. When

- i. ICU nurse receives post-op orders and 20 minutes of OR activity prior to patient arrival. All handoff information is received at patient arrival. Device settings are transferred at patient arrival. Patient care plan is written after handoff. New labs are ordered after handoff. EKG is collected within the hour after transfer.
- ii. Respiratory Tech transfers vent settings at patient arrival.
- iii. Pharmacist receives medication orders after the surgeon places them. Also receives ETA of patient in ICU so medications are sent at the correct time.
- iv. Auxiliary staff is notified of patient transfer towards end of surgery.
- v. Materials management receives device/disposables orders when they are entered. Also receives ETA of patient in ICU so disposables are received at the correct time.
- vi. OR staff performs patient assessments post-op. Labs are ordered upon request.
- vii. Intensivist has handoff conversation with anesthesiologist and receives communications sheet at patient arrival in ICU.
- viii. Anesthesiologist fills out communications sheet at end of surgery. Handoff conversation occurs at patient arrival. 8-12 hours after handoff anesthesiologist checks in with patient.
- ix. Surgeon fills out orders after surgery is complete. 30-60 minutes after handoff, surgeon checks in with patient.

e. Why

- i. ICU nurse needs all the data to prepare for the patient and formulate a care plan. Post-op orders, device list, and medication list are necessary for pre-patient ICU setup. EKG after transfer is a check to make sure patient's heart function is normal.
- ii. Respiratory Tech needs the desired ventilator settings to successfully transfer the patient to the new ventilator in the ICU
- iii. Pharmacist needs to prepare medications for administration and must have them ready at the appropriate time.
- iv. Auxiliary staff needs to be notified of the patient transfer because hey are the people who conduct the physical moving of the patient.
- v. Materials management handles disposables (tubing etc...) so they need to know what the nursing staff needs and when they need it.
- vi. OR staff conducts patient assessments and orders labs in to give the ICU nurses/Intensivist a complete picture of the patient at handoff
- vii. Intensivist receives all data to care for the patient from the communications sheet and from the verbal handoff from the anesthesiologist.

- viii. Anesthesiologist fills out communications sheet to organize information for the handoff. Post-op visit is conducted to check for awareness, complications, signs of stroke, kidney function (labs, urine), and vitals.
- ix. Surgeon fills post-op orders for ICU nurse and intensivist to care for the patient. Checks in with patient after handoff to assure everything is going well.

Data Model Documentation

Data Model Detail

This document provides an overview of the data model. For simpler and more focused reports, simply copy this initial template and turn off the sections not required.

OR to ICU As Is Workflow

Type: Package

Package: OR to ICU Process Model

Detail: Created on 1/5/2006. Last modified on 8/16/2012.

Notes:

OR to ICU Workflows

Created By: Michael on 1/11/2006 Last Modified: 8/17/2012, Version: 1.0

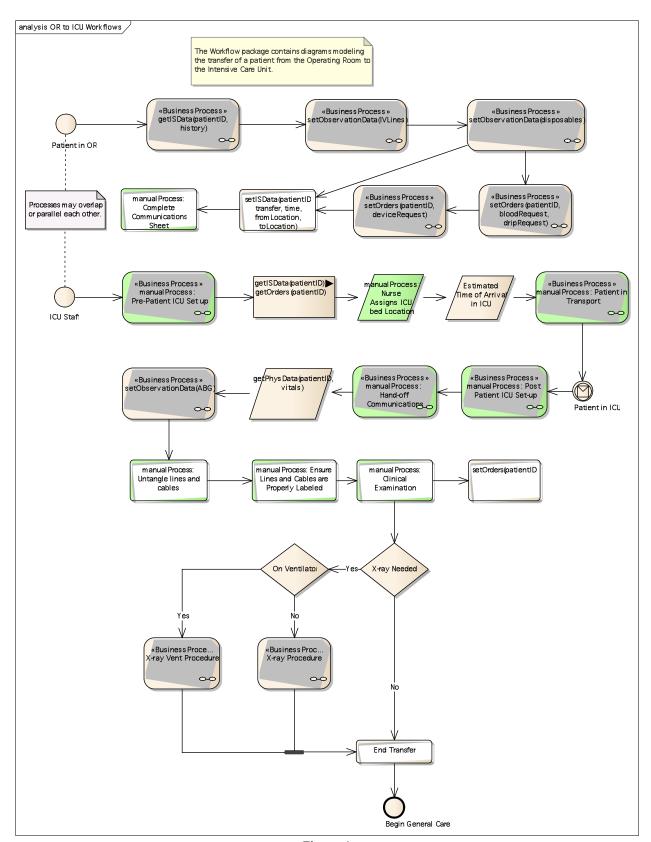


Figure: 1

Estimated Time of Arrival in ICU

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	manualProcess: Nurse Assigns ICU bed Location.	
	Target:	
	Estimated Time of Arrival in ICU.	
	Source:	
	Estimated Time of Arrival in ICU.	
	Target:	
	manualProcess: Patient in Transport.	

getPhysData(patientID, vitals)

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 7/27/2011.

Notes: Document Patient Condition

Connections

Name	Association	Notes
	Source:	
	manualProcess: Hand-off Communications.	
	Target:	
	getPhysData(patientID, vitals).	
	Source:	
	getPhysData(patientID, vitals).	
	Target:	
	setObservationData(ABG).	

manualProcess: Nurse Assigns ICU bed Location

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 8/17/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	getISData(patientID); getOrders(patientID).	
	Target:	
	manualProcess: Nurse Assigns ICU bed Location.	
	Source:	
	manualProcess: Nurse Assigns ICU bed Location.	
	Target:	
	Estimated Time of Arrival in ICU.	

End Transfer

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	<anonymous>.</anonymous>	
	Target:	
	End Transfer.	
	Source:	
	End Transfer.	
	Target:	
	Begin General Care.	
No	Source:	
	X-ray Needed.	
	Target:	
	End Transfer.	

Post Patient ICU Set-up

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Created on 6/2/2011. Last modified on 6/2/2011. Detail:

Notes:

X-ray Procedure

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	X-ray Procedure.	
	Target:	
	<anonymous>.</anonymous>	
No	Source:	
	On Ventilator.	
	Target:	
	X-ray Procedure.	

BPMN 1.1 diagram: X-ray Procedure TO BE ADDED

TO BE ADDED
BPMN X-ray Procedure

X-ray Vent Procedure

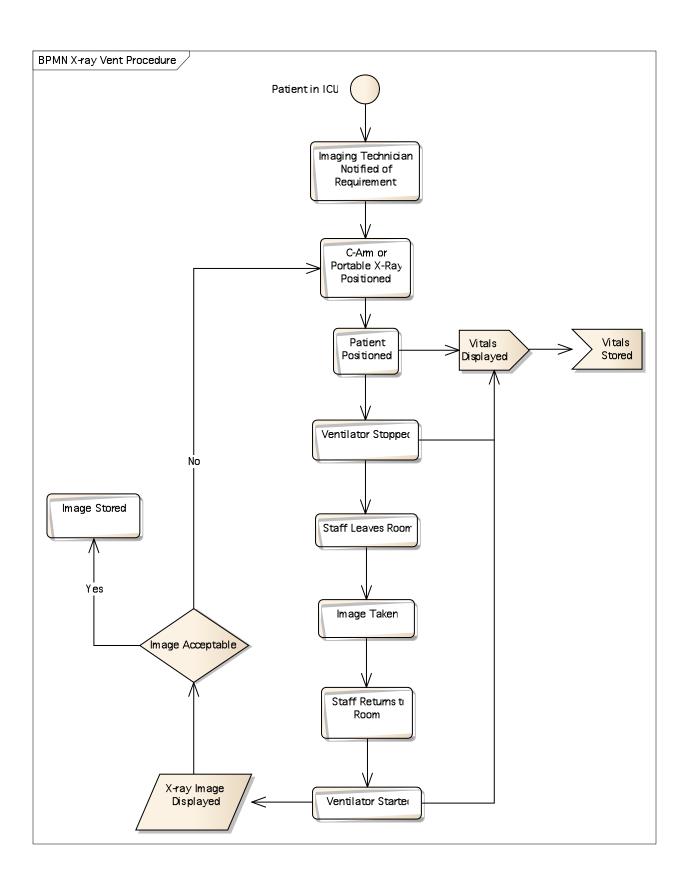
<none>, *Stereotype:* «BusinessProcess», *Package:* OR to ICU As Is Workflow *Created on 6/2/2011.* Last modified on 6/2/2011. Database:

Detail:

Notes:

Name	Association	Notes
	Source:	
	X-ray Vent Procedure.	
	Target:	
	<anonymous>.</anonymous>	
Yes	Source:	
	On Ventilator.	
	Target:	
	X-ray Vent Procedure.	

BPMN 1.1 diagram: X-ray Vent Procedure



C-Arm or Portable X-Ray Positioned

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Imaging Technician Notified of Requirement.	
	Target:	
	C-Arm or Portable X-Ray Positioned.	
	Source:	
	C-Arm or Portable X-Ray Positioned.	
	Target:	
	Patient Positioned.	
No	Source:	
	Image Acceptable.	
	Target:	
	C-Arm or Portable X-Ray Positioned.	

Image Stored

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Connections		
Name	Association	Notes
Yes	Source:	
	Image Acceptable.	
	Target:	
	Image Stored.	

Image Taken

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Staff Leaves Room.	
	Target:	
	Image Taken.	
	Source:	
	Image Taken.	
	Target:	
	Staff Returns to Room.	

Imaging Technician Notified of Requirement

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Patient in ICU.	
	Target:	
	Imaging Technician Notified of Requirement.	
	Source:	
	Imaging Technician Notified of Requirement.	
	Target:	
	C-Arm or Portable X-Ray Positioned.	

Patient Positioned

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	C-Arm or Portable X-Ray Positioned.	
	Target:	
	Patient Positioned.	
	Source:	
	Patient Positioned.	
	Target:	
	Vitals Displayed.	
	Source:	
	Patient Positioned.	
	Target:	
	Ventilator Stopped.	

Staff Leaves Room

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Ventilator Stopped.	
	Target:	
	Staff Leaves Room.	
	Source:	
	Staff Leaves Room.	
	Target:	
	Image Taken.	

Staff Returns to Room

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Name	Association	Notes
	Source:	
	Image Taken.	
	Target:	
	Staff Returns to Room.	
	Source:	
	Staff Returns to Room.	
	Target:	
	Ventilator Started.	

Ventilator Started

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Staff Returns to Room.	
	Target:	
	Ventilator Started.	
	Source:	
	Ventilator Started.	
	Target:	
	X-ray Image Displayed.	
	Source:	
	Ventilator Started.	
	Target:	
	Vitals Displayed.	

Ventilator Stopped

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Patient Positioned.	
	Target:	
	Ventilator Stopped.	
	Source:	
	Ventilator Stopped.	
	Target:	
	Staff Leaves Room.	
	Source:	
	Ventilator Stopped.	
	Target:	
	Vitals Displayed.	!

Image Acceptable

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	X-ray Image Displayed.	
	Target:	
	Image Acceptable.	
No	Source:	
	Image Acceptable.	
	Target:	
	C-Arm or Portable X-Ray Positioned.	
Yes	Source:	
	Image Acceptable.	
	Target:	
	Image Stored.	

X-ray Image Displayed

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Ventilator Started.	
	Target:	
	X-ray Image Displayed.	
	Source:	
	X-ray Image Displayed.	
	Target:	
	Image Acceptable.	

Patient in ICU

Database: <none>, Stereotype: «StartEvent», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Patient in ICU.	
	Target:	
	Imaging Technician Notified of Requirement.	

Vitals Displayed

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Name	Association	Notes
	Source:	

Name	Association	Notes
	Patient Positioned.	
	Target:	
	Vitals Displayed.	
	Source:	
	Vitals Displayed.	
	Target:	
	Vitals Stored.	
	Source:	
	Ventilator Started.	
	Target:	
	Vitals Displayed.	
	Source:	
	Ventilator Stopped.	
	Target:	
	Vitals Displayed.	

Vitals Stored

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Vitals Displayed.	
	Target:	
	Vitals Stored.	

getISData(patientID, history)

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes: Retrieve Patient History

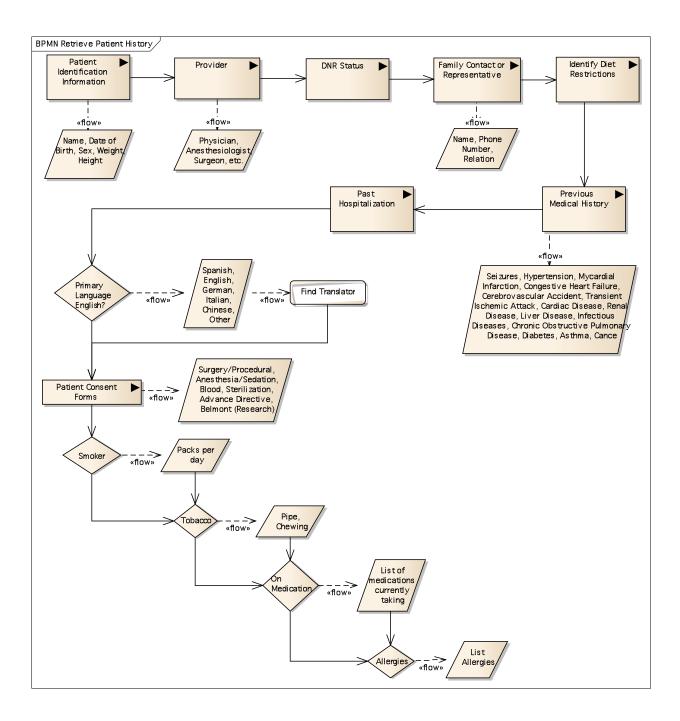
Data Attributes

Name	Type	Notes
Allergies	String	
Anesthesiologist	String	
Consent Forms - Advance	String	
Directive		
Consent Forms - Anesthesia/	String	
Sedation		
Consent Forms - Belmont	String	
(Research)		
Consent Forms - Blood	String	
Consent Forms - Sterilization	String	
Consent Forms - Surgery/	String	
Procedural		
Contact Name	String	
Contact Phone Number	String	
Contact Relationship to Patient	String	
Current Medications	String	
Diet Restrictions	String	
DNR Status	String	-
Language	String	

Past Hospitalization - Date	String
Past Hospitalization - Outcome	String
Past Hospitalization - Reason/	String
Procedure	
Patient Date of Birth	String
Patient Height	Integer
Patient Medical History	String
Patient Name	String
Patient Sex	String
Patient Weight	Integer
Physician	String
Smoke - Packs per Day	Integer
Surgeon	String
Tobacco - Chewing	String
Tobacco - Pipe	String
Translator Required	String

Name	Association	Notes
	Source:	
	manualProcess: Transfer patient to ICU.	
	Target:	
	getISData(patientID, history).	
	Source:	
	getISData(patientID, history).	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Patient in OR.	
	Target:	
	getISData(patientID, history).	
	Source:	
	OR Nurse.	
	Target:	
	getISData(patientID, history).	

BPMN 1.1 diagram: Retrieve Patient History



Find Translator

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Find Translator.	

Name	Association	Notes
	Target:	
	Patient Consent Forms.	
	Source:	
	Spanish, English, German, Italian, Chinese, Other.	
	Target:	
	Find Translator.	

Allergies

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	List of medications currently taking.	
	Target:	
	Allergies.	
	Source:	
	On Medication.	
	Target:	
	Allergies.	
	Source:	
	Allergies.	
	Target:	
	List Allergies.	

On Medication

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Pipe, Chewing.	
	Target:	
	On Medication.	
	Source:	
	Tobacco.	
	Target:	
	On Medication.	
	Source:	
	On Medication.	
	Target:	
	Allergies.	
	Source:	
	On Medication.	
	Target:	
	List of medications currently taking.	

Primary Language English?

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Past Hospitalization.	
	Target:	
	Primary Language English?.	
	Source:	
	Primary Language English?.	
	Target:	
	Patient Consent Forms.	
	Source:	
	Primary Language English?.	
	Target:	
	Spanish, English, German, Italian, Chinese, Other.	

Smoker

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Patient Consent Forms.	
	Target:	
	Smoker.	
	Source:	
	Smoker.	
	Target:	
	Tobacco.	
	Source:	
	Smoker.	
	Target:	
	Packs per day.	

Tobacco

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Packs per day.	
	Target:	
	Tobacco.	
	Source:	
	Tobacco.	
	Target:	
	On Medication.	

Name	Association	Notes
	Source:	
	Smoker.	
	Target:	
	Tobacco.	
	Source:	
	Tobacco.	
	Target:	
	Pipe, Chewing.	

List Allergies

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Allergies.	
	Target:	
	List Allergies.	

List of medications currently taking

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	List of medications currently taking.	
	Target:	
	Allergies.	
	Source:	
	On Medication.	
	Target:	
	List of medications currently taking.	

Name, Date of Birth, Sex, Weight, Height

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Patient Identification Information.	
	Target:	
	Name, Date of Birth, Sex, Weight, Height.	

Name, Phone Number, Relation

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 2/8/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Family Contact or Representative.	
	Target:	
	Name, Phone Number, Relation.	

Packs per day

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Packs per day.	
	Target:	
	Tobacco.	
	Source:	
	Smoker.	
	Target:	
	Packs per day.	

Physician, Anesthesiologist, Surgeon, etc.

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 2/8/2012. Last modified on 2/8/2012.

Notes:

Connections

Connections		
Name	Association	Notes
	Source:	
	Provider.	
	Target:	
	Physician, Anesthesiologist, Surgeon, etc	

Pipe, Chewing

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Pipe, Chewing.	
	Target:	
	On Medication.	
	Source:	
	Tobacco.	
	Target:	
	Pipe, Chewing.	

Seizures, Hypertension, Mycardial Infarction, Congestive Heart Failure, Cerebrovascular Accident, Transient Ischemic Attack, Cardiac Disease, Renal Disease, Liver Disease, Infectious Diseases, Chronic Obstructive Pulmonary Disease, Diabetes, Asthma, Cance

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Previous Medical History.	
	Target:	
	Seizures, Hypertension, Mycardial Infarction, Congestive	
	Heart Failure, Cerebrovascular Accident, Transient Ischemic	
	Attack, Cardiac Disease, Renal Disease, Liver Disease,	
	Infectious Diseases, Chronic Obstructive Pulmonary Disease,	
	Diabetes, Asthma, Cance.	

Spanish, English, German, Italian, Chinese, Other

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Primary Language English?.	
	Target:	
	Spanish, English, German, Italian, Chinese, Other.	
	Source:	
	Spanish, English, German, Italian, Chinese, Other.	
	Target:	
	Find Translator.	

Surgery/Procedural, Anesthesia/Sedation, Blood, Sterilization, Advance Directive, Belmont (Research)

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Connections		
Name	Association	Notes
	Source:	
	Patient Consent Forms.	
	Target:	
	Surgery/Procedural, Anesthesia/Sedation, Blood,	
	Sterilization, Advance Directive, Belmont (Research).	

manualProcess: Clinical Examination

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 8/17/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	manualProcess: Ensure Lines and Cables are Properly	
	Labeled.	
	Target:	
	manualProcess: Clinical Examination.	
	Source:	
	manualProcess: Clinical Examination.	
	Target:	
	setOrders(patientID).	
	Source:	
	manualProcess: Clinical Examination.	
	Target:	
	X-ray Needed.	

manualProcess: Complete Communications Sheet

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 8/17/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	
	Target:	
	manualProcess: Complete Communications Sheet.	

manualProcess: Ensure Lines and Cables are Properly Labeled

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 8/17/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	manualProcess: Untangle lines and cables.	
	Target:	
	manualProcess: Ensure Lines and Cables are Properly	
	Labeled.	
	Source:	
	manualProcess: Ensure Lines and Cables are Properly	
	Labeled.	
	Target:	
	manualProcess: Clinical Examination.	

manualProcess: Hand-off Communications

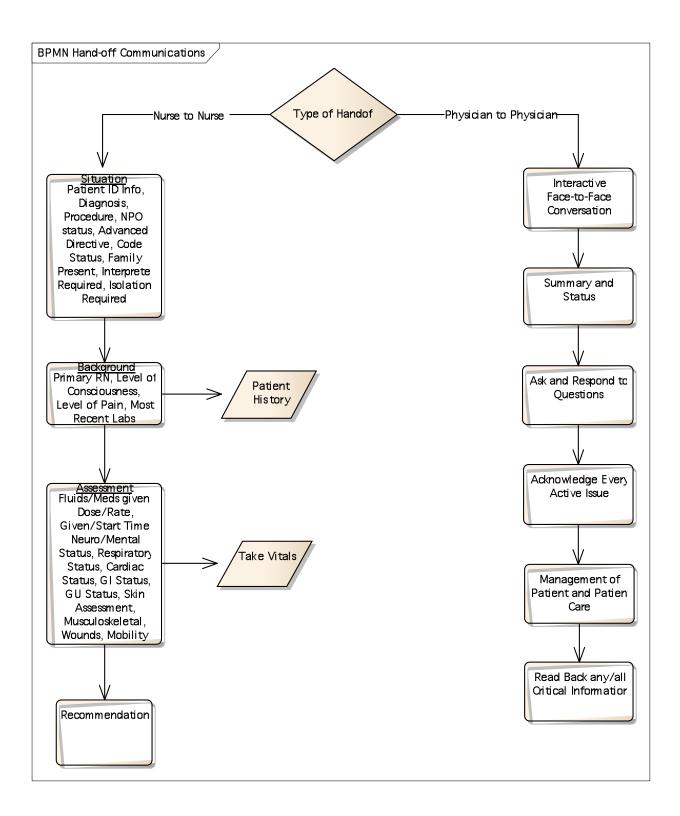
Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 8/17/2012.

Notes:

Name	Association	Notes
	Source:	
	manualProcess: Post Patient ICU Set-up.	
	Target:	
	manualProcess: Hand-off Communications.	
	Source:	
	manualProcess: Hand-off Communications.	
	Target:	
	getPhysData(patientID, vitals).	

BPMN 1.1 diagram: Hand-off Communications



Acknowledge Every Active Issue

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Ask and Respond to Questions.	
	Target:	
	Acknowledge Every Active Issue.	
	Source:	
	Acknowledge Every Active Issue.	
	Target:	
	Management of Patient and Patient Care.	

Ask and Respond to Questions

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Summary and Status.	
	Target:	
	Ask and Respond to Questions.	
	Source:	
	Ask and Respond to Questions.	
	Target:	
	Acknowledge Every Active Issue.	

Fluids/Meds given, Dose/Rate, Given/Start Time, Neuro/Mental Status, Respiratory Status, Cardiac Status, GI Status, GU Status, Skin Assessment, Musculoskeletal, Wounds, Mobility

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

Name	Type	Notes
Cardiac Status	String	
Dose/ Rate	String	
Fluids/ Meds Given	String	
GI Status	String	
Given/ Start Time	String	
GU Status	String	
Mobility	String	
Musculoskeletal	String	
Neuro/ Mental Status	String	
Respiratory Status	String	
Skin Assessment	String	
Take Vitals	UnlimitedNatural	
Wounds	String	

Name	Association	Notes
	Source:	

Name	Association	Notes
	Fluids/Meds given, Dose/Rate, Given/Start Time,	
	Neuro/Mental Status, Respiratory Status, Cardiac Status, GI	
	Status, GU Status, Skin Assessment, Musculoskeletal,	
	Wounds, Mobility.	
	Target:	
	Recommendation.	
	Source:	
	Fluids/Meds given, Dose/Rate, Given/Start Time,	
	Neuro/Mental Status, Respiratory Status, Cardiac Status, GI	
	Status, GU Status, Skin Assessment, Musculoskeletal,	
	Wounds, Mobility.	
	Target:	
	Take Vitals.	
	Source:	
	Primary RN, Level of Consciousness, Level of Pain, Most	
	Recent Labs.	
	Target:	
	Fluids/Meds given, Dose/Rate, Given/Start Time,	
	Neuro/Mental Status, Respiratory Status, Cardiac Status, GI	
	Status, GU Status, Skin Assessment, Musculoskeletal,	
	Wounds, Mobility.	
	Source:	
	Fluids/Meds given, Dose/Rate, Given/Start Time,	
	Neuro/Mental Status, Respiratory Status, Cardiac Status, GI	
	Status, GU Status, Skin Assessment, Musculoskeletal,	
	Wounds, Mobility.	
	Target:	
	Take Vitals.	

Interactive Face-to-Face Conversation

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Interactive Face-to-Face Conversation.	
	Target:	
	Summary and Status.	
Physician to Physician	Source:	
j	Type of Handoff.	
	Target:	
	Interactive Face-to-Face Conversation.	

Management of Patient and Patient Care

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

2 WW 12W TOWNED			
Name	Type	Notes	
clinicalDecisionSupport	String		

Connections

Name	Association	Notes
	Source:	
	Acknowledge Every Active Issue.	
	Target:	
	Management of Patient and Patient Care.	
	Source:	
	Management of Patient and Patient Care.	
	Target:	
	Read Back any/all Critical Information.	

Patient ID Info, Diagnosis, Procedure, NPO status, Advanced Directive, Code Status, Family Present, Interpreter Required, Isolation Required

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

Name	Type	Notes	
Advanced Directive	String		
Code Status	String		
Diagnosis	String		
Family Present	String		
Interpreter Required	String		
NPO Status	String		
Patient ID Info	String		
Procedure	String		

Connections

Name	Association	Notes
	Source:	
	Patient ID Info, Diagnosis, Procedure, NPO status, Advanced	
	Directive, Code Status, Family Present, Interpreter Required,	
	Isolation Required.	
	Target:	
	Primary RN, Level of Consciousness, Level of Pain, Most	
	Recent Labs.	

Primary RN, Level of Consciousness, Level of Pain, Most Recent Labs

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

Dun Annonies	Duta Attributes			
Name	Type	Notes		
Most Recent Labs	String			
Patient History	String			
Patient Level of Pain	Integer			
Patient LOC	String			
Primary RN	String			

Name	Association	Notes
	Source:	

Name	Association	Notes
	Patient ID Info, Diagnosis, Procedure, NPO status, Advanced	
	Directive, Code Status, Family Present, Interpreter Required,	
	Isolation Required.	
	Target:	
	Primary RN, Level of Consciousness, Level of Pain, Most	
	Recent Labs.	
	Source:	
	Primary RN, Level of Consciousness, Level of Pain, Most	
	Recent Labs.	
	Target:	
	Patient History.	
	Source:	
	Primary RN, Level of Consciousness, Level of Pain, Most	
	Recent Labs.	
	Target:	
	Fluids/Meds given, Dose/Rate, Given/Start Time,	
	Neuro/Mental Status, Respiratory Status, Cardiac Status, GI	
	Status, GU Status, Skin Assessment, Musculoskeletal,	
	Wounds, Mobility.	
	Source:	
	Primary RN, Level of Consciousness, Level of Pain, Most	
	Recent Labs.	
	Target:	
	Patient History.	

Read Back any/all Critical Information

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Management of Patient and Patient Care.	
	Target:	
	Read Back any/all Critical Information.	

Recommendation

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

Name	Type	Notes
Recommendation	String	

Name	Association	Notes
	Source:	
	Fluids/Meds given, Dose/Rate, Given/Start Time,	
	Neuro/Mental Status, Respiratory Status, Cardiac Status, GI	
	Status, GU Status, Skin Assessment, Musculoskeletal,	
	Wounds, Mobility.	
	Target:	

Name	Association	Notes
	Recommendation.	

Summary and Status

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

Name	Type	Notes
Patient Status	String	
Patient Summary	String	

Connections

Name	Association	Notes
	Source:	
	Interactive Face-to-Face Conversation.	
	Target:	
	Summary and Status.	
	Source:	
	Summary and Status.	
	Target:	
	Ask and Respond to Questions.	

Type of Handoff

Database: <none>, Stereotype: «Gateway», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
Nurse to Nurse	Source:	
	Type of Handoff.	
	Target:	
	<anonymous>.</anonymous>	
Physician to Physician	Source:	
•	Type of Handoff.	
	Target:	
	Interactive Face-to-Face Conversation.	

Patient History

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Name	Association	Notes
	Source:	
	Primary RN, Level of Consciousness, Level of Pain, Most	
	Recent Labs.	
	Target:	
	Patient History.	

Take Vitals

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Fluids/Meds given, Dose/Rate, Given/Start Time,	
	Neuro/Mental Status, Respiratory Status, Cardiac Status, GI	
	Status, GU Status, Skin Assessment, Musculoskeletal,	
	Wounds, Mobility.	
	Target:	
	Take Vitals.	

manualProcess: Patient in Transport

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

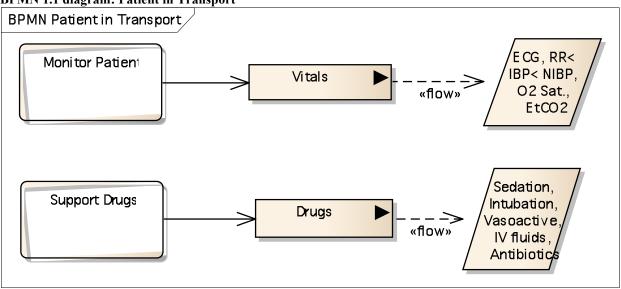
Detail: Created on 5/25/2011. Last modified on 8/17/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Estimated Time of Arrival in ICU.	
	Target:	
	manualProcess: Patient in Transport.	
	Source:	
	manualProcess: Patient in Transport.	
	Target:	
	Patient in ICU.	

BPMN 1.1 diagram: Patient in Transport



Monitor Patient

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Data Attributes

Name	Type	Notes
Blood Pressure	Integer	
ECG		
EtCO2	Integer	
Respiratory Rate	Integer	
SpO2	Integer	

Connections

Name	Association	Notes
	Source:	
	Monitor Patient.	
	Target:	
	Vitals.	
	Source:	
	Monitor Patient.	
	Target:	
	Vitals.	

Support Drugs

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Data Attributes

Name	Type	Notes
medicationList	String	

Connections

Name	Association	Notes
	Source:	
	Support Drugs.	
	Target:	
	Drugs.	
	Source:	
	Support Drugs.	
	Target:	
	Drugs.	

ECG, RR< IBP< NIBP, O2 Sat., EtCO2

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Vitals.	
	Target:	
	ECG, RR< IBP< NIBP, O2 Sat., EtCO2.	

Name	Association	Notes
	Source:	
	Vitals.	
	Target:	
	ECG, RR< IBP< NIBP, O2 Sat., EtCO2.	

Sedation, Intubation, Vasoactive, IV fluids, Antibiotics

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Drugs.	
	Target:	
	Sedation, Intubation, Vasoactive, IV fluids, Antibiotics.	
	Source:	
	Drugs.	
	Target:	
	Sedation, Intubation, Vasoactive, IV fluids, Antibiotics.	

manualProcess: Post Patient ICU Set-up

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

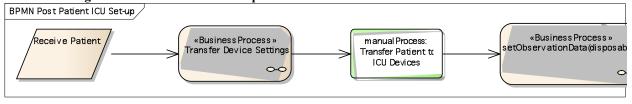
Detail: Created on 6/2/2011. Last modified on 8/17/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
Ì	Patient in ICU.	
l	Target:	
l	manualProcess: Post Patient ICU Set-up.	
	Source:	
l	manualProcess: Post Patient ICU Set-up.	
l	Target:	
İ	manualProcess: Hand-off Communications.	

BPMN 1.1 diagram: Post Patient ICU Set-up



manualProcess: Transfer Patient to ICU Devices

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 8/17/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Transfer Device Settings.	
	Target:	
	manualProcess: Transfer Patient to ICU Devices.	
	Source:	
	manualProcess: Transfer Patient to ICU Devices.	
	Target:	
	setObservationData(disposables).	
	Source:	
	Receive Patient.	
	Target:	
	manualProcess: Transfer Patient to ICU Devices.	
	Source:	
	manualProcess: Transfer Patient to ICU Devices.	
	Target:	
	setObservationData(disposables).	

Transfer Device Settings

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

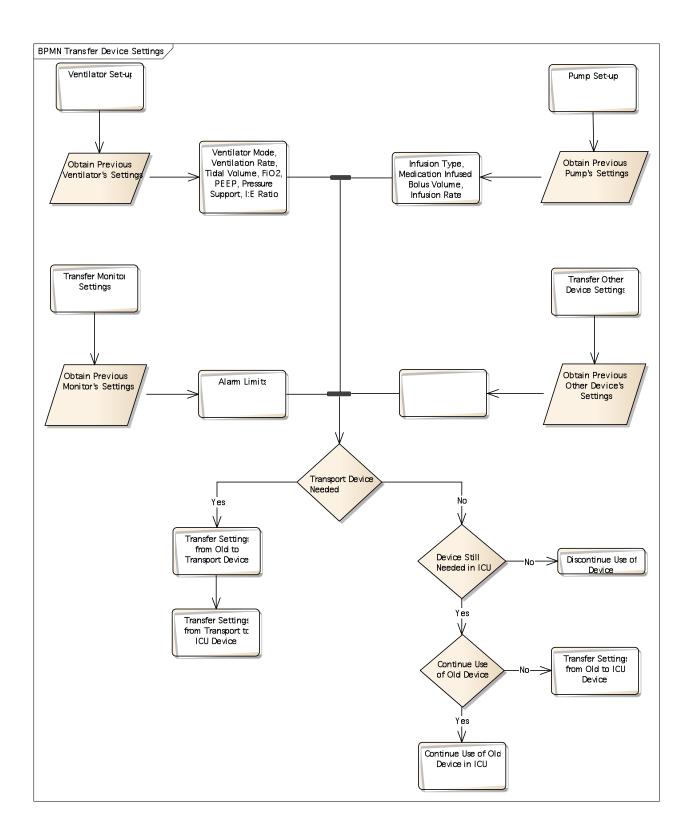
Notes:

Data Attributes

Name	Type	Notes	
Continue use of old device in	Boolean		
ICU			
Infusion Pump, Bolus Volume	Integer		
Infusion Pump, Infusion Rate	String		
Infusion Pump, Medication	String		
Infused			
Infusion Pump, Type	String		
Set Monitor Alarm Limits	String		
Ventillator, FiO2	Integer		
Ventillator, I:E Ratio	String		
Ventillator, Mode	String		
Ventillator, PEEP	String		
Ventillator, Pressure Support	String		
Ventillator, Rate	String		
Ventillator, Tidal Volume	Integer		

Name	Association	Notes
	Source:	
	Receive Patient.	
	Target:	
	Transfer Device Settings.	
	Source:	
	Transfer Device Settings.	
	Target:	
	manualProcess: Transfer Patient to ICU Devices.	

BPMN 1.1 diagram: Transfer Device Settings



<anonymous>

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Obtain Previous Other Device's Settings.	
	Target:	
	<anonymous>.</anonymous>	
	Source:	
	<anonymous>.</anonymous>	
	Target:	
	<anonymous>.</anonymous>	

Alarm Limits

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Obtain Previous Monitor's Settings.	
	Target:	
	Alarm Limits.	
	Source:	
	Alarm Limits.	
	Target:	
	<anonymous>.</anonymous>	

Continue Use of Old Device in ICU

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
Yes	Source:	
	Continue Use of Old Device.	
	Target:	
	Continue Use of Old Device in ICU.	

Discontinue Use of Device

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Name	Association	Notes
No	Source:	
	Device Still Needed in ICU.	
	Target:	
	Discontinue Use of Device.	

Infusion Type, Medication Infused, Bolus Volume, Infusion Rate

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Obtain Previous Pump's Settings.	
	Target:	
	Infusion Type, Medication Infused, Bolus Volume, Infusion	
	Rate.	
	Source:	
	Infusion Type, Medication Infused, Bolus Volume, Infusion	
	Rate.	
	Target:	
	<anonymous>.</anonymous>	

Pump Set-up

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

Name	Type	Notes
bolusVolume	Integer	
drug	String	
infusionRate	Integer	
infusionTime	Integer	
infusionType	String	

Connections

Name	Association		Notes
	Source:		
	Pump Set-up.		
	Target:		
	Obtain Previous Pum	p's Settings.	

Transfer Monitor Settings

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

Name	Type	Notes
alarmSettings	String	

Connections

Name	Association	Notes
	Source:	
	Transfer Monitor Settings.	
	Target:	
	Obtain Previous Monitor's Settings.	

Transfer Other Device Settings

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Transfer Other Device Settings.	
	Target:	
	Obtain Previous Other Device's Settings.	

Transfer Settings from Old to ICU Device

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
No	Source:	
	Continue Use of Old Device.	
	Target:	
	Transfer Settings from Old to ICU Device.	

Transfer Settings from Old to Transport Device

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Transfer Settings from Old to Transport Device.	
	Target:	
	Transfer Settings from Transport to ICU Device.	
Yes	Source:	
	Transport Device Needed.	
	Target:	
	Transfer Settings from Old to Transport Device.	

Transfer Settings from Transport to ICU Device

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Transfer Settings from Old to Transport Device.	
	Target:	
	Transfer Settings from Transport to ICU Device.	

Ventilator Mode, Ventilation Rate, Tidal Volume, FiO2, PEEP, Pressure Support, I:E Ratio

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Obtain Previous Ventilator's Settings.	
	Target:	
	Ventilator Mode, Ventilation Rate, Tidal Volume, FiO2,	
	PEEP, Pressure Support, I:E Ratio.	
	Source:	
	Ventilator Mode, Ventilation Rate, Tidal Volume, FiO2,	
	PEEP, Pressure Support, I:E Ratio.	
	Target:	
	<anonymous>.</anonymous>	

Ventilator Set-up

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Data Attributes

Name	Type	Notes	
FiO2	Integer		
PEEP	String		
pressureSupport	String		
tidalVolume	Integer		
ventMode	String		
ventRate	Integer		

Connections

Name	Association	Notes
	Source:	
	Ventilator Set-up.	
	Target:	
	Obtain Previous Ventilator's Settings.	

Continue Use of Old Device

Database: <none>, Stereotype: «Gateway», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Name	Association	Notes
No	Source:	
	Continue Use of Old Device.	
	Target:	
	Transfer Settings from Old to ICU Device.	
Yes	Source:	
	Device Still Needed in ICU.	
	Target:	
	Continue Use of Old Device.	
Yes	Source:	
	Continue Use of Old Device.	

Name	Association	Notes
	Target:	
	Continue Use of Old Device in ICU.	

Device Still Needed in ICU

Database: <none>, Stereotype: «Gateway», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
No	Source:	
	Transport Device Needed.	
	Target:	
	Device Still Needed in ICU.	
No	Source:	
	Device Still Needed in ICU.	
	Target:	
	Discontinue Use of Device.	
Yes	Source:	
	Device Still Needed in ICU.	
	Target:	
	Continue Use of Old Device.	

Transport Device Needed

Database: <none>, Stereotype: «Gateway», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	<anonymous>.</anonymous>	
	Target:	
	Transport Device Needed.	
No	Source:	
	Transport Device Needed.	
	Target:	
	Device Still Needed in ICU.	
Yes	Source:	
	Transport Device Needed.	
	Target:	
	Transfer Settings from Old to Transport Device.	

Obtain Previous Monitor's Settings

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Name	Association	Notes
	Source:	
	Transfer Monitor Settings.	
	Target:	

Name	Association	Notes
	Obtain Previous Monitor's Settings.	
	Source: Obtain Previous Monitor's Settings.	
	Target:	
	Alarm Limits.	

Obtain Previous Other Device's Settings

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Transfer Other Device Settings.	
	Target:	
	Obtain Previous Other Device's Settings.	
	Source:	
	Obtain Previous Other Device's Settings.	
	Target:	
	<anonymous>.</anonymous>	

Obtain Previous Pump's Settings

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Pump Set-up.	
	Target:	
	Obtain Previous Pump's Settings.	
	Source:	
	Obtain Previous Pump's Settings.	
	Target:	
	Infusion Type, Medication Infused, Bolus Volume, Infusion	
	Rate.	

Obtain Previous Ventilator's Settings

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Name	Association	Notes
	Source:	
	Ventilator Set-up.	
	Target:	
	Obtain Previous Ventilator's Settings.	
	Source:	
	Obtain Previous Ventilator's Settings.	

Name	Association	Notes
	Target:	
	Ventilator Mode, Ventilation Rate, Tidal Volume, FiO2,	
	PEEP, Pressure Support, I:E Ratio.	

Receive Patient

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Receive Patient.	
	Target:	
	Transfer Device Settings.	

manualProcess: Pre-Patient ICU Set up

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 8/17/2012.

Notes:

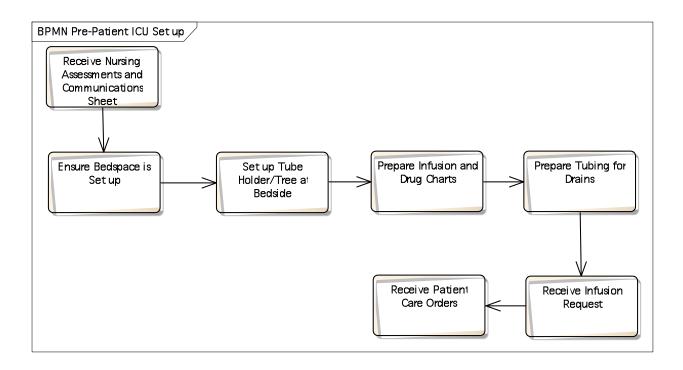
Data Attributes

Name	Type	Notes
Communications Sheet	String	
ETA of Arrival in ICU	Integer	
ICU Bed Location	String	
Infusion and Drug Charts	String	
Infusion Request	String	
Nursing Assessments	String	
Patient Care Orders	String	

Connections

Name	Association	Notes
	Source:	
	manualProcess: Pre-Patient ICU Set up.	
	Target:	
	getISData(patientID); getOrders(patientID).	
	Source:	
	ICU Staff.	
	Target:	
	manualProcess: Pre-Patient ICU Set up.	

BPMN 1.1 diagram: Pre-Patient ICU Set up



Ensure Bedspace is Set up

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Receive Nursing Assessments and Communications Sheet.	
	Target:	
	Ensure Bedspace is Set up.	
	Source:	
	Ensure Bedspace is Set up.	
	Target:	
	Set up Tube Holder/Tree at Bedside.	

Prepare Infusion and Drug Charts

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Set up Tube Holder/Tree at Bedside.	
	Target:	
	Prepare Infusion and Drug Charts.	
	Source:	
	Prepare Infusion and Drug Charts.	

Name	Association	Notes
	Target:	
	Prepare Tubing for Drains.	

Prepare Tubing for Drains

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Prepare Infusion and Drug Charts.	
	Target:	
	Prepare Tubing for Drains.	
	Source:	
	Prepare Tubing for Drains.	
	Target:	
	Receive Infusion Request.	

Receive Infusion Request

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 4/4/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Prepare Tubing for Drains.	
	Target:	
	Receive Infusion Request.	
	Source:	
	Receive Infusion Request.	
	Target:	
	Receive Patient Care Orders.	

Receive Nursing Assessments and Communications Sheet

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 4/23/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Receive Nursing Assessments and Communications Sheet.	
	Target:	
	Ensure Bedspace is Set up.	
	Source:	
	Access ICE Handoff App.	
	Target:	
	Receive Nursing Assessments and Communications Sheet.	

Receive Patient Care Orders

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 4/4/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Receive Infusion Request.	
	Target:	
	Receive Patient Care Orders.	
	Source:	
	Receive Patient Care Orders.	
	Target:	
	Complete Room Readiness Checklist.	

Set up Tube Holder/Tree at Bedside

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Ensure Bedspace is Set up.	
	Target:	
	Set up Tube Holder/Tree at Bedside.	
	Source:	
	Set up Tube Holder/Tree at Bedside.	
	Target:	
	Prepare Infusion and Drug Charts.	

manualProcess: Transfer patient to ICU

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Patient in OR.	
	Target:	
	manualProcess: Transfer patient to ICU.	
	Source:	
	manualProcess: Transfer patient to ICU.	
	Target:	
	getISData(patientID, history).	

manualProcess: Untangle lines and cables

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 8/17/2012.

Notes:

Name	Association	Notes

Name	Association	Notes
	Source:	
	manualProcess: Untangle lines and cables.	
	Target:	
	manualProcess: Ensure Lines and Cables are Properly	
	Labeled.	
	Source:	
	setObservationData(ABG).	
	Target:	
	manualProcess: Untangle lines and cables.	

setISData(patientID, transfer, time, fromLocation, toLocation)

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes: Alert ICU prior to Transport

Data Attributes

Name	Type	Notes
Set fromLocation	String	
Set Patient Transfer	String	
Set Patient Transfer Time	String	
Set patientID		
Set toLocation	String	

Name	Association	Notes
	Source:	
	setOrders(patientID, deviceRequest).	
	Target:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	
	Source:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	
	Target:	
	manualProcess: Complete Communications Sheet.	
	Source:	
	setObservationData(disposables).	
	Target:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	
	Source:	
	setObservationData(disposables).	
	Target:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	
	Source:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	
	Target:	
	Patient leaves OR.	
	Source:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	
	Target:	
	Patient Leaves OR.	

setObservationData(ABG)

<none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow Created on 5/24/2011. Last modified on 8/17/2012. Database:

Detail:

Collect ABG Notes:

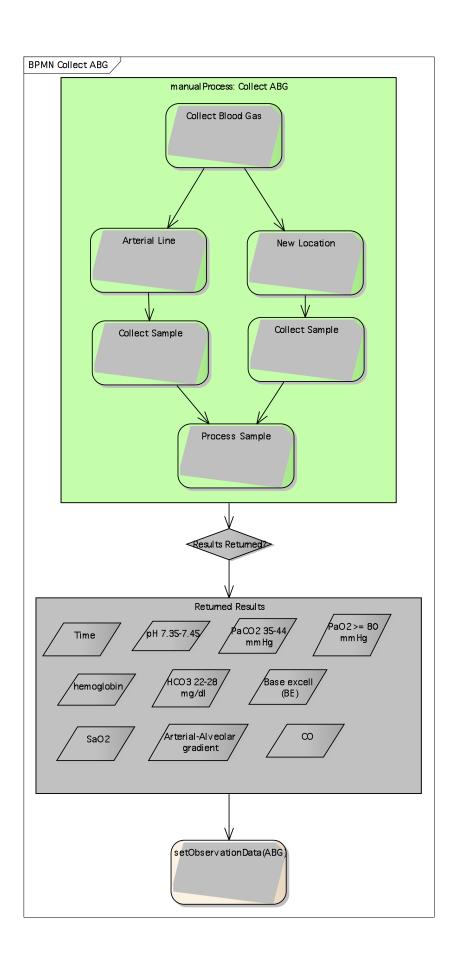
Data Attributes

Name	Type	Notes	
Arterial-Alveolar gradient	String		
Base Excell (BE)	Integer		
CO	Integer		
HCO3 mg/dl	Integer		
Hemoglobin	String		
PaCO2 mmHg	Integer		
PaO2 mmHg	Integer		
pН	Integer		
SaO2	String		
Time	String		

Connections

Name	Association	Notes
	Source:	
	getPhysData(patientID, vitals).	
	Target:	
	setObservationData(ABG).	
	Source:	
	setObservationData(ABG).	
	Target:	
	manualProcess: Untangle lines and cables.	

BPMN 1.1 diagram: Collect ABG



Arterial Line

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow
Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Collect Blood Gas.	
	Target:	
	Arterial Line.	
	Source:	
	Arterial Line.	
	Target:	
	Collect Sample.	

Collect Blood Gas

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Collect Blood Gas.	
	Target:	
	Arterial Line.	
	Source:	
	Collect Blood Gas.	
	Target:	
	New Location.	

Collect Sample

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow
Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	New Location.	
	Target:	
	Collect Sample.	
	Source:	
	Collect Sample.	
	Target:	
	Process Sample.	

Collect Sample

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Arterial Line.	
	Target:	
	Collect Sample.	
	Source:	
	Collect Sample.	
	Target:	
	Process Sample.	

New Location

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow
Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Collect Blood Gas.	
	Target:	
	New Location.	
	Source:	
	New Location.	
	Target:	
	Collect Sample.	

Process Sample

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Collect Sample.	
	Target:	
	Process Sample.	
	Source:	
	Collect Sample.	
	Target:	
	Process Sample.	

setObservationData(ABG)

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow
Detail: Created on 7/27/2011. Last modified on 8/17/2012.

Notes:

Name	Association	Notes

Name	Association	Notes
	Source:	
	Returned Results.	
	Target:	
	setObservationData(ABG).	

Results Returned?

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow
Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Results Returned?.	
	Target:	
	Returned Results.	
	Source:	
	manualProcess: Collect ABG.	
	Target:	
	Results Returned?.	
	Source:	
	manualProcess: Collect ABG.	
	Target:	
	Results Returned?.	
Yes	Source:	
	Results Returned?.	
	Target:	
	Returned Results.	

Arterial-Alveolar gradient

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Base excell (BE)

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

CO

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

HCO3 22-28 mg/dl

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

hemoglobin

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

PaCO2 35-44 mmHg

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

PaO2 >= 80 mmHg

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

pH 7.35-7.45

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Sa₀₂

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

Time

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/18/2011.

Notes:

manualProcess: Collect ABG

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 7/18/2011. Last modified on 7/18/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	manualProcess: Collect ABG.	
	Target:	
	Results Returned?.	

Returned Results

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
Yes	Source:	
	Results Returned?.	
	Target:	

Name	Association	Notes
	Returned Results.	

setObservationData(IVLines)

<none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow Created on 5/25/2011. Last modified on 7/27/2011. Database:

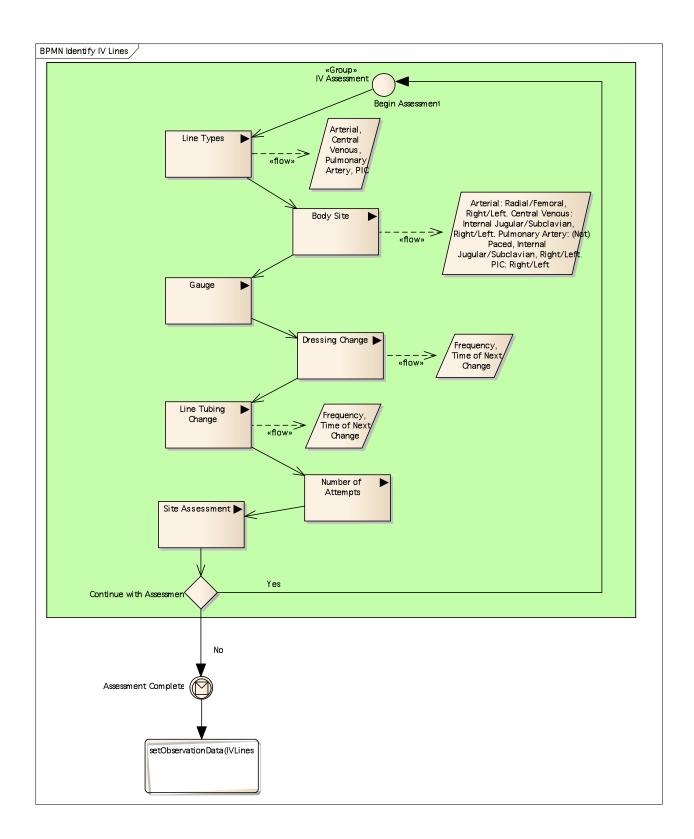
Detail:

Notes: Identify IV Lines

Connections

Name	Association	Notes
	Source:	
	getISData(patientID, history).	
	Target:	
	setObservationData(IVLines).	
	Source:	
	setObservationData(IVLines).	
	Target:	
	setObservationData(disposables).	

BPMN 1.1 diagram: Identify IV Lines



setObservationData(IVLines)

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 7/27/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Right, Left.	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Radial, Femoral.	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Right, Left.	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Internal Jugular (IJ), Subclavian (SC).	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Right, Left.	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Internal Jugular (IJ), Subclavian (SC).	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Paced, Not Paced.	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Right, Left.	
	Target:	
	setObservationData(IVLines).	

Internal Jugular (IJ), Subclavian (SC)

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Name	Association	Notes
	Source:	
	Pulmonary Artery Lines Connected.	
	Target:	
	Internal Jugular (IJ), Subclavian (SC).	
	Source:	
	Internal Jugular (IJ), Subclavian (SC).	
	Target:	
	setObservationData(IVLines).	

Internal Jugular (IJ), Subclavian (SC)

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Central Venous Lines Connected.	
	Target:	
	Internal Jugular (IJ), Subclavian (SC).	
	Source:	
	Internal Jugular (IJ), Subclavian (SC).	
	Target:	
	setObservationData(IVLines).	

Paced, Not Paced

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Pulmonary Artery Lines Connected.	
	Target:	
	Paced, Not Paced.	
	Source:	
	Paced, Not Paced.	
	Target:	
	setObservationData(IVLines).	

Radial, Femoral

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Arterial Lines Connected.	
	Target:	
	Radial, Femoral.	
	Source:	
	Radial, Femoral.	
	Target:	
	setObservationData(IVLines).	

Right, Left

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Central Venous Lines Connected.	
	Target:	
	Right, Left.	
	Source:	
	Right, Left.	
	Target:	
	setObservationData(IVLines).	

Right, Left

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Pulmonary Artery Lines Connected.	
	Target:	
	Right, Left.	
	Source:	
	Right, Left.	
	Target:	
	setObservationData(IVLines).	

Right, Left

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	PIC.	
	Target:	
	Right, Left.	
	Source:	
	Right, Left.	
	Target:	
	setObservationData(IVLines).	

Right, Left

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Name	Association	Notes
	Source:	
	Arterial Lines Connected.	
	Target:	

Name	Association	Notes
	Right, Left.	
	Source: Right, Left.	
	Target:	
	setObservationData(IVLines).	

setObservationData(IVLines)

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 8/14/2012. Last modified on 2/8/2012.

Notes:

Data Attributes

Name	Type	Notes
Body Site	String	
Dressing Change Frequency	String	
Gauge	String	
Line Tubing Change Frequency	String	
Line Type	String	
Site Assessment	String	

Connections

Name	Association	Notes
	Source:	
	Assessment Complete.	
	Target:	
	setObservationData(IVLines).	

Continue with Assessment

Database: <none>, Stereotype: «Gateway», Package: OR to ICU As Is Workflow

Detail: Created on 8/14/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Site Assessment.	
	Target:	
	Continue with Assessment.	
	Source:	
	Continue with Assessment.	
	Target:	
	Begin Assessment.	
	Source:	
	Continue with Assessment.	
	Target:	
	Assessment Complete.	

Arterial, Central Venous, Pulmonary Artery, PIC

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 8/14/2012. Last modified on 2/8/2012.

Notes:

Name	Association	Notes
	Source:	
	Line Types.	
	Target:	
	Arterial, Central Venous, Pulmonary Artery, PIC.	

Arterial: Radial/Femoral, Right/Left. Central Venous: Internal Jugular/Subclavian, Right/Left. Pulmonary Artery: (Not) Paced, Internal Jugular/Subclavian, Right/Left. PIC: Right/Left

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 8/14/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Body Site.	
	Target:	
	Arterial: Radial/Femoral, Right/Left. Central Venous: Internal	
	Jugular/Subclavian, Right/Left. Pulmonary Artery: (Not)	
	Paced, Internal Jugular/Subclavian, Right/Left. PIC:	
	Right/Left.	

Frequency, Time of Next Change

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 8/14/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Line Tubing Change.	
	Target:	
	Frequency, Time of Next Change.	

Frequency, Time of Next Change

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 8/14/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Dressing Change.	
	Target:	
	Frequency, Time of Next Change.	

Assessment Complete

Database: <none>, Stereotype: «IntermediateEvent», Package: OR to ICU As Is Workflow

Detail: Created on 8/14/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Assessment Complete.	
	Target:	
	setObservationData(IVLines).	
	Source:	
	Continue with Assessment.	
	Target:	
	Assessment Complete.	

Begin Assessment

Database: <none>, Stereotype: «StartEvent», Package: OR to ICU As Is Workflow

Detail: Created on 8/14/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Begin Assessment.	
	Target:	
	Line Types.	
	Source:	
	Continue with Assessment.	
	Target:	
	Begin Assessment.	

Body Site

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 8/14/2012. Last modified on 8/14/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Line Types.	
	Target:	
	Body Site.	
	Source:	
	Body Site.	
	Target:	
	Gauge.	
	Source:	
	Body Site.	
	Target:	
	Arterial: Radial/Femoral, Right/Left. Central Venous: Internal	
	Jugular/Subclavian, Right/Left. Pulmonary Artery: (Not)	
	Paced, Internal Jugular/Subclavian, Right/Left. PIC:	
	Right/Left.	

Dressing Change

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 8/14/2012. Last modified on 8/14/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Gauge.	
	Target:	
	Dressing Change.	
	Source:	
	Dressing Change.	
	Target:	
	Line Tubing Change.	
	Source:	
	Dressing Change.	
	Target:	
	Frequency, Time of Next Change.	

Gauge

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 8/14/2012. Last modified on 8/14/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Gauge.	
	Target:	
	Dressing Change.	
	Source:	
	Body Site.	
	Target:	
	Gauge.	

Line Tubing Change

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 8/14/2012. Last modified on 8/14/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Dressing Change.	
	Target:	
	Line Tubing Change.	
	Source:	
	Line Tubing Change.	
	Target:	
	Number of Attempts.	
	Source:	
	Line Tubing Change.	
	Target:	
	Frequency, Time of Next Change.	

Line Types

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 8/14/2012. Last modified on 8/14/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Line Types.	
	Target:	
	Body Site.	
	Source:	
	Line Types.	
	Target:	
	Arterial, Central Venous, Pulmonary Artery, PIC.	
	Source:	
	Begin Assessment.	
	Target:	
	Line Types.	

Number of Attempts

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 8/14/2012. Last modified on 8/14/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Number of Attempts.	
	Target:	
	Site Assessment.	
	Source:	
	Line Tubing Change.	
	Target:	
	Number of Attempts.	

Site Assessment

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 8/14/2012. Last modified on 8/14/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Site Assessment.	
	Target:	
	Continue with Assessment.	
	Source:	
	Number of Attempts.	
	Target:	
	Site Assessment.	

setObservationData(disposables)

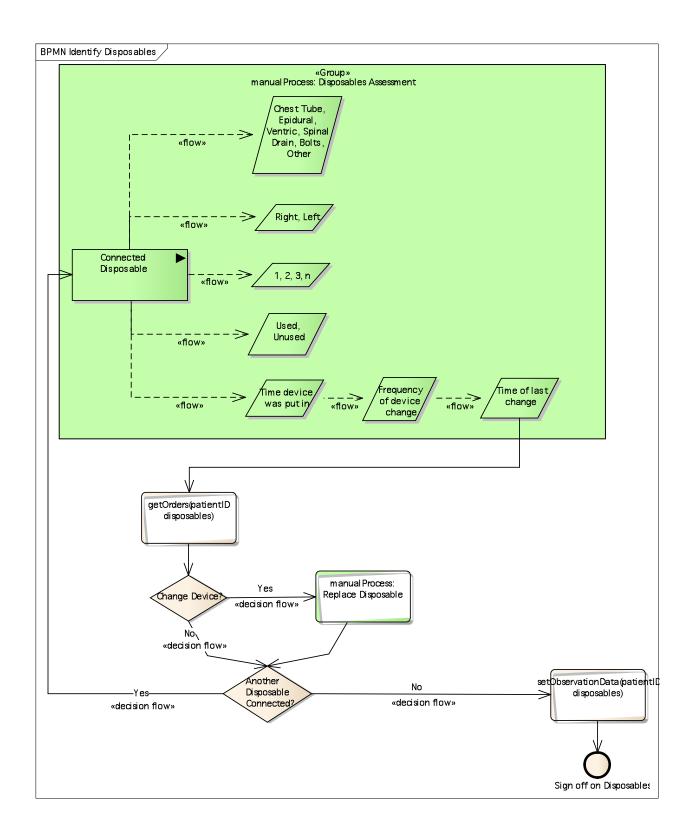
Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes: Identify Disposables

Name	Association	Notes
	Source:	
	setObservationData(IVLines).	
	Target:	
	setObservationData(disposables).	
	Source:	
	setObservationData(disposables).	
	Target:	
	setOrders(patientID, bloodRequest, dripRequest).	
	Source:	
	manualProcess: Transfer Patient to ICU Devices.	
	Target:	
	setObservationData(disposables).	
	Source:	
	setObservationData(disposables).	
	Target:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	

BPMN 1.1 diagram: Identify Disposables



getOrders(patientID, disposables)

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Data Attributes

Name	Туре	Notes
Patient Care Orders	String	
patientID	String	

Connections

Name	Association	Notes
	Source:	
	Time of last change.	
	Target:	
	getOrders(patientID, disposables).	
	Source:	
	getOrders(patientID, disposables).	
	Target:	
	Change Device?.	

manualProcess: Replace Disposable

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 8/16/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	manualProcess: Replace Disposable.	
	Target:	
	Another Disposable Connected?.	
Yes	Source:	
	Change Device?.	
	Target:	
	manualProcess: Replace Disposable.	

setObservationData(patientID, disposables)

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 7/27/2011. Last modified on 7/27/2011.

Notes:

Data Attributes

Name	Type	Notes
disposables	String	
patientID	String	

Connections

Name	Association	Notes
	Source:	
	setObservationData(patientID, disposables).	
	Target:	
	Sign off on Disposables.	
No	Source:	
	Another Disposable Connected?.	
	Target:	
	setObservationData(patientID, disposables).	

Another Disposable Connected?

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	manualProcess: Replace Disposable.	
	Target:	
	Another Disposable Connected?.	
No	Source:	
	Another Disposable Connected?.	
	Target:	
	setObservationData(patientID, disposables).	
No	Source:	
	Change Device?.	
	Target:	
	Another Disposable Connected?.	
Yes	Source:	
	Another Disposable Connected?.	
	Target:	
	Connected Disposable.	

Change Device?

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow
Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	getOrders(patientID, disposables).	
	Target:	
	Change Device?.	
No	Source:	
	Change Device?.	
	Target:	
	Another Disposable Connected?.	
Yes	Source:	
	Change Device?.	
	Target:	
	manualProcess: Replace Disposable.	

1, 2, 3, n

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Name	Association	Notes
	Source:	
	Connected Disposable.	
	Target:	
	1, 2, 3, n.	

Chest Tube, Epidural, Ventric, Spinal Drain, Bolts, Other

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Connected Disposable.	
	Target:	
	Chest Tube, Epidural, Ventric, Spinal Drain, Bolts, Other.	

Frequency of device change

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Time device was put in.	
	Target:	
	Frequency of device change.	
	Source:	
	Frequency of device change.	
	Target:	
	Time of last change.	

Right, Left

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Connected Disposable.	
	Target:	
	Right, Left.	

Time device was put in

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Name	Association	Notes
	Source:	
	Connected Disposable.	
	Target:	
	Time device was put in.	
	Source:	
	Time device was put in.	

Name	Association	Notes
	Target:	
	Frequency of device change.	

Time of last change

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Frequency of device change.	
	Target:	
	Time of last change.	
	Source:	
	Time of last change.	
	Target:	
	getOrders(patientID, disposables).	

Used, Unused

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Connected Disposable.	
	Target:	
	Used, Unused.	

Sign off on Disposables

Database: <none>, Stereotype: «EndEvent», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	setObservationData(patientID, disposables).	
	Target:	
	Sign off on Disposables.	

setOrders(patientID)

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 7/27/2011.

Notes: Order Labs

Data Attributes

Name	Type	Notes
patientCareOrders	String	
patientID	String	

Connections

Name	Association	Notes
	Source:	
	manualProcess: Clinical Examination.	
	Target:	
	setOrders(patientID).	

setOrders(patientID, bloodRequest, dripRequest)

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

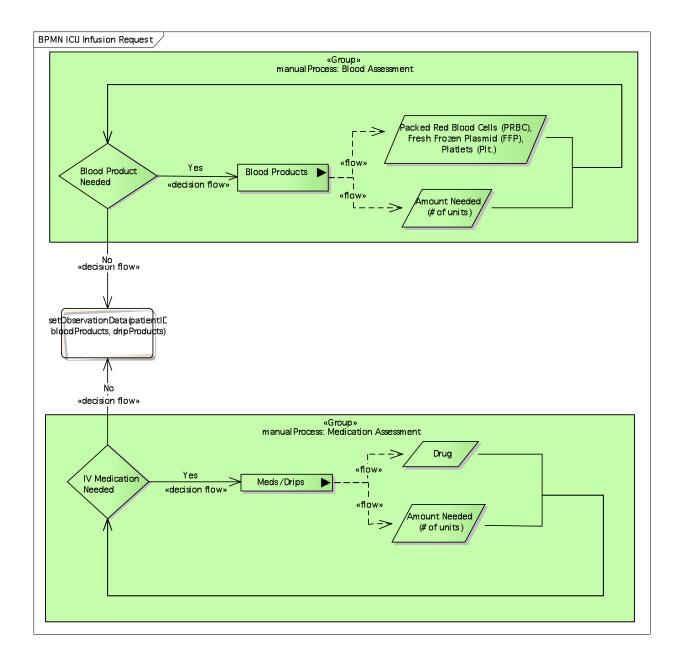
Detail: Created on 5/25/2011. Last modified on 2/8/2012.

Notes: ICU Infusion Request

Connections

Name	Association	Notes
	Source:	
	setObservationData(disposables).	
	Target:	
	setOrders(patientID, bloodRequest, dripRequest).	
	Source:	
	setOrders(patientID, bloodRequest, dripRequest).	
	Target:	
	setOrders(patientID, deviceRequest).	

BPMN 1.1 diagram: ICU Infusion Request



setObservationData(patientID, bloodProducts, dripProducts)

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 7/27/2011. Last modified on 7/27/2011.

Notes:

Data Attributes

Name	Type	Notes
bloodProducts	String	
dripProducts	String	
patientID	String	

Name	Association	Notes
1 (diffe	rissociation	11000

Name	Association	Notes
No	Source:	
	Blood Product Needed.	
	Target:	
	setObservationData(patientID, bloodProducts, dripProducts).	
No	Source:	
	IV Medication Needed.	
	Target:	
	setObservationData(patientID, bloodProducts, dripProducts).	

Blood Product Needed

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Packed Red Blood Cells (PRBC), Fresh Frozen Plasmid	
	(FFP), Platlets (Plt.).	
	Target:	
	Blood Product Needed.	
	Source:	
	Amount Needed (# of units).	
	Target:	
	Blood Product Needed.	
No	Source:	
	Blood Product Needed.	
	Target:	
	setObservationData(patientID, bloodProducts, dripProducts).	
Yes	Source:	
	Blood Product Needed.	
	Target:	
	Blood Products.	

IV Medication Needed

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow
Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Name	Association	Notes
	Source:	
	Drug.	
	Target:	
	IV Medication Needed.	
	Source:	
	Amount Needed (# of units).	
	Target:	
	IV Medication Needed.	
No	Source:	
	IV Medication Needed.	
	Target:	
	setObservationData(patientID, bloodProducts, dripProducts).	

Name	Association	Notes
Yes	Source:	
	IV Medication Needed.	
	Target:	
	Meds/Drips.	

Amount Needed (# of units)

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Blood Products.	
	Target:	
	Amount Needed (# of units).	
	Source:	
	Amount Needed (# of units).	
	Target:	
	Blood Product Needed.	

Amount Needed (# of units)

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Meds/Drips.	
	Target:	
	Amount Needed (# of units).	
	Source:	
	Amount Needed (# of units).	
	Target:	
	IV Medication Needed.	

Drug

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Name	Association	Notes
	Source:	
	Meds/Drips.	
	Target:	
	Drug.	
	Source:	
	Drug.	
	Target:	
	IV Medication Needed.	

Packed Red Blood Cells (PRBC), Fresh Frozen Plasmid (FFP), Platlets (Plt.)

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Blood Products.	
	Target:	
	Packed Red Blood Cells (PRBC), Fresh Frozen Plasmid	
	(FFP), Platlets (Plt.).	
	Source:	
	Packed Red Blood Cells (PRBC), Fresh Frozen Plasmid	
	(FFP), Platlets (Plt.).	
	Target:	
	Blood Product Needed.	

setOrders(patientID, deviceRequest)

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

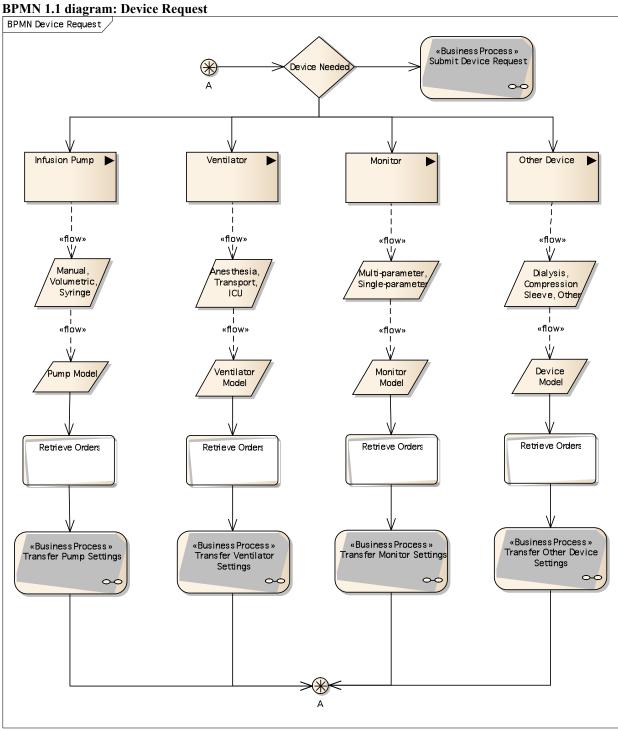
Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes: Device Request

Data Attributes

Name	Type	Notes
Infusion Pump Model	String	
Infusion Pump Type	String	
Infusion Pump, Get Orders	UnlimitedNatural	
Infusion Pump, Transfer Settings	UnlimitedNatural	
Monitor Model	String	
Monitor Type	String	
Monitor, Get Orders	UnlimitedNatural	
Monitor, Transfer Settings	UnlimitedNatural	
Other Devices	String	
Other Devices, Get Orders	UnlimitedNatural	
Other Devices, Model	String	
Other Devices, Transfer Settings	UnlimitedNatural	
Submit Device Request	UnlimitedNatural	
Ventillator Model	String	
Ventillator Type	String	
Ventillator, Get Orders	UnlimitedNatural	
Ventillator, Transfer Settings	UnlimitedNatural	

Name	Association	Notes
	Source:	
	setOrders(patientID, bloodRequest, dripRequest).	
	Target:	
	setOrders(patientID, deviceRequest).	
	Source:	
	setOrders(patientID, deviceRequest).	
	Target:	
	setISData(patientID, transfer, time, fromLocation,	
	toLocation).	



Retrieve Orders

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Created on 5/25/2011. Last modified on 5/25/2011. Detail:

Notes:

Connections

Name	Association	Notes
	Source:	
	Pump Model.	
	Target:	
	Retrieve Orders.	
	Source:	
	Retrieve Orders.	
	Target:	
	Transfer Pump Settings.	

Retrieve Orders

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Ventilator Model.	
	Target:	
	Retrieve Orders.	
	Source:	
	Retrieve Orders.	
	Target:	
	Transfer Ventilator Settings.	

Retrieve Orders

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Monitor Model.	
	Target:	
	Retrieve Orders.	
	Source:	
	Retrieve Orders.	
	Target:	
	Transfer Monitor Settings.	

Retrieve Orders

Database: <none>, Stereotype: «Activity», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Controlle		
Name	Association	Notes
	Source:	
	Device Model.	

Name	Association	Notes
	Target:	
	Retrieve Orders.	
	Source:	
	Retrieve Orders.	
	Target:	
	Transfer Other Device Settings.	

Submit Device Request

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

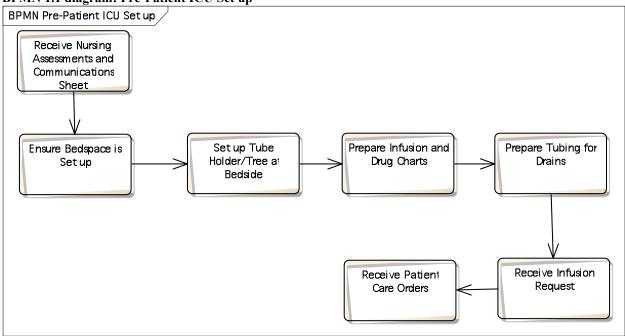
Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Device Needed.	
	Target:	
	Submit Device Request.	

BPMN 1.1 diagram: Pre-Patient ICU Set up



Transfer Monitor Settings

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	

Name	Association	Notes
	Retrieve Orders.	
	Target:	
	Transfer Monitor Settings.	
	Source:	
	Transfer Monitor Settings.	
	Target:	
	A.	

Data Flow diagram: Transfer Monitor Settings TO BE ADDED

dfd Transfer Monitor Settings	

Transfer Other Device Settings

<none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow Created on 5/25/2011. Last modified on 5/25/2011. Database:

Detail:

Notes:

Connections

Name	Association	Notes
ì	Source:	
l	Retrieve Orders.	
l	Target:	
l	Transfer Other Device Settings.	
	Source:	
l	Transfer Other Device Settings.	
l	Target:	
İ	A.	

Data Flow diagram: Transfer Other Device Settings TO BE ADDED

dfd Transfer Other Device Settings	

Transfer Pump Settings

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Retrieve Orders.	
	Target:	
	Transfer Pump Settings.	
	Source:	
	Transfer Pump Settings.	
	Target:	
	A.	

BPMN 1.1 diagram: Transfer Pump Settings

TO BE ADDED

TO DE ADDED	
BPMN Transfer Pump Settings	

Transfer Ventilator Settings

Database: <none>, Stereotype: «BusinessProcess», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Retrieve Orders.	
	Target:	
	Transfer Ventilator Settings.	
	Source:	
	Transfer Ventilator Settings.	
	Target:	
	A.	

BPMN 1.1 diagram: Transfer Ventilator Settings

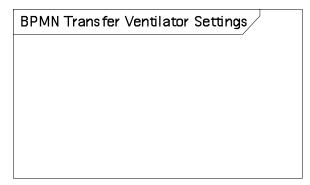


Figure 1 TO BE ADDED

Device Needed

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Device Needed.	
	Target:	
	Submit Device Request.	
	Source:	
	Device Needed.	
	Target:	
	Infusion Pump.	
	Source:	
	Device Needed.	
	Target:	
	Ventilator.	
	Source:	
	Device Needed.	
	Target:	
	Monitor.	
	Source:	
	Device Needed.	
	Target:	
	Other Device.	
	Source:	
	A.	
	Target:	
	Device Needed.	

Anesthesia, Transport, ICU

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Ventilator.	
	Target:	
	Anesthesia, Transport, ICU.	
	Source:	
	Anesthesia, Transport, ICU.	
	Target:	
	Ventilator Model.	

Device Model

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Dialysis, Compression Sleeve, Other.	
	Target:	
	Device Model.	
	Source:	
	Device Model.	
	Target:	
	Retrieve Orders.	

Dialysis, Compression Sleeve, Other

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Other Device.	
	Target:	
	Dialysis, Compression Sleeve, Other.	
	Source:	
	Dialysis, Compression Sleeve, Other.	
	Target:	
	Device Model.	

Manual, Volumetric, Syringe

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Infusion Pump.	
	Target:	
	Manual, Volumetric, Syringe.	

Name	Association	Notes
	Source:	
	Manual, Volumetric, Syringe.	
	Target:	
	Pump Model.	

Monitor Model

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Multi-parameter, Single-parameter.	
	Target:	
	Monitor Model.	
	Source:	
	Monitor Model.	
	Target:	
	Retrieve Orders.	

Multi-parameter, Single-parameter

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Monitor.	
	Target:	
	Multi-parameter, Single-parameter.	
	Source:	
	Multi-parameter, Single-parameter.	
	Target:	
	Monitor Model.	

Pump Model

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Manual, Volumetric, Syringe.	
	Target:	
	Pump Model.	
	Source:	
	Pump Model.	
	Target:	
	Retrieve Orders.	

Ventilator Model

Database: <none>, Stereotype: «information», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Anesthesia, Transport, ICU.	
	Target:	
	Ventilator Model.	
	Source:	
	Ventilator Model.	
	Target:	
	Retrieve Orders.	

Α

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow
Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Transfer Pump Settings.	
	Target:	
	A.	
	Source:	
	Transfer Ventilator Settings.	
	Target:	
	A.	
	Source:	
	Transfer Monitor Settings.	
	Target:	
	A.	
	Source:	
	Transfer Other Device Settings.	
	Target:	
	A.	

Α

Database: <none>, Stereotype: , Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	A.	
	Target:	
	Device Needed	

Begin General Care

Database: <none>, Stereotype: «EndEvent», Package: OR to ICU As Is Workflow

Detail: Created on 7/27/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	End Transfer.	
	Target:	
	Begin General Care.	

ICU Staff

Database: <none>, Stereotype: «StartEvent», Package: OR to ICU As Is Workflow

Detail: Created on 2/8/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	ICU Staff.	
	Target:	
	manualProcess: Pre-Patient ICU Set up.	
	Source:	
	<anonymous>.</anonymous>	
	Target:	
	ICU Staff.	

Patient in ICU

Database: <none>, Stereotype: «IntermediateEvent», Package: OR to ICU As Is Workflow

Detail: Created on 7/27/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	manualProcess: Patient in Transport.	
	Target:	
	Patient in ICU.	
	Source:	
	Patient in ICU.	
	Target:	
	manualProcess: Post Patient ICU Set-up.	

Patient in OR

Database: <none>, Stereotype: «StartEvent», Package: OR to ICU As Is Workflow

Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Patient in OR.	
	Target:	
	manualProcess: Transfer patient to ICU.	

Name	Association	Notes
	Source:	
	Patient in OR.	
	Target:	
	getISData(patientID, history).	
	Source:	
	<anonymous>.</anonymous>	
	Target:	
	Patient in OR.	

Arterial Lines Connected

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Arterial Lines Connected.	
	Target:	
	Right, Left.	
	Source:	
	Arterial Lines Connected.	
	Target:	
	Radial, Femoral.	

Blood Products

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Blood Products.	
	Target:	
	Packed Red Blood Cells (PRBC), Fresh Frozen Plasmid	
	(FFP), Platlets (Plt.).	
	Source:	
	Blood Products.	
	Target:	
	Amount Needed (# of units).	
Yes	Source:	
	Blood Product Needed.	
	Target:	
	Blood Products.	

Central Venous Lines Connected

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Name	Association	Notes

Name	Association	Notes
	Source:	
	Central Venous Lines Connected.	
	Target:	
	Right, Left.	
	Source:	
	Central Venous Lines Connected.	
	Target:	
	Internal Jugular (IJ), Subclavian (SC).	

Connected Disposable

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Connected Disposable.	
	Target:	
	Chest Tube, Epidural, Ventric, Spinal Drain, Bolts, Other.	
	Source:	
	Connected Disposable.	
	Target:	
	Right, Left.	
	Source:	
	Connected Disposable.	
	Target:	
	1, 2, 3, n.	
	Source:	
	Connected Disposable.	
	Target:	
	Used, Unused.	
	Source:	
	Connected Disposable.	
	Target:	
	Time device was put in.	
Yes	Source:	
	Another Disposable Connected?.	
	Target:	
	Connected Disposable.	

DNR Status

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 2/8/2012. Last modified on 2/8/2012.

Notes:

Name	Association	Notes
	Source:	
	DNR Status.	
	Target:	
	Family Contact or Representative.	
	Source:	

Name	Association	Notes
	Provider.	
	Target:	
	DNR Status.	
	Source:	
	DNR Status.	
	Target:	
	Status.	

Drugs

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Support Drugs.	
	Target:	
	Drugs.	
	Source:	
	Drugs.	
	Target:	
	Sedation, Intubation, Vasoactive, IV fluids, Antibiotics.	

Family Contact or Representative

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 2/8/2012. Last modified on 2/8/2012.

Notes:

Connections

Name	Association	Notes
	Source:	
	Family Contact or Representative.	
	Target:	
	Identify Diet Restrictions.	
	Source:	
	DNR Status.	
	Target:	
	Family Contact or Representative.	
	Source:	
	Family Contact or Representative.	
	Target:	
	Name, Phone Number, Relation.	

Identify Diet Restrictions

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Identify Diet Restrictions.	

Name	Association	Notes
	Target:	
	Previous Medical History.	
	Source:	
	Family Contact or Representative.	
	Target:	
	Identify Diet Restrictions.	

InformationItem1

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 2/8/2012. Last modified on 2/8/2012.

Notes:

Infusion Pump

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Infusion Pump.	
	Target:	
	Manual, Volumetric, Syringe.	
	Source:	
	Device Needed.	
	Target:	
	Infusion Pump.	

Meds/Drips

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Meds/Drips.	
	Target:	
	Drug.	
	Source:	
	Meds/Drips.	
	Target:	
	Amount Needed (# of units).	
Yes	Source:	
	IV Medication Needed.	
	Target:	
	Meds/Drips.	

Monitor

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Monitor.	
	Target:	
	Multi-parameter, Single-parameter.	
	Source:	
	Device Needed.	
	Target:	
	Monitor.	

On Ventilator

Database: <none>, Stereotype: «Gateway», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
No	Source:	
	On Ventilator.	
	Target:	
	X-ray Procedure.	
Yes	Source:	
	X-ray Needed.	
	Target:	
	On Ventilator.	
Yes	Source:	
	On Ventilator.	
	Target:	
	X-ray Vent Procedure.	

Other Device

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Other Device.	
	Target:	
	Dialysis, Compression Sleeve, Other.	
	Source:	
	Device Needed.	
	Target:	
	Other Device.	

PIC

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Name	Association	Notes
	Source:	
	PIC.	
	Target:	
	Right, Left.	

Past Hospitalization

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Previous Medical History.	
	Target:	
	Past Hospitalization.	
	Source:	
	Past Hospitalization.	
	Target:	
	Primary Language English?.	
	Source:	
	Past Hospitalization.	
	Target:	
	Past Hospitalizatios.	

Patient Consent Forms

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Primary Language English?.	
	Target:	
	Patient Consent Forms.	
	Source:	
	Find Translator.	
	Target:	
	Patient Consent Forms.	
	Source:	
	Patient Consent Forms.	
	Target:	
	Smoker.	
	Source:	
	Patient Consent Forms.	
	Target:	
	Surgery/Procedural, Anesthesia/Sedation, Blood,	
	Sterilization, Advance Directive, Belmont (Research).	

Patient Identification Information

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Patient Identification Information.	
	Target:	
	Name, Date of Birth, Sex, Weight, Height.	
	Source:	
	Patient Identification Information.	
	Target:	
	Provider.	

Previous Medical History

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Identify Diet Restrictions.	
	Target:	
	Previous Medical History.	
	Source:	
	Previous Medical History.	
	Target:	
	Past Hospitalization.	
	Source:	
	Previous Medical History.	
	Target:	
	Seizures, Hypertension, Mycardial Infarction, Congestive	
	Heart Failure, Cerebrovascular Accident, Transient Ischemic	
	Attack, Cardiac Disease, Renal Disease, Liver Disease,	
	Infectious Diseases, Chronic Obstructive Pulmonary Disease,	
	Diabetes, Asthma, Cance.	

Provider

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 2/8/2012. Last modified on 2/8/2012.

Notes:

Name	Association	Notes
	Source:	
	Provider.	
	Target:	
	Physician, Anesthesiologist, Surgeon, etc	
	Source:	
	Patient Identification Information.	
	Target:	
	Provider.	
	Source:	
	Provider.	

Name	Association	Notes
	Target:	
	DNR Status.	

Pulmonary Artery Lines Connected

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Pulmonary Artery Lines Connected.	
	Target:	
	Right, Left.	
	Source:	
	Pulmonary Artery Lines Connected.	
	Target:	
	Internal Jugular (IJ), Subclavian (SC).	
	Source:	
	Pulmonary Artery Lines Connected.	
	Target:	
	Paced, Not Paced.	

Ventilator

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	Ventilator.	
	Target:	
	Anesthesia, Transport, ICU.	
	Source:	
	Device Needed.	
	Target:	
	Ventilator.	

Vitals

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 5/25/2011.

Notes:

Name	Association	Notes
	Source:	
	Monitor Patient.	
	Target:	
	Vitals.	
	Source:	
	Vitals.	
	Target:	

Name	Association	Notes
	ECG, RR< IBP< NIBP, O2 Sat., EtCO2.	

X-ray Needed

Database: <none>, Stereotype: «Gateway», Package: OR to ICU As Is Workflow

Detail: Created on 6/2/2011. Last modified on 6/2/2011.

Notes:

Connections

Name	Association	Notes
	Source:	
	manualProcess: Clinical Examination.	
	Target:	
	X-ray Needed.	
No	Source:	
	X-ray Needed.	
	Target:	
	End Transfer.	
Yes	Source:	
	X-ray Needed.	
	Target:	
	On Ventilator.	

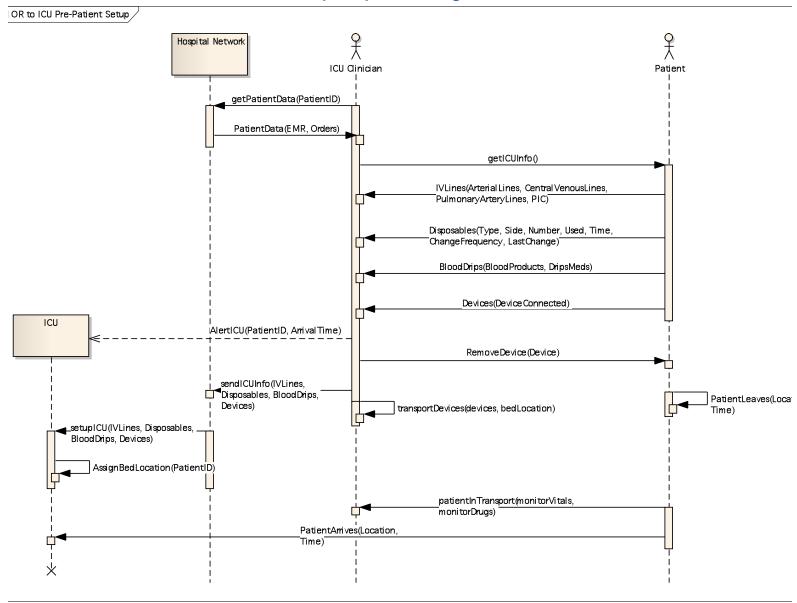
getISData(patientID); getOrders(patientID)

Database: Java, Stereotype: , Package: OR to ICU As Is Workflow Detail: Created on 5/25/2011. Last modified on 7/27/2011.

Notes: Transmit Patient Information to ICU

Name	Association	Notes
	Source:	
	manualProcess: Pre-Patient ICU Set up.	
	Target:	
	getISData(patientID); getOrders(patientID).	
	Source:	
	getISData(patientID); getOrders(patientID).	
	Target:	
	manualProcess: Nurse Assigns ICU bed Location.	

A. OR to Pre-Patient Setup Sequence Diagram



B. Transport to ICU Post-Patient Setup Sequence Diagram

