

Inpatient/ED Laboratory Workflows

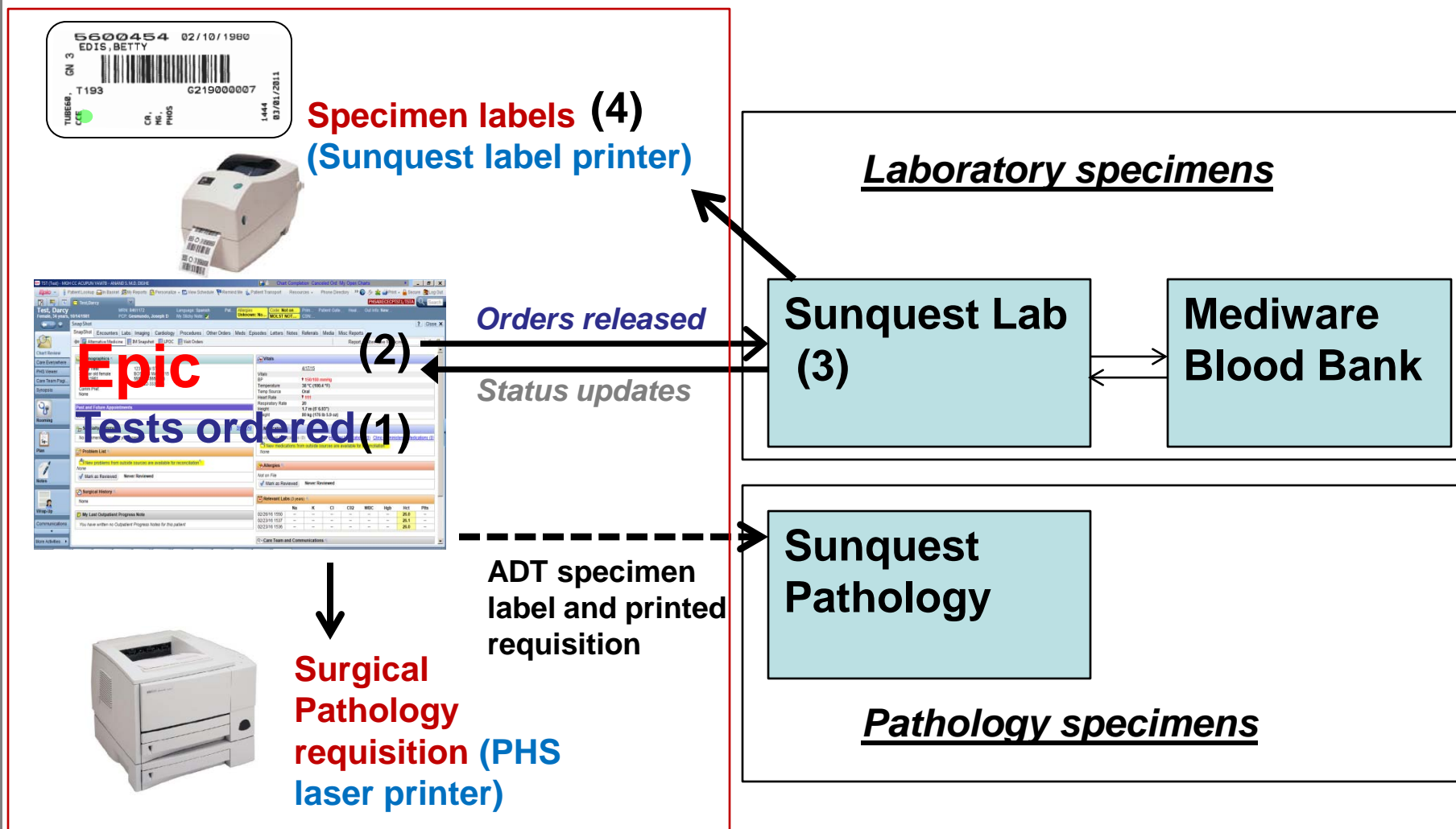
AGENDA

- Background
- Demo and Q&A
 - Inpatient
 - Emergency dept
 - Ordering, collecting, transporting specimens
 - Clinical labs, pathology, point of care
- Resources for go live

April 2, 2016 Workflows

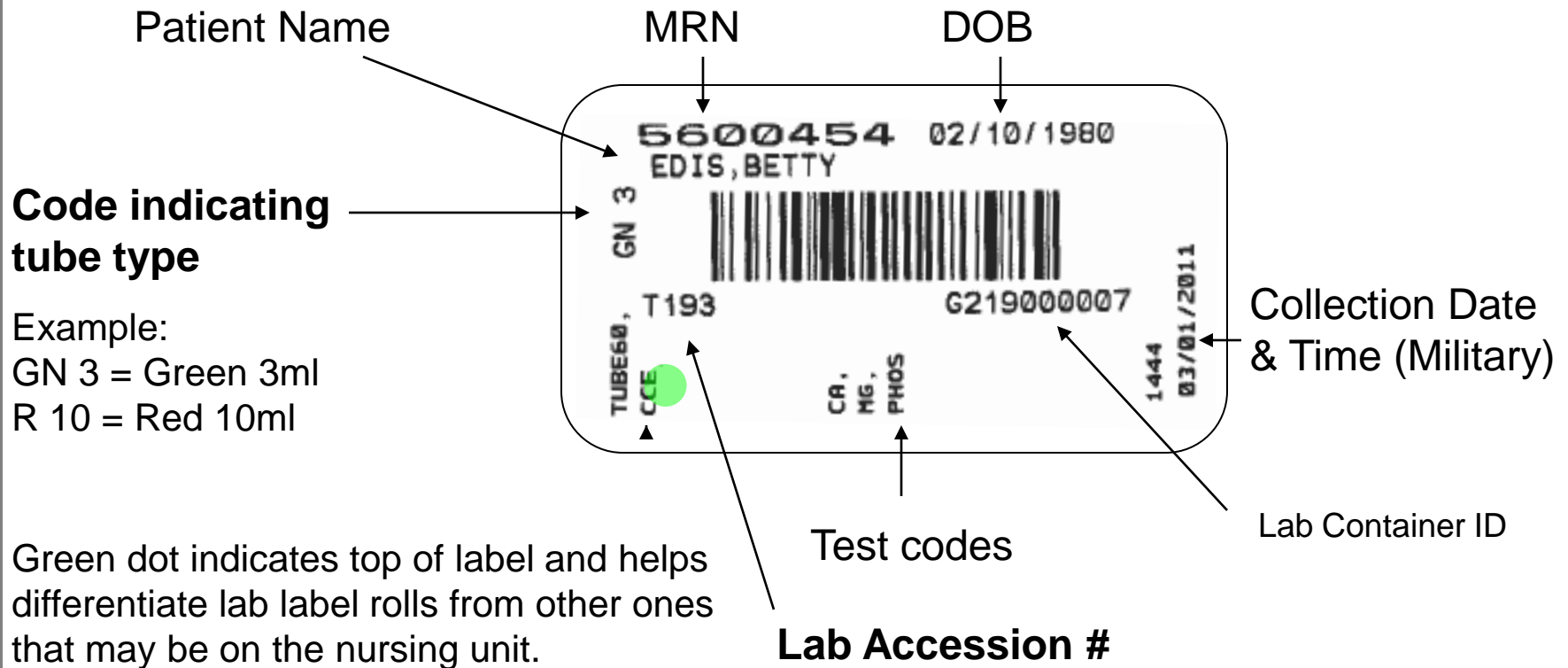
Laboratory specimen = Chem, heme, sendouts, micro, blood bank

Pathology specimen = Pap smears, cytology, biopsies



Biggest Change:

Most lab requisitions replaced with Lab Labels (core, micro, sendouts, blood bank)

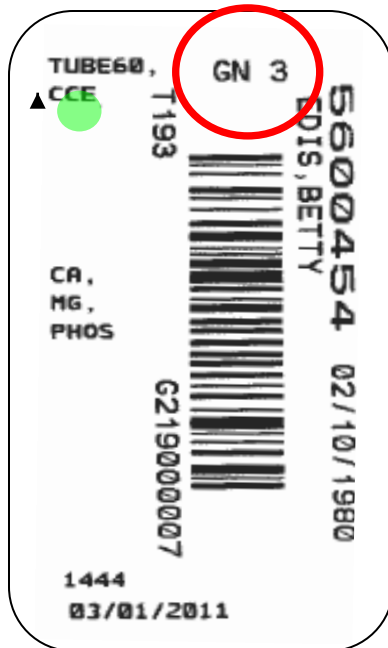


Changes from POE-Lab Express

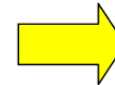
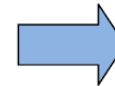
- Only a **single batch print for in AM orders** for most units
- **All other labels will be printed on demand**
 - On demand printing enables combining, discontinuing and modifying orders right up until draw time
- **No more “POE requisitions”** PRN orders, microbiology orders, timed orders, pedi orders, and blood bank orders, can all be printed to lab labels
- Pediatric units will use the same labels as adults




Pediatric Tube Labeling

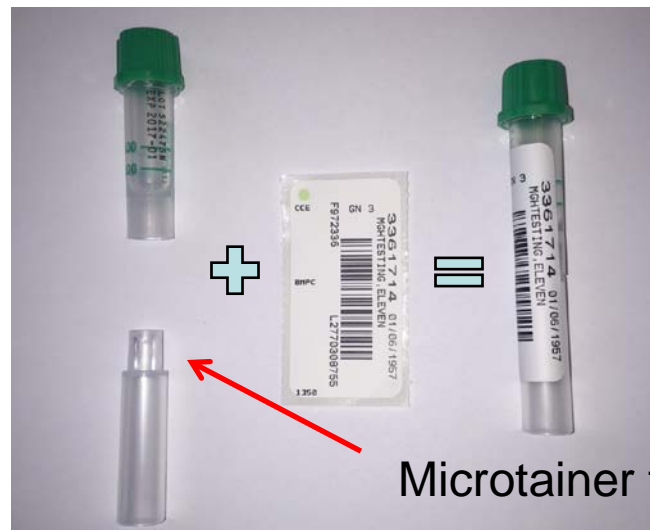
Epic Requisition Tube Codes and Pediatric Crosswalk (rev.12/5/2015)



REQ LABEL TUBE CODE	TUBE TYPE
B 3	3 ml Blue
B 3 I	3 ml Blue on ICE
GD 5	5 ml Gold
GD 5 I	5 ml Gold on ICE
GD 5 F	5 ml Gold in FOIL
GN 10	10 ml Green
GN 3	3 ml Green
GN 3 I	3 ml Green on ICE
GY 2	2 ml Grav



CORRESPONDING PEDIATRIC/MICROTAINER TUBE	
	1.8 ml Blue
	Red microtainer
	Green microtainer



Microtainer tube extender

Batch Prints for “In AM” labs

- Two or more printers at each care unit.
- One printer used for the **single batch print for in AM orders**. Batch print times adjustable by unit but generally approximately 1 AM.
- **Other printers will be used for “On Demand” printing** from Epic. ICUs and ED may have more printers associated with various PCs.
- Labels printed during in AM batch print will have collect time defaulted as 0600. However, these can be drawn any time after printed.
- **Person collecting the in AM specimen MUST document collection date and time on the specimen bag**



TUBE68, GN 3
CCE T193
CR, MG, PHOS
5600454 02/10/1980
EDIS, BETTY
G21900006
0600
04/02/2016



MASSACHUSETTS GENERAL HOSPITAL
PATHOLOGY SERVICE
USE THIS BAG FOR ALL SPECIMENS EXCEPT MICRO

Date Collected ____ / ____ / ____ AM
Time Collected ____ : ____ PM

1. Place specimen(s) in zip-lock compartment.
2. Seal by sliding your thumb and forefinger across the zipper.
3. Recheck zip-lock for proper closure.
4. When using a requisition, fold and insert into outside pocket.

84496 (7/07)



On Demand Printing from Epic

- On Demand printing from Epic used for all laboratory specimens that are **NOT** ordered as IN AM.
 - Used for tests to be drawn at a specific time, STAT, Now, timed draws, PRN (“As Needed”), etc
- Printed from **Nursing Worklist (below)** or OA **Print Lab Labels** report

The screenshot displays the Epic interface for a patient named Labdemo, Test, M, 31 years, 02/23/1985. The patient is inpatient, and the current shift is 02/26/16 2301-0701. The worklist shows three tasks under the heading 'MULTISTEP COLLECTION', all with a priority of 'Routine'. Each task has a 'Print Label' button next to it, which is highlighted by a red box. The tasks are:

Time	Task	Priority	Done
0538	Print Label for Basic metabolic panel	Routine	<input type="button" value="Print Label"/>
0538	Print Label for CBC and differential	Routine	<input type="button" value="Print Label"/>
0538	Print Label for PT-INR	Routine	<input type="button" value="Print Label"/>
None			
PRN	User Task: Wound Care		<input type="button" value="Done"/>

On Demand Printing from Epic

- After clicking “Print Label” select orders that you wish to print
- Will be able to print all labs in the past that have not been collected as well as any labs with collection times in next 6-8 hours

Labdemo, Test #8474081 - Print Label for Basic metabolic panel

Please provide the following information:

No display items configured for this procedure

Specimens to Collect by Type

- ☒ **Blood**
 - Basic metabolic panel** - Scheduled for Sat Feb 27, 2016 5:38 AM
 - ☒ Ordered: Routine, On Sat 2/27/16 at 0538
The basic metabolic panel consists of the following tests: Na, K, Cl, CO2 (bicarb), BUN, Glucose, Creatinine, and Calcium.
 - CBC and differential** - Scheduled for Sat Feb 27, 2016 5:38 AM
 - ☒ Ordered: Routine, On Sat 2/27/16 at 0538
In most non-intensive settings, differentials should only be ordered once every 72 hours.
 - PT-INR** - Scheduled for Sat Feb 27, 2016 5:38 AM
 - ☒ Ordered: Routine, On Sat 2/27/16 at 0538

Print Label **Cancel**

On Demand Printing from Epic

- Print with header label
- Container label used to label tube
- Container label indicates Collection Time (time label was printed)
- **NO need to write collect date/time on bag if collected within 15 minutes of label print time.**

Container Label




**PUT ON
CONTAINER**

Header Label



TOSS (in
accord with
PHI policy)



 MASSACHUSETTS GENERAL HOSPITAL	
PATHOLOGY SERVICE	
USE THIS BAG FOR ALL SPECIMENS EXCEPT MICRO	
Date Collected _____ / _____	AM
Time Collected _____	PM
<ol style="list-style-type: none">1. Place specimen(s) in zip-lock compartment.2. Seal by sliding your thumb and forefinger across the zipper.3. Recheck zip-lock for proper closure.4. When using a requisition, fold and insert into outside pocket.	
84498 (7/07)	

On Demand Printing from Epic

- After labels print and specimen collected you can return to worklist and document that blood was collected (and who collected)
- **Done** task must be completed before tubes received in the lab otherwise button will not be available.

TST (Test) - MGH MEDICINE - NURSE INPATIENT

Chart Completion My Incomplete

Epic Patient Lookup My Reports View Schedule Procedural Reports Bed Board Resources Phone Directory

Labdemo, Test

Labdemo, Test
M, 31 years, 02/23/1985

Adm Date: 2/23/2016
Room/Bed: E1026-E10...

Class: Inpatient
Team: John Elliott...

Service: Medi...
MRN: 8474081
CSN: 2000460415

Allergy: Unknown:...
Code: Not on file

Wt: None

Work List Tasks - Last Refresh: 0548

Current Shift 02/26/16 2301-0701 Start Date: 2/26/2016 Overdue

Time View Filters: My Discipline Show: ☐ Completed ☐ Discontinued

List view: ☐ Category ☐ Discipline ☒ Documentation ☐ Priority ☐ Task ☐ Time Choose Columns

Time	Task	Priority	Done
MULTISTEP COLLECTION			
0538	Basic metabolic panel	Routine	Done
0538	CBC and differential	Routine	Done
0538	PT-INR	Routine	Done
None			
PRN	User Task: Wound Care		Done

On Demand Printing from Epic

- Defaults to logged in user, can change who collected
- Can select all labs that were collected

Labdemo, Test #8474081 - Basic metabolic panel

Please provide the following information:

Collected By:

Specimens to Collect by Type

☒ **Blood**

Basic metabolic panel - Scheduled for Sat Feb 27, 2016 5:38 AM

☒ Ordered: Routine, On Sat 2/27/16 at 0538
The basic metabolic panel consists of the following tests: Na, K, Cl, CO2 (bicarb), BUN, Glucose, Creatinine, and Calcium.

CBC and differential - Scheduled for Sat Feb 27, 2016 5:38 AM

☒ Ordered: Routine, On Sat 2/27/16 at 0538
In most non-intensive settings, differentials should only be ordered once every 72 hours.

☒ **PT-INR** - Scheduled for Sat Feb 27, 2016 5:38 AM

☒ Ordered: Routine, On Sat 2/27/16 at 0538

Done Cancel

Microbiology Testing

- Header label indicates to put microbiology sample in **blue microbiology bag**
- Header label provides source and specimen description information as entered by provider (e.g. Pleural fluid)
- Header label should be thrown out after specimen labeled with container label

Container Label

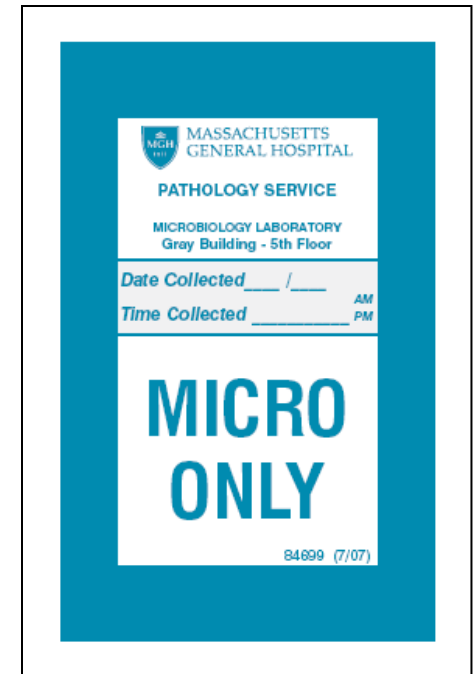


**PUT ON
CONTAINER**

Header Label



TOSS (in
accord with
PHI policy)



Blood bank testing labeling

- Signature and date/time still **REQUIRED**
- **CHANGE**: Will use new base label where lab label will be affixed
- No paper requisition needs to accompany specimen

Affix Sunquest lab label
HERE

Phlebotomist _____ Date _____ Time _____

BLOOD BANK SAMPLE TO GRAY 2
BLOOD TRANSFUSION SERVICE



5600454 02/10/1980
EDIS, BETTY

P 10

TUBE60, T193

CCE

TYPSCR

G219000007

1444 03/01/2011

5600454 02/10/1980
EDIS, BETTY

P 10

TUBE60, T193

CCE

TYPSCR

G219000007

1444 03/01/2011

Phlebotomist _____ Date _____ Time _____

BLOOD BANK SAMPLE TO GRAY 2
BLOOD TRANSFUSION SERVICE

PRN or “As Needed” test workflow

- Order test with **Frequency of “As Needed”** and the number of **Occurrences** needed. Put in comments the reason to draw (e.g. For PTT, “PRN changes in heparin dose”).
- Requires Release:** A PRN order will NOT appear on the nursing worklist or OA print labels report unless it is first released
- Must release PRN order in nursing **Active Orders report**
- Once released, the orders are available on the **Nursing Worklist** or the **OA Print Lab Labels** and can be printed via the Print Label task.

PTT

Priority: ☐ Routine ☒ STAT ☐ Routine ☐ Timed

Frequency:

For: ☒ Occurrences ☐ Hours ☐ Days ☐ Weeks

Starting: At:

Starting: Today 1025 Until Specified [Show Additional Options](#)

There are no scheduled times based on the current order parameters.

Reference links: 1. [Click for test details](#)

Comments (F6): [Click to add text](#)

Summary

Overview Labs **Active Orders** ☒ Report: Active Orders

PRN Lab Orders
(24h ago through 24h from now)

Start

Unscheduled > PTT As needed (0 of 3 released) [Release Comments: PRN heparin dosing changes](#)

ADT-Related Orders

Nurse Snapshot Configuration [Collapse All](#) | [Exp](#)

Add On Testing

- Order in Epic similar to any other lab order
- Three lab add on orders:
 - Lab Add On
 - Microbiology Add On
 - Blood bank Add On
- Order requires entry of contact information and tests requested
- On sign, the order is sent to lab system and also prints at a designated laser printer in the lab
- If lab cannot perform add on the care unit will be contacted

Lab Add On: ✓ Accept ✗ Cancel

Reference Links:

Questions:

Prompt	Answer
1. Phone/Pager:	61234
2. Tests to be Added	TSH on morning draw
Single response	

Process Inst:

Specimens are held for a limited time and only certain tests may be added on.

This screen should be ONLY USED to add a test to a Core laboratory (chemistry, hematology, coagulation, immunology, diabetes) specimen that has ALREADY BEEN RECEIVED by the Lab.

Comments (F6): [Click to add text](#)

✗ Next Required Link Order ✓ Accept ✗ Cancel

Lab Add On screen

Miscellaneous Test Workflow

- Most inpatient tests will be on facility list (1,600 orders)
- Two orders:
Miscellaneous Lab Test (Core lab, including sendouts) and **Miscellaneous Micro Test**
- Need to enter **Tests requested** and **Tube type**
- Will generate single label with MISC as the tube type

Miscellaneous Micro test ✓ Accept ✗ Cancel

Priority:

Frequency:

Starting: At:

First Occurrence: **Today 1606**

Scheduled Times: [Hide Schedule](#)

Process Inst:

NOTE: ONLY orders to be performed in the microbiology lab should be entered here. Most lab tests performed in-house and at sendout labs can be found via searching the Facility list. All miscellaneous test requests will be monitored. If known, please enter the container or tube type as well as the tests requested.

Questions:

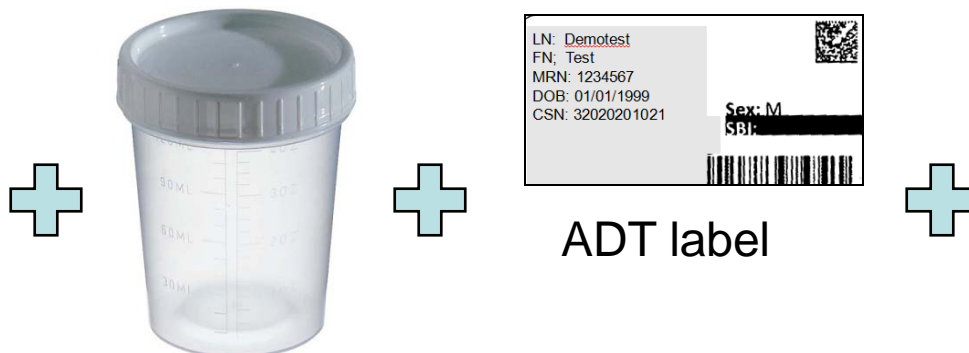
Prompt	Answer
1. Tests requested	<input type="text"/>
2. Specimen/Tube type	<input type="text"/>
Single response	<input type="text"/>


Comments (F6): [Click to add text](#)

✗ Next Required ✓ Accept ✗ Cancel

Anatomic Pathology

- Searched for in Epic similar to lab tests
- **8 different orders** (e.g. anatomic pathology, pap smear, non-GYN cytology, dermatopathology, flow cytometry)
- Upon signing, **Print Requisition** task will be created on the Nursing worklist. Orders will remain active and may be edited until the requisition is printed.
- **Specimen container(s) labeled with ADT labels**
- Send laser printed requisition plus ADT labeled container to pathology lab in **clear bag**

[illegible]

		MASSACHUSETTS GENERAL HOSPITAL	
PATHOLOGY SERVICE			
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Date Collected _____ / _____		AM	
Time Collected _____		PM	
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		84498 (7/07)	

Clear bag

Point of Care Enter/Edit Results

- Once POC test is ordered, Enter/Edit Results can be used to document results
- Accessible via the Work List

The screenshot displays the Epic EHR interface for a patient named 'Labdemo, Test' (M, 31 years, 02/23/1985). The patient's admission date is 2/23/2016, and they are in the 'Inpatient' class. The 'Work List Tasks' section shows a task for 'POCT Occult Blood Stool' (Routine) with a 'Done' button and a red box highlighting the 'Enter/Edit Results' icon (a blue arrow pointing to a pencil). The interface also includes a 'Current Shift' section with the date '02/27/16 1501-2301' and a 'Start Date' of '2/27/2016'. The 'Work List' section is active, showing a list of tasks with columns for 'Time', 'Task', 'Priority', and 'Done'. The task 'POCT Occult Blood Stool' is listed with a 'Routine' priority and a 'Done' button. The 'Enter/Edit Results' icon is highlighted with a red box.

Time	Task	Priority	Done
1506	POCT Occult Blood Stool	Routine	Done
None	User Task: Wound Care		Done

Point of Care Enter/Edit Results

Enter/Edit Results

Filter Cancel Order Reflex Order Edit Scan Dictation Media Manager Ext Result

Filters: Outstanding ECG, Point of Care Testing ordered on or after 12/20/2015 (1)

No.	Test	Code Type	Order Date	Auth. MD	Order Status
1669192	POCT OCCULT BLOOD STOOL, GUA	Custom	03/19/2016	DIGHE, ANAND	Ordered

Specimen

Type:

Collected by: DIGHE, ANAND S

Collection date: 3/19/2016

Collection time: 11:41 PM

Resulting Lab

Lab name:

Technician:

Providers

Billing: DIGHE, ANAND S [1003]

Resulting:

Results Message

Recipient:

☒ Send results

Components Sensitivities Narrative Impression

Component	Value	Flags	Low	High	Range	Units	Comment
FECAL OCCULT BLD [58000	Positive, Inter	Abnormal				Negative	

Record Select

Search: mgh poc

%	ID	Name
	258	MGH POCT SPECIAL FUNCTION LAB GROUPS 1
	259	MGH CHC POCT

2 records total, all records loaded.

Accept Cancel

Result

Date: 3/19/2016

Time: 11:41 PM

Abnormal: Abnormal

Status: Final

Accept/Next

Accept Cancel

- **Resulting lab** (i.e. where testing performed) is a regulatory requirement
- For MGH Inpatient **Resulting Lab** = MGH POCT SPECIAL FUNCTION LAB GROUPS 1 & 2 [258]
- Once you enter this once you can just type = in field for future patients

Comments to the Laboratory


- Comments to the laboratory can be entered during the Epic ordering process using the comment field of the order details screen
- **Rarely**, comments may need to be entered at the time of collection. For these comments affix a Header label or ADT label to a blank piece of paper and write the comment on the paper. Send to lab along with tube in specimen bag

Container Label



Header Label



 MASSACHUSETTS GENERAL HOSPITAL	
PATHOLOGY SERVICE	
USE THIS BAG FOR ALL SPECIMENS EXCEPT MICRO	
Date Collected _____ / _____	AM
Time Collected _____	PM
<ol style="list-style-type: none">1. Place specimen(s) in zip-lock compartment.2. Seal by sliding your thumb and forefinger across the zipper.3. Recheck zip-lock for proper closure.4. When using a requisition, fold and insert into outside pocket.	
84496 (7/07)	

Issues: Unable to Draw All Tubes

- If unable to draw all tubes of an accession (group of tubes with common header label) ONLY send the tubes that were drawn
- **Do not send “extra labels” in bag**
- In some instances the tests from the label that was not sent may be able to be performed on the tubes that were received. If this is not possible, tests that were not able to be drawn on that accession will be credited.
- If the label/tube that was not drawn is sent later, the lab will create a new order using the information from the order that was credited earlier

Resources for go live

- MGH Lab Handbook <http://mghlabtest.partners.org/EPIC.htm>
- Epic Dashboard Learning Home

MASSACHUSETTS GENERAL HOSPITAL PATHOLOGY SERVICE LABORATORY HANDBOOK

Home Lab Policies Tubes and Reqs **Pneumatic Tube** Critical Values Contact Help

EPIC Instructions and Tip Sheets

Click to search for a lab test: [MGH Test Catalog](#)

Interim Lab Workflows for Ambulatory Practices

- [Interim Specimen Collection](#) (Tip Sheet)
- [Interim Workflow for Lab Orders](#) (Tip Sheet)
- [Interim Workflow: How to Order Laboratory Tests](#) (Tip Sheet)
- [Lab Collected Specimen Guide](#)
- [Clinic Collected Specimen Guide](#)
- [Laboratory Training Manual for Providers](#) (Training Manual)

Tip Sheets

- [How to Order Ambulatory Outpatient Pathology Reviews](#)
- [How to Order Ambulatory Outpatient Dermopathology Specimens](#)
- [How to Reprint a Clinical Pathology Requisition](#)
- [How to Reprint a Anatomical Pathology Requisition](#)
- [Using Standing Orders](#)
- [How to Cancel Standing Orders](#)

Specimen Collection Guides

- [Requisition Tube Codes and Pediatric Crosswalk](#)
- [General Guidelines for Tube Collection](#)

Training Manuals

- [Anatomic Pathology Ordering Ambulatory](#)