

# Adopting a Continuous Quality Improvement Mindset: Laboratory Documents

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**MARION COUNTY**  
**PUBLIC**  
**HEALTH**  
**DEPARTMENT**

**Prevent. Promote. Protect.**

# Overview

## 2 examples of QI

- Reformatting Policies and Procedures using CLSI GP2-A5
  - for document creation, organization
- Streamlining Policies and Procedures management and review
  - Adopting a software platform called DKT OnBase

# New *Manual* Approach to P&P

Reformatting Policies and Procedures using CLSI GP2-A5

- Based on Clinical and Laboratory Standards Institute (CLSI) document: GP2-A5. Laboratory Documents: Development and Control; Approved Guideline-Fifth Edition

“Written procedures should encompass a single task from start to finish. Therefore, it makes sense to write separate instructions for tasks that are performed at different times by different people.”



# Why change formats?

- They were based on the old NCCLS format, and contained irrelevant information
  - Impractical as work-aids or as training documents
  - Were not process-based
  - Looked at once/year
- Some of our SOPs ran 100s of pages long
- Were organized alphabetically (not in work-order) so difficult to use as reference

# Elements in the new Procedure Manual

- Table of Contents
- Process Flowchart
- Procedure Documents
- Related Documents
- References
- Appendices/Attachments

# Elements in the new Procedure Manual

- Table of Contents
- Process Flowchart
- **Procedure Documents**
- Related Documents
- References
- Appendices/Attachments

# Elements in the new Workflow Procedure (formerly SOP)

- Corporate Header
- Purpose
- Process Flowchart/Table (if needed)
- Instructions
- Related Documents

- **HHC Header**
  - Title
  - Author
  - Approval
  - Revision History
  - Storage Location
- **Purpose**
  - Succinct
- **Process Flowchart/Table**
  - We use Visio
  - Limited # of Shapes
- **Instructions**
  - In order of operations
  - Plain command language
  - Screen shots and images where appropriate
  - Tables are even better
- **Related Documents**
  - Troubleshooting guides
  - Manufacturer product literature
- **References**
  - Procedures do not need references
  - National Guidelines
  - Applicable regulations
- **Appendices/Attachments**
  - Examples of Completed Form



, Tags



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# EXAMPLE-DIRECT PRINTING LAB RESULTS TO MULTI-FUNCTIONAL DEVICE PRINTERS



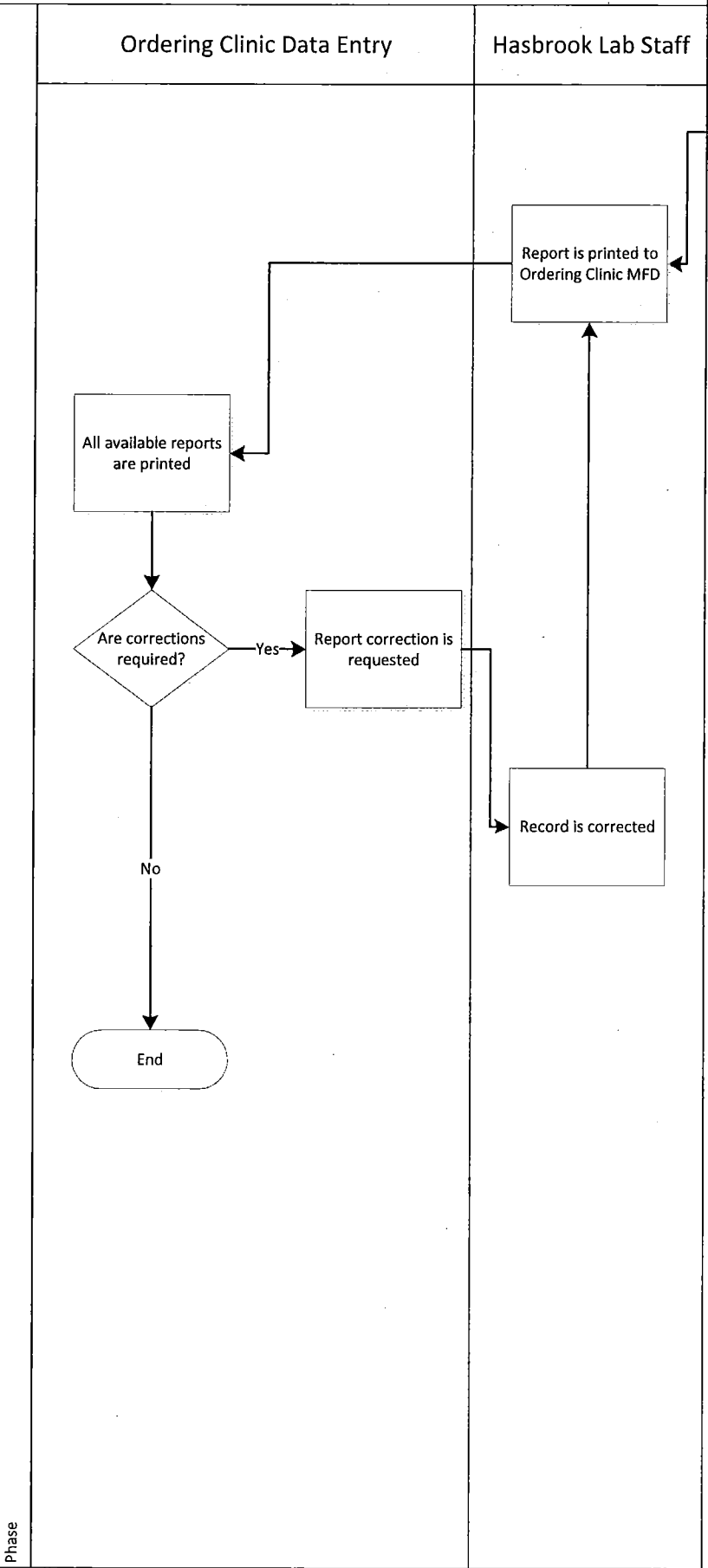
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s:\laboratory\clinical testing\hasbrook\hasbrook procedures\current procedures new filing system\printing to mfd table of contents\_07.03.2012.docx

*B2V*  
*3 July 2012*

Direct Printing from Hasbrook Lab to Ordering Clinic Multi-Functional Device (MFD)



Phase

*BLW 03 July 2012*

<b>PPROCEDURE</b>	<b>No. 5.P.4727a</b>
<b>SUBJECT:</b> Printing Results to an Ordering Clinic on Multifunctional Device Process Map ref (Report is printed to Ordering Clinic MFD)	<b>Effective:</b> 07.03.2012 <b>Reviewed:</b> 07.02.2012 <b>Revised:</b> NA
<b>APPROVED:</b> <i>Bonny Lewis Van (PhD)</i> Bonny Lewis Van, PhD, FACB. Laboratory Director	<b>Replaces:</b> New
<b>DATE:</b> <i>3 July 2012</i>	
s:\labora~1\clinic~1\hasbrook\hasbro~1\curren~2\direct~1.201\5p4720~1.201\5.p.4727a_printin g results to mfd_07.03.2012.docx	

**Summary**

The purpose of this procedure is to provide instructions on how to print Clinical Result reports directly to a multifunctional device at an ordering site using locked printing. This procedure replaces the previous process, in which hard-copy Clinical Reports were hand-delivered via a courier.

**Required Information:**

User ID: HSBRPTS

1. Double-click on CREV Queue in Batching.

Queue	Rule	Description	Count	Min Due Date	Min Hold Date
NGON	ANALYTICAL	PROBLEM! Cell LIMS ADMIN	14	04/12/12	04/13/12
UNRP	ADMIN	Worklist for administrative	1	03/05/12	
MSV	GCMS5242-W	EPA 524.2 VOA Analysis	6	06/20/12	06/28/12
WETC	ENVT_CHECK	Environmental Checks	5	05/24/12	
WETP	1801-W	E180.1,Turbidity Check,JCP(MS)	4	06/26/12	12/15/12
WETP	4214-FILT	MCHD Herbicide Filtration	12	06/26/12	06/26/12
DIGM	4205-DDIG	4205 DIGESTION,ICP-MS,DUST	586	05/31/12	10/07/12
DIGM	4205-SDIG	4205 DIGESTION,ICP-MS,SOIL	10	06/14/12	10/07/12
ICPM	ICPM-2008	ICPMS 200.8 Analysis	1	06/29/12	12/15/12
ICPM	ICPM-2008Q	ICPMS 200.8 Analysis (QC Req)	7	07/13/12	12/14/12
ICPM	PB2008-ENV	ICPMS 200.8 Analysis Env't Pb	166	05/25/12	10/30/12
IC	IC-3000	IC 300.0 Analysis	10	06/20/12	06/20/12
IC	IC-3007	IC 300.7 Analysis	7	07/17/12	07/17/12
IC	IC4214-W	MCHD Herbicide Analysis	2	07/05/12	07/12/12
BREV	ADMIN	Worklist for administrative	3	06/21/12	
<b>CREV</b>	CLIN_REV	<b>Clinical Final Review</b>	<b>56</b>	<b>06/20/12</b>	
FREV	ADMIN	Worklist for administrative	2	06/22/12	
WREV	ADMIN	Worklist for administrative	1	06/22/12	

2. Clear selections. Scroll to the right and view Client ID.

Open Schedules for Rule

Queue: CREV Rule: CLIN\_REV Clinical Final Review

Min Batch Size: 1 Max Batch Size: 60 Number Selected: 56

Workorder	Schedule	Type	A	Folder	Client ID	Profile	Due Date	Hold De
<input checked="" type="checkbox"/> M1226712	2621812	CL	A	060712-Pb	Foreign Born	188	06/20/12 15:05:00	
<input checked="" type="checkbox"/> M200627	2621868	CL	A		PHL	205	06/20/12 15:31:00	
<input checked="" type="checkbox"/> M1226573	2621887	CL	A	061912-AM	Urban League	241	06/20/12 15:49:00	
<input checked="" type="checkbox"/> M1226574	2621890	CL	A	061912-AM	Urban League	241	06/20/12 15:49:00	
<input checked="" type="checkbox"/> M1226575	2621893	CL	A	061912-AM	Urban League	241	06/20/12 15:49:00	
<input checked="" type="checkbox"/> M1226576	2621896	CL	A	061912-AM	Urban League	241	06/20/12 15:49:00	
<input checked="" type="checkbox"/> M1226577	2621899	CL	A	061912-AM	Urban League	241	06/20/12 15:49:00	
<input checked="" type="checkbox"/> M1226709	2621902	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226710	2621905	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226711	2621908	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226712	2621911	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226713	2621914	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226714	2621917	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226715	2621920	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226716	2621923	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226717	2621926	CL	A	062012-AM	Damien Cntr	211	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226731	2621932	CL	A	062012-AM	PHC	100	06/20/12 15:50:00	
<input checked="" type="checkbox"/> M1226771	2621946	CL	A	062012-AM	Urban League	241	06/20/12 15:50:00	

3. Using the checkboxes on the right; select the appropriate Clients IDs (Table I).

4. Click on Build Batch. Click on Save.

Open Schedules for Rule

Queue: CREV Rule: CLIN\_REV Clinical Final Review

Min Batch Size: 1 Max Batch Size: 60 Number Selected: 56

Workorder	Schedule	Type	A	Folder	Client ID	Profile	Due Date	Hold De
<input checked="" type="checkbox"/> M1226712	2621812	CL	A	060712-Pb	Foreign Born	188	06/20/12 15:05:00	
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<input checked="" type="checkbox"/> M1226574	2621890	CL	A	061912-AM	Urban League	241	06/20/12 15:49:00	
<input checked="" type="checkbox"/> M1226575	2621893	CL	A	061912-AM	Urban League	241	06/20/12 15:49:00	

5. Post the Batch by going to Operations → Posting → By Batch. Enter the Run Date. Save.

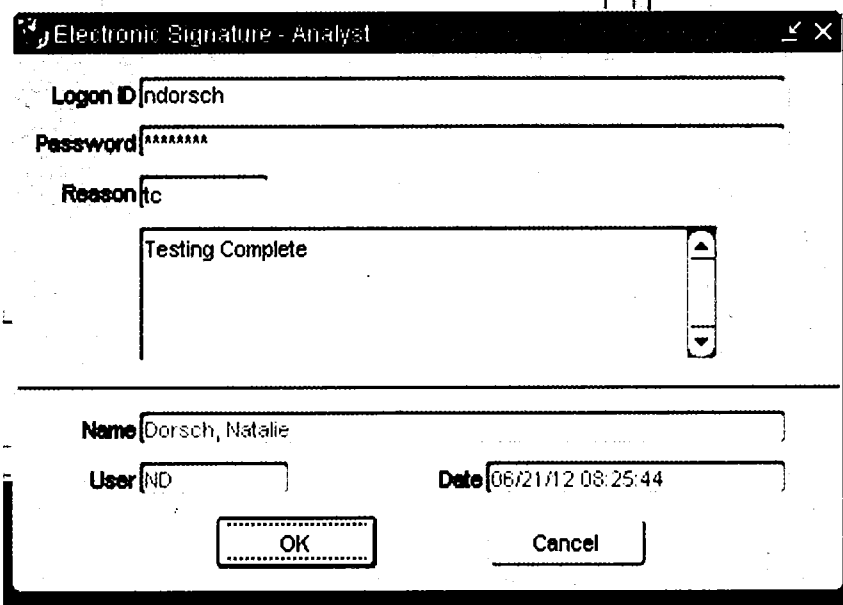
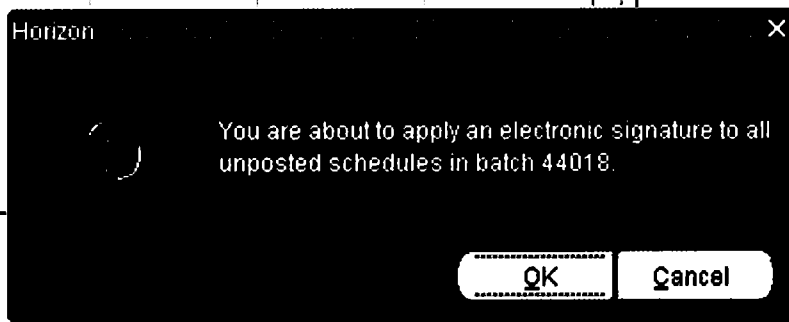
Batch Posting

Queue: FREV Rule: ADMIN Batch: 5505

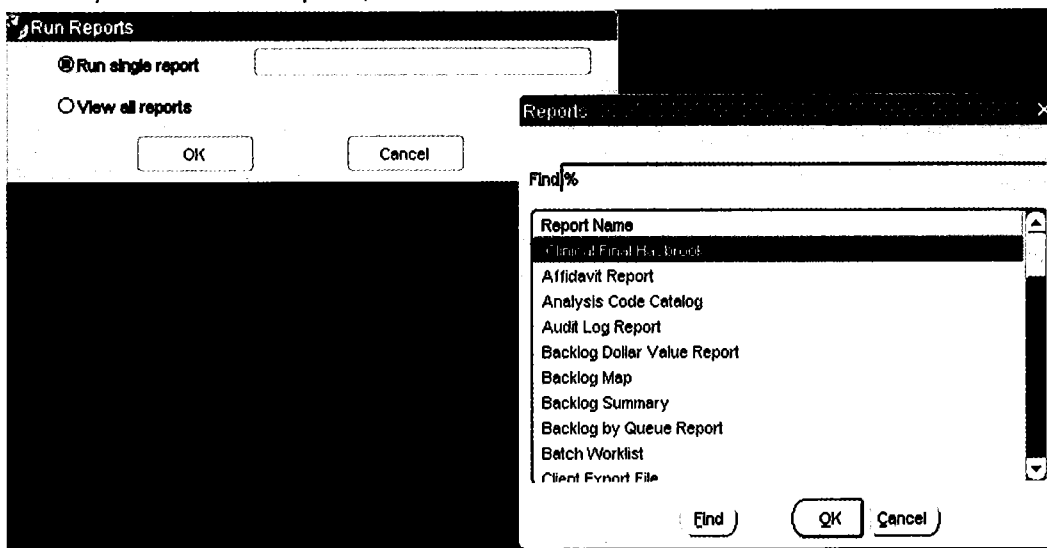
Run Date: 06/21/12 08:23:00

Pos	Workorder	Type	S	CC	A
1	F1218721	M		OK	F
2	F1226185	M		OK	F

- The user will be prompted to enter their Logon ID and Password for LIMS. Use "tc" as the Reason. Click on OK. Click on Save.



- Go to Systems → Run Reports; choose "Clinical Final Hasbrook". Click on OK.



8. The Actuate Web Portal window will open. Choose \*ALL for Workorder. Click on Submit.

Mode	Final		
Workorder *	*ALL		
Detail Report Printer	None		
<b>Connection Parameters</b>			
Connectstring Override	.....		
Lab Site *	M		
<b>Connection Parameters</b>			
jdbcconnectstring	jdbc:oracle:thin:@hahlabdb:1521:lims		
debug *	False		

\* denotes parameter is required.

9. Go to Systems → Submit Job. Choose the appropriate job (Table I). Click on OK.

Submit Job

Job: **Print Daemon Clinical Final HSB to BFC**

Parameter	Value
Debug	No
Delivery type	P
Sort Order	HSN
Printer seq	180
Owner lab	M
Cycles before self termination	1
Minutes to sleep between cycles	10
Actuate Server	hahlabapp

Submit to the Job Queue
 

Start Date	<input type="text"/>	Repeat Interval	<input type="text"/>
Priority	<input type="text"/>	Repeat Unit	<input type="text"/>

Run on the Server  
 Run Locally  
 Run Minimized

This will print the report(s) to the RICOH device at the chosen location as a "locked print" under User ID= HSBRPTS. The report(s) will only print out when they are retrieved using the proper pin and following instructions in "Retrieving reports on a RICOH device."

**Table I**

Location	Client ID(s)	Print Job, Seq number
BFC	<ul style="list-style-type: none"> <li>• Damien Center</li> <li>• Urban League</li> <li>• Jail 1</li> <li>• Jail 2</li> <li>• Bellflower Field Bloods</li> <li>• BFC</li> <li>• APC</li> <li>• Liberty Hall</li> </ul>	PHSBtoBFC, 180
AHC	ACTION (SBC)	
HIV Outreach	MCHD-HIV Out	
NEDHO	NEDHO TARC	
Foreign Born	Foreign Born	

*BLV  
08/03/2012*



<b>PROCEDURE</b>	<b>No. 5.P.4727b</b>
<b>SUBJECT:</b> Printing Results from the PHL on Multifunctional Device Process Map ref (All available reports are printed)	<b>Effective:</b> 07.03.2012 <b>Reviewed:</b> 07.03.2012 <b>Revised:</b> NA
<b>APPROVED:</b> <i>Bonny Van PhD</i> Bonny Lewis Van, PhD, FACB. Laboratory Director	<b>Replaces:</b> New
<b>DATE:</b> <i>3 July 2012</i>	
s:\labora~1\clinic~1\hasbrook\hasbro~1\curren~2\direct~1.201\5p4720~2.201\5.p.4727b_retrievi ng reports on mfd_07.03.2012.docx	

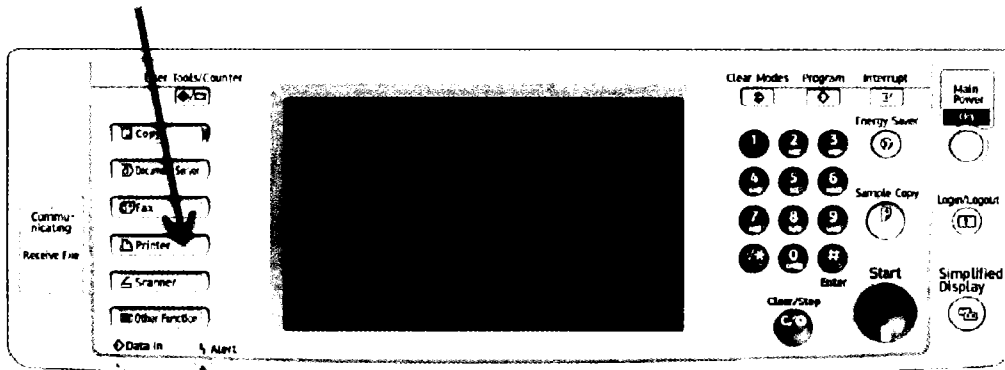
**Summary**

The purpose of this procedure is to provide instructions on how to print Clinical Result reports for testing that has been done at the Public Health Laboratory. This procedure replaces the previous process, in which hard-copy Clinical Reports were delivered via a courier.

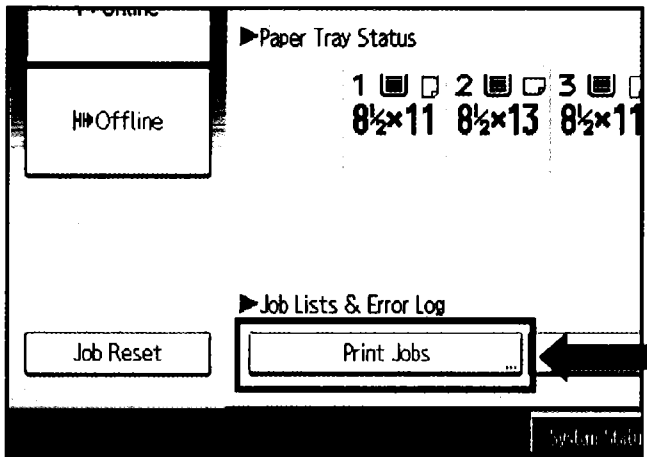
**Required Information:**

User ID: HSBRPTS  
Pin: 8300

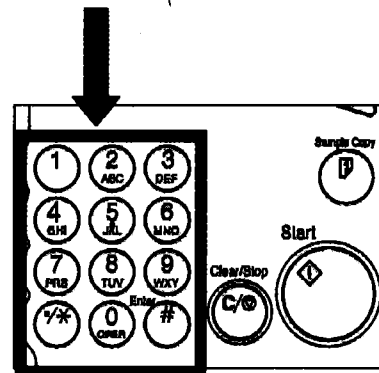
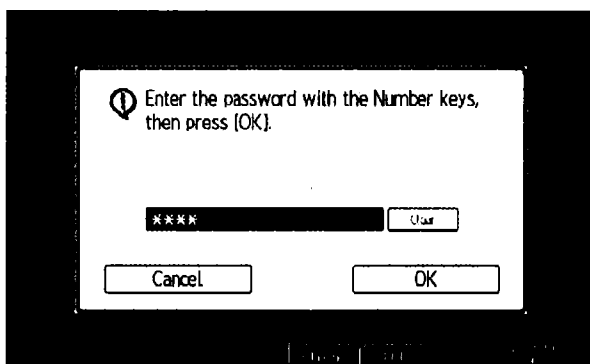
1. Go to Printer



2. Touch the Print Jobs button.



3. Touch the Select All Jobs button (top right) and the Print (bottom right) button.
4. A prompt will appear; enter the pin with the Number keys (on the left) and touch OK. The reports selected will now print.



5. This process should be repeated AT LEAST ONCE EACH DAY

<b>PROCEDURE</b>	<b>No. 5.P.4727c</b>
<b>SUBJECT:</b> Report Correction Request Procedure Process Map ref (Report correction is requested)	<b>Effective:</b> 07.03.2012 <b>Reviewed:</b> 07/03/2012 <b>Revised:</b> NA
<b>APPROVED:</b> <i>Bonny Van PhD</i> Bonny Lewis Van, PhD, FACB. Laboratory Director	<b>Replaces:</b> New
<b>DATE:</b> <i>3 July 2012</i>	
s:\labora~1\clinic~1\hasbrook\hasbro~1\curren~2\direct~1.201\5p4720~1.doc\5.p.4727b_request for report correction_07.03.2012.docx	

**Summary**

The purpose of this procedure is to provide instructions on how to submit requested corrections or changes to Clinical Result reports from the Public Health Laboratory

**Required Form:**

Report Correction Tool

**Directions:**

1. Electronically complete all fields on the correction request form completely. Please see the example appended.
2. Print the completed form to the PHL lab multi-functional device. This network printer is called HH\_HBB\_LABRicoh1 on hahps1

OR

2. By hand complete all fields on the correction request form completely and legibly. Please see the example appended.
3. Fax the completed form to the PHL lab at 314.221.4683
  
4. Retain a copy of your request until you receive a corrected clinical report.

**Your location**

- Bell Flower Clinic
- ACTION Health Center
- Other \_\_\_\_\_

---

**Patient Information**

**Last Name**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**First Name**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Date of Birth**

--	--	--	--	--	--	--	--

M M D D Y Y Y Y

**Date of Sample Collection**

--	--	--	--	--	--	--	--

M M D D Y Y Y Y

**Sex**

--	--	--

Male Female Other

**Test report to be corrected**

- CHLAMYDIA
- N. GONORRHEA
- SYPHILIS (RPR)
- SYPHILIS (FTA)
- HIV 1/2
- Other \_\_\_\_\_

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**Reasons for correction**

- Name correction
- DOB correction
- Other (Explain)

**Requester Information**

**Last Name**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**First Name**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Call back number (if needed)**

			-			
--	--	--	---	--	--	--



# OnBase Document Knowledge Transfer-DKT

- Requirement to review all documents once a year
  - not uncommon for documents to expire
  - or for a marathon session of revision to be needed to maintain compliance prior to biannual laboratory certification inspections
- Then we had to run around the county to get signatures on documents.



**Clearly we needed a better solution.**

# Document Knowledge Transfer (DKT)

- In December of 2011 planning started
- Electronic document management system for version control, review and acknowledgement.
- Document Knowledge Transfer (DKT) is a module for the larger document storage and management solution called OnBase (Hyland Software, Westlake, OH).
- The Health Department has been using OnBase for document storage for Vital Records for many years.

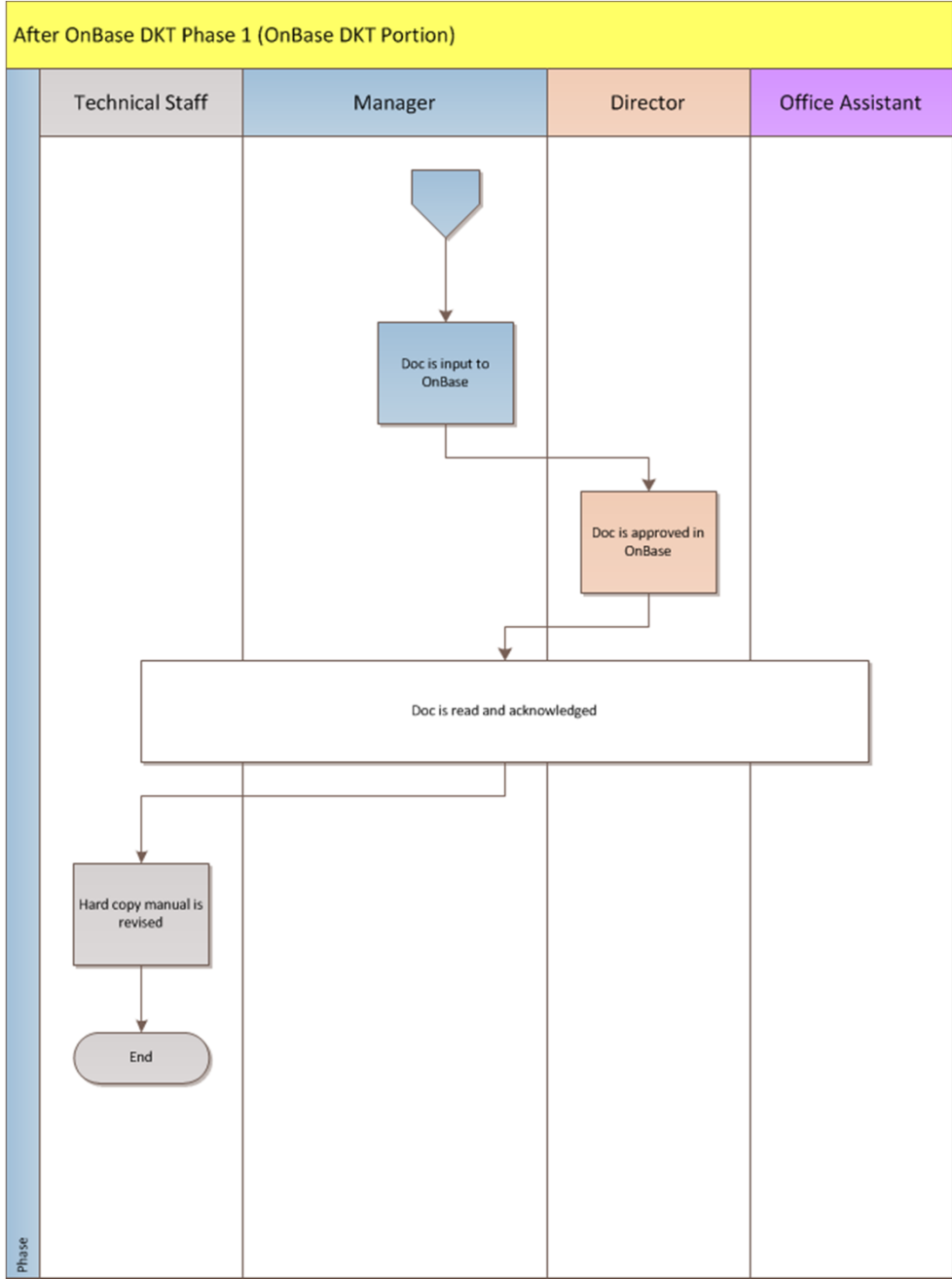
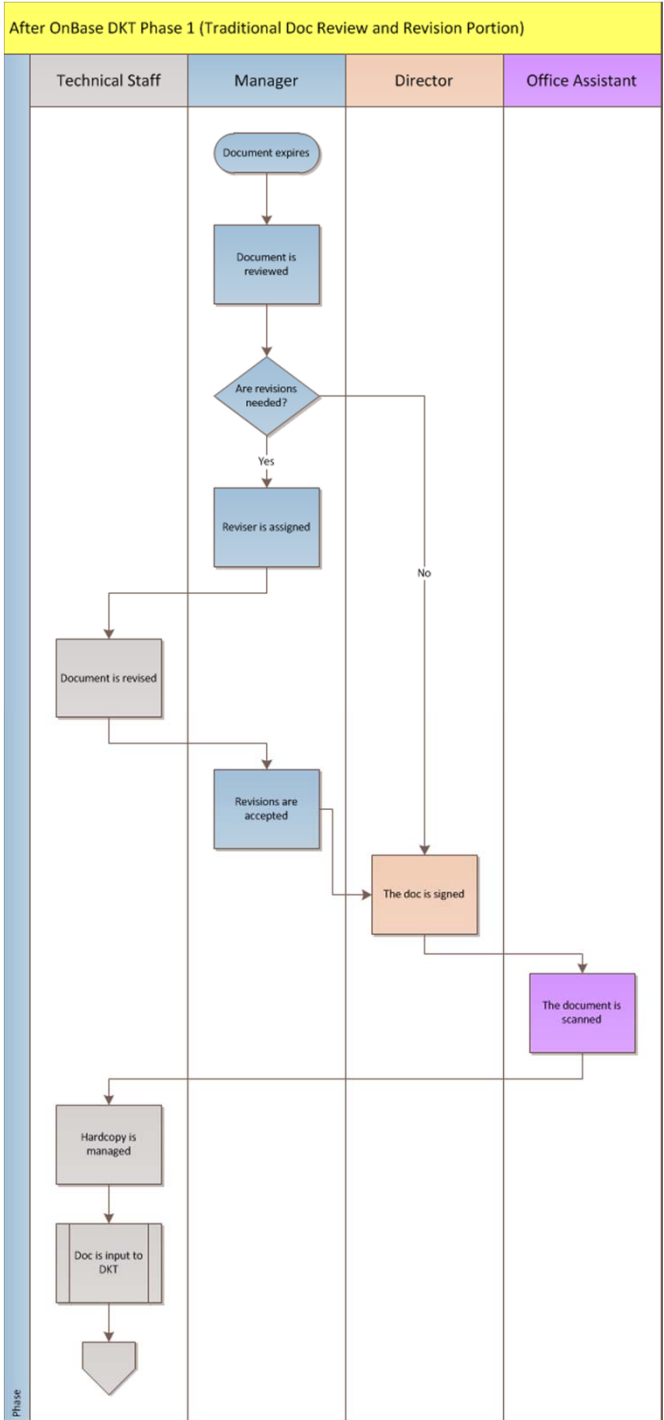




# DKT-



- Staff are either Approvers, or Reviewers
  - These are grouped according to shared work function
  - Approvers load and manage docs
  - Reviewers view and acknowledge docs
- Reviewers can Acknowledge or Reject a document
  - User is signed in = electronic signature
  - Time to review is customizable (we use 30 days)
- Documents expire
  - Revision history is captured

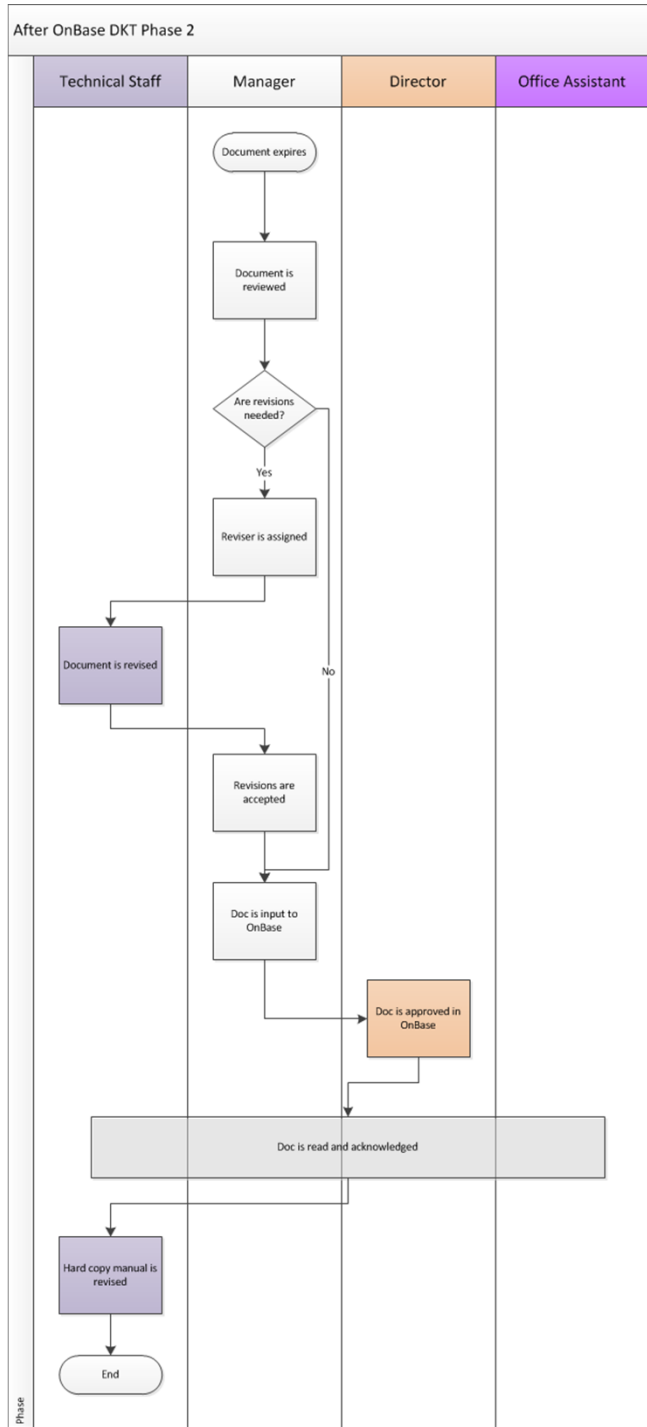


# DKT Phase 1

- December 12, 2011 was the OnBase kickoff meeting, and DKT went live in the Public Health Lab at the end of April, 2012
- Document expiration date is tracked automatically. We anticipate greater and easier compliance for on-time revisions
- We realized a 50% reduction in the number of times a hard copy gets handled
- We created a more linear flow for documents between technical staff, managers, etc. resulting in a process that is easier to follow.
- The complexity to revise a document is reduced by 40%.



- Expand DKT in phase 2 beginning in April of 2013, with an anticipated go-live date in July, 2013.
- Will eliminate all physical signatures
- Reduce need to print to the single copy needed at the point of use.
- Further reduce complexity and time required for our document management process.



# So Many Questions

- What made your laboratory want to do the QI activity?
- How was the QI activity chosen?
- What was the goal of your QI activity?
- How did the staff respond to the laboratory wanting to take on this initiative?
- What was the impact of the QI activity?
- What are the next steps?
- What was the cost of doing the QI activity?
- Were there any barriers to doing this QI activity and if so, how were you able to overcome them (or not overcome them)?