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Trials Network

ENHANCING LAB PERFORMANCE

HPTN Regional Meeting
October 19, 2017

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Introduction

- HPTN Lab QA/QC Core
- PALs
- CAPAs
- Lessons Learned
    - Network evaluation
        - New Shipping Requirements
        - Sample Completeness
    - LDMS Reconciliations

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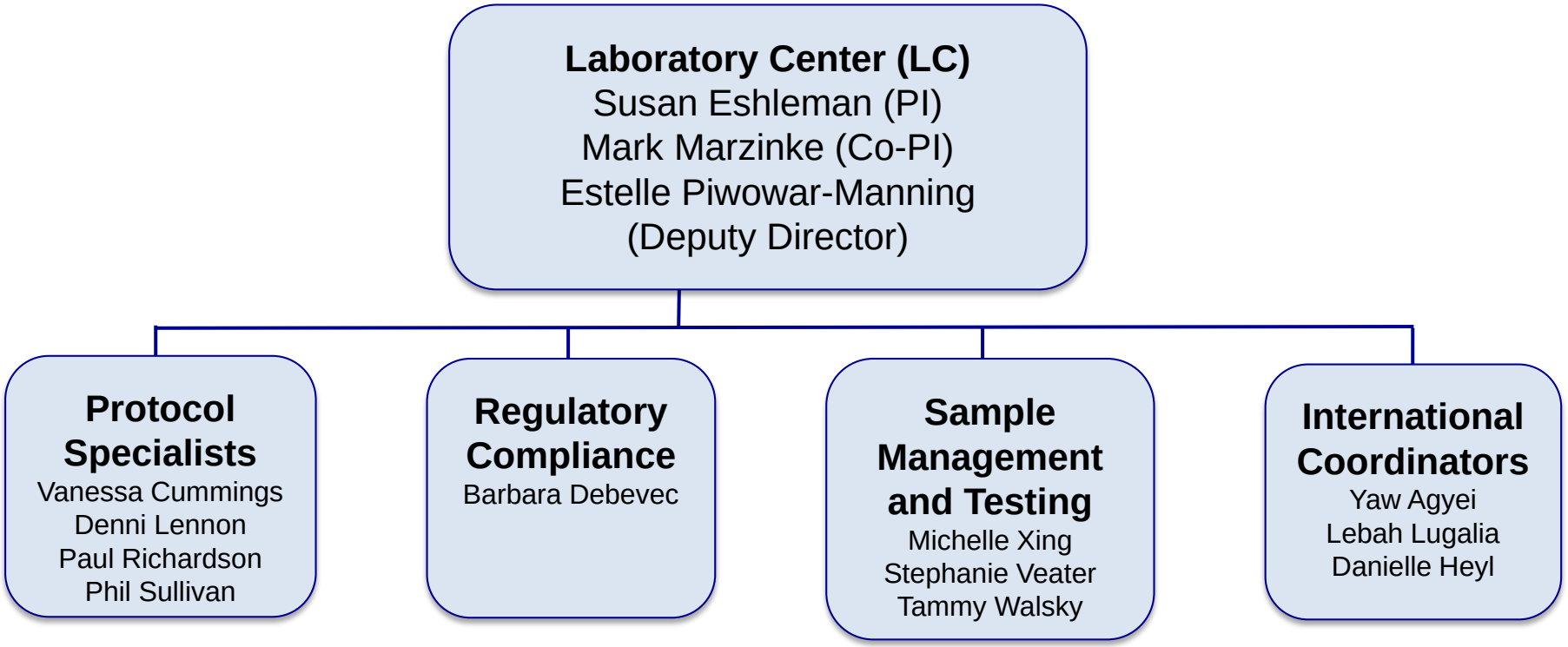

Special strengths of the QA/QC Core

QA/QC Core

- Certified Clinical Laboratory Scientists, each with between 10 to 40 years of experience in regulated laboratories
- Expertise in Hematology, Chemistry, Immunology, Flow Cytometry, Serology, Virology, HIV diagnostics, Blood Banking, Molecular Pathology, Microbiology
- Over 20 years of involvement in laboratory QA/QC activities at US and non-US CTU / CRS laboratories for HIV prevention trials
- Estelle managed two international laboratories for 5 years

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- Protocol team members- development, SSP, HIV algorithm, training
- Site support
- QA/QC testing
- Specialized HIV testing
- Specializing in lab specimen management, freezer management, international shipping
- Production of training videos in laboratory practices

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PAL – Protocol Analyte List

CRS Number:	**30320, 30294, 30304, 30313, 30303**
Protocol:	**HPTN 084**
LDMS Number	**306**
HPTN LC contact	**Estelle Piwowar-Manning**
	Yaw Agyei

Completed By:	Allen Matubu
Date Completed:	6-Mar-17
Reviewed By:	
Date Reviewed:	
Revision	Allen Matubu
Updated date:	7-Sep-17
Date Reviewed:	

CKD: Sam Ghanta, 10 March 2017

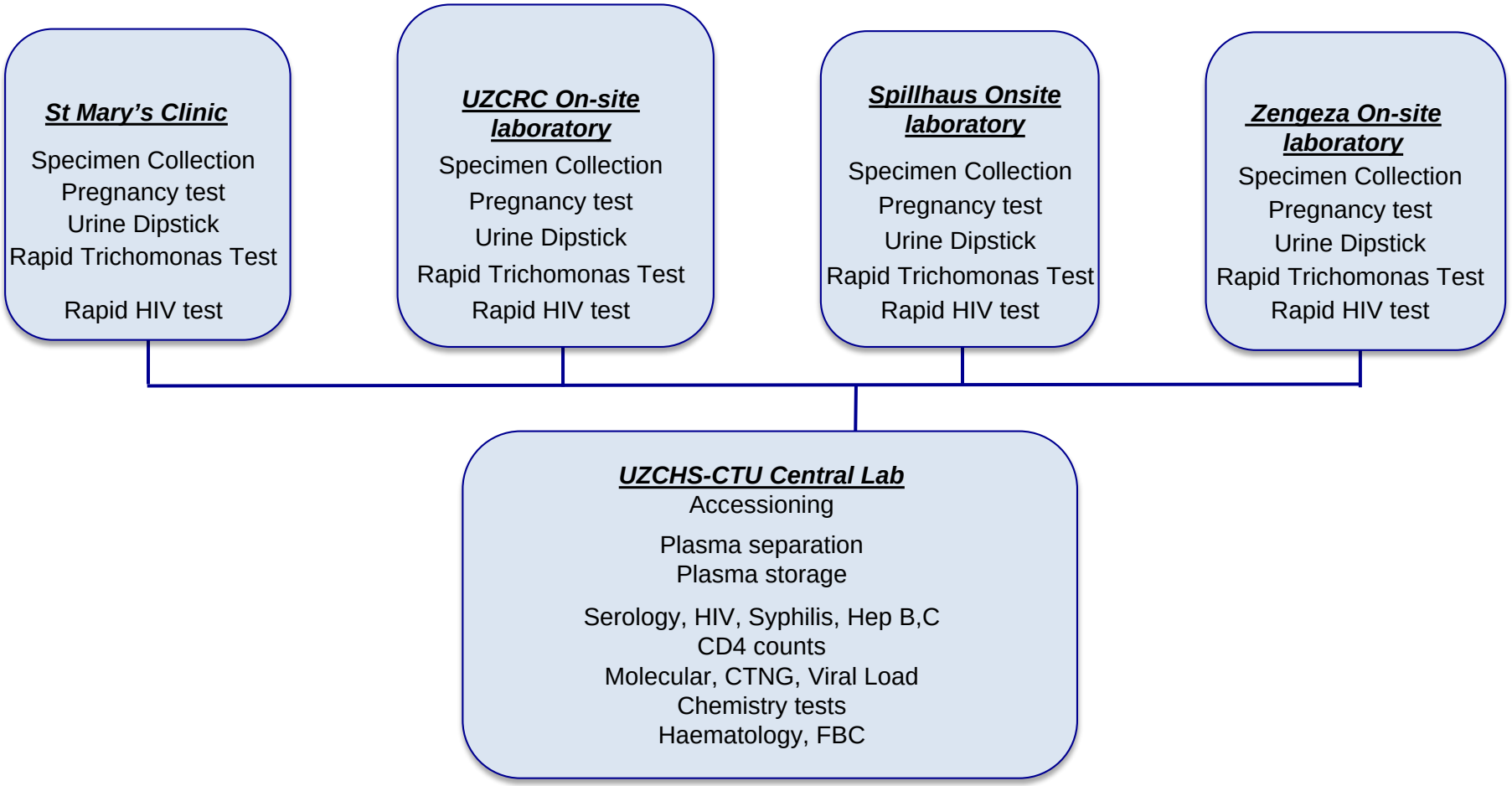
Please fill in as much detailed information as you can provide. Please add any assays that are missing.

Assay		Primary Instrument				Primary Method/Reagent Kit				
	Primary Lab	Instrument Name	Instrument Manufacturer	Instrument Model Number	FDA Approved (Yes/No/Don't Know)	Method/Kit Name	Method/Kit Manufacturer	Method/Kit Product Number or Product Code	FDA Approval (Yes/No)	Validated (Date or No)
Chemistry										
ALT	UZCHS-CTU	COBAS	ROCHE	C311	YES	ALT W/out pyridoxal phosphate activation	ROCHE	20764957 322	Yes	
AST	UZCHS-CTU	COBAS	ROCHE	C311	YES	AST W/out pyridoxal phosphate activation	ROCHE	20764949 322	Yes	20-Jul-15
ALP	UZCHS-CTU	COBAS	ROCHE	C311	YES	ALP IFCC LIQUID	ROCHE	10851132216	Yes	20-Jul-15
Creatinine	UZCHS-CTU	COBAS	ROCHE	C311	YES	Creatinine Jaffe' Method	ROCHE	11489291	Yes	20-Jul-15
BUN/Urea	UZCHS-CTU	COBAS	ROCHE	C311	YES	Dichlorophenyl diazonium salt (DPD)	ROCHE	11489364215	Yes	20-Jul-15
CPK	UZCHS-CTU	COBAS	ROCHE	C311	YES	Creatinine Kinase liquid acc to IFCCMethod	ROCHE	12132524	Yes	20-Jul-15
Total Bilirubin	UZCHS-CTU	COBAS	ROCHE	C311	YES	Dichlorophenyl diazonium salt (DPD)	ROCHE	11489194 216	Yes	20-Jul-15
Phosphorous	UZCHS-CTU	COBAS	ROCHE	C311	YES	Phosphomolybdate	ROCHE	PHOS 11127993 216	Yes	20-Jul-15
Glucose		COBAS	ROCHE	C311	YES	Glucose Oxidase- Peroxidase Method	ROCHE	11448668216	Yes	20-Jul-15
Amylase	UZCHS-CTU	COBAS	ROCHE	C311	YES	Enzymatic colorimetric	ROCHE	3183742122	Yes	20-Jul-15
Lipase	UZCHS-CTU	COBAS	ROCHE	C311	YES	Enzymatic colorimetric	ROCHE	3029590322	Yes	20-Jul-15
Calcium	UZCHS-CTU	COBAS	ROCHE	C311	YES	Colorimetric End point Assay	ROCHE	5061482190	Yes	20-Jul-15
Total Cholesterol	UZCHS-CTU	COBAS	ROCHE	C311	YES	Enzymatic colorimetric	ROCHE	3039773190	Yes	20-Jul-15
HDL Cholesterol	UZCHS-CTU	COBAS	ROCHE	C311	YES	Enzymatic colorimetric	ROCHE	4399803190	Yes	20-Jul-15
Triglyceride	UZCHS-CTU	COBAS	ROCHE	C311	YES	Enzymatic colorimetric	ROCHE	20767107322	Yes	20-Jul-15

PAL Completion

- PALs must
  - Reflect all assays defined in the protocol.
  - Reflect FDA approval of assays.
  - Reflect current primary and secondary labs/methods.
  - Reflect EQA enrolment.
- Changes in PAL information or reference intervals must be communicated to HPTN LC *immediately.*
- Provides an overview of testing methodologies for LC and safety / CMC reference

EXAMPLE FLOW CHART FOR COC



Corrective Action / Preventive Action

- Tools to improve site lab performance
  - Timely completion of CAPAs for EQA failures, referred to as Investigation Reports
  - Submission of corrective actions for DAIDS audit findings.
  - Submission of corrective actions for HPTN LC visit findings

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Network Evaluation – Laboratory Component

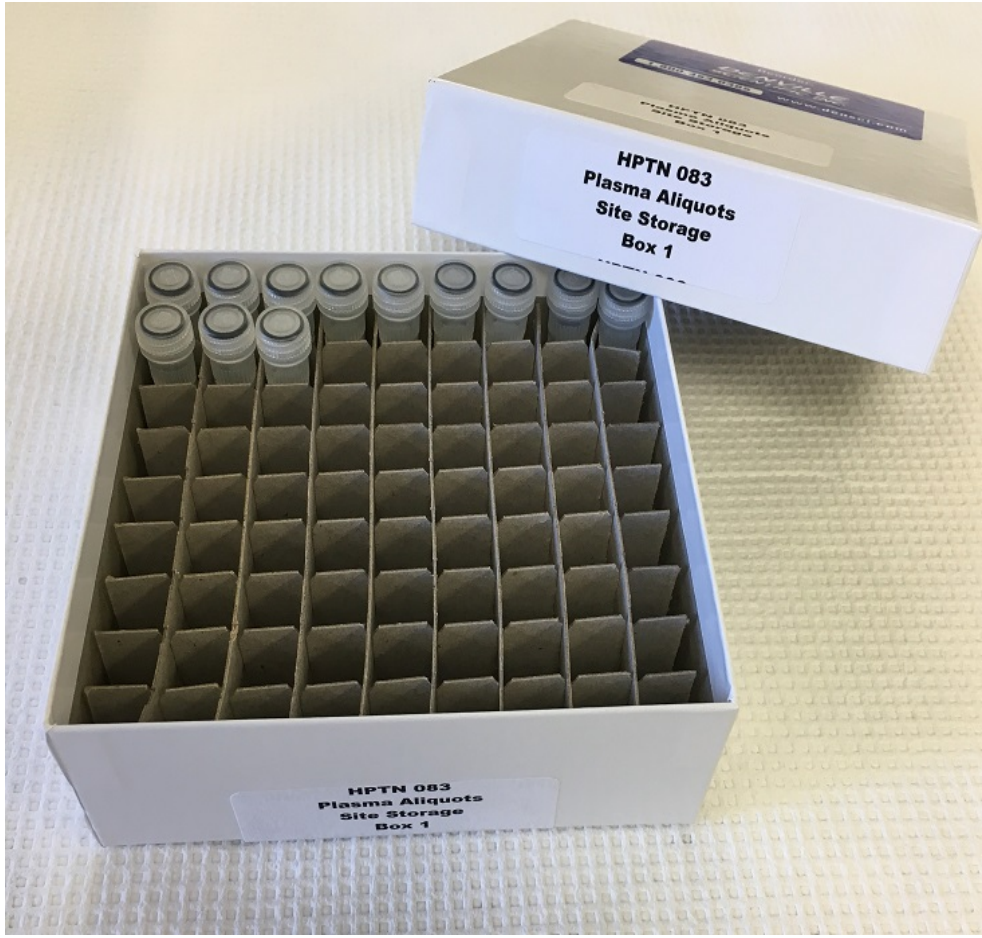
NEW!! NEW!! NEW!!

Monitor	Description	Requirement	Data Source
Quality of specimen handling/ shipment	Number of shipments received within the specified timeframe	90% received within timeframe	LC reports
Specimen storage completeness	Number of aliquots stored/ number of aliquots anticipated per specimen type per visit per protocol	95% storage completeness	SDMC report to LC for interpretation

Shipping Requirements – 083/084

Samples to be shipped quarterly.

- Plasma- starting from enrollment store (-01) aliquots in a box marked “To be shipped”.
- Shipment quarterly



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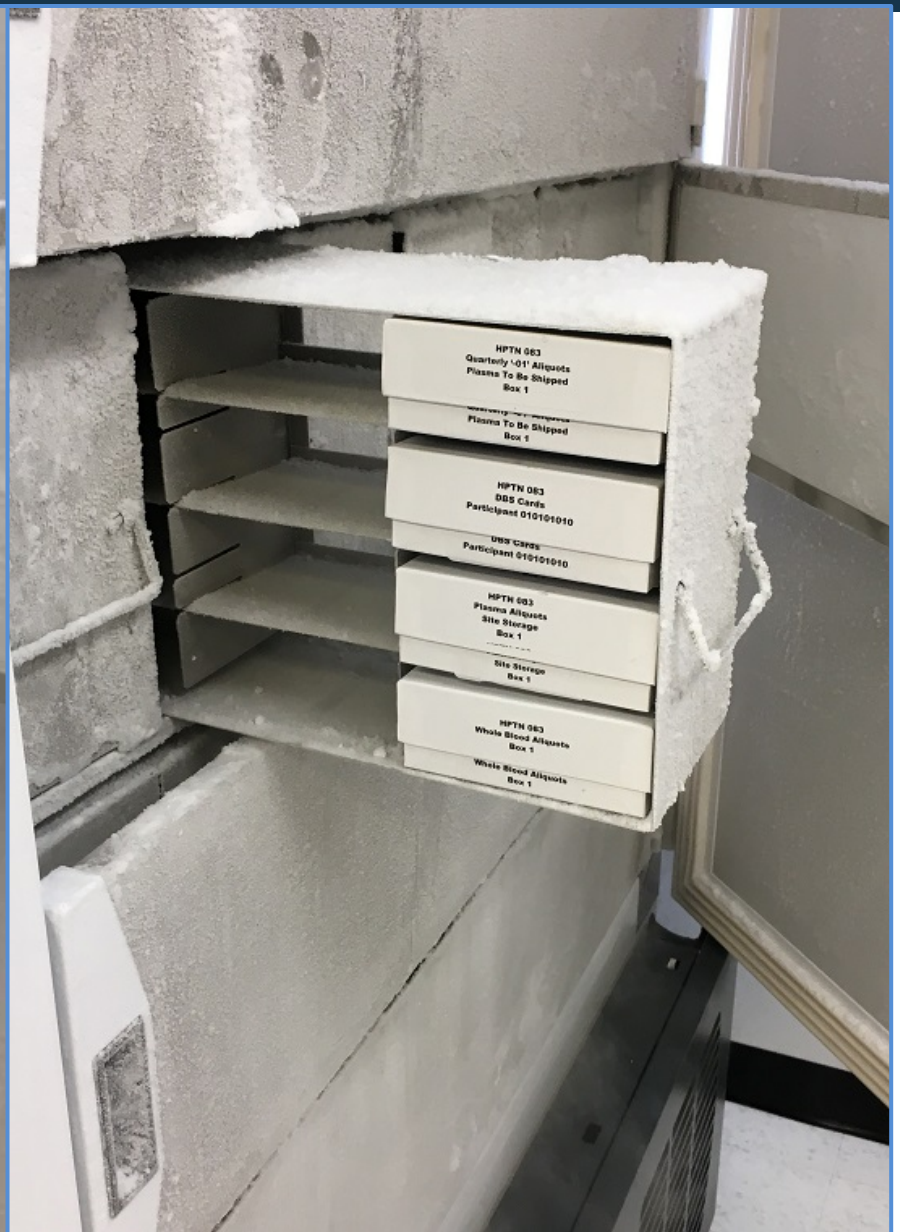
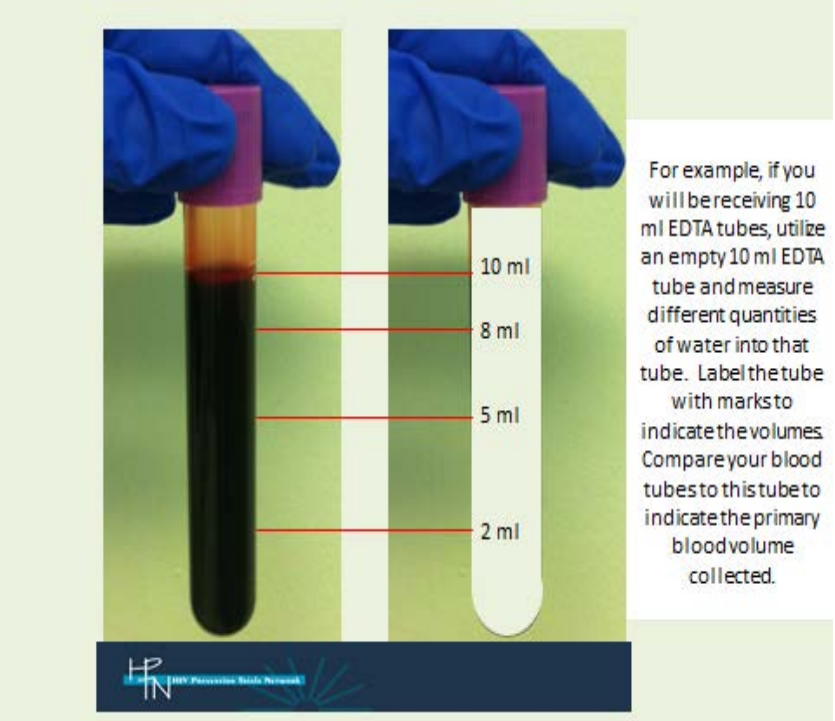


Sample Completeness

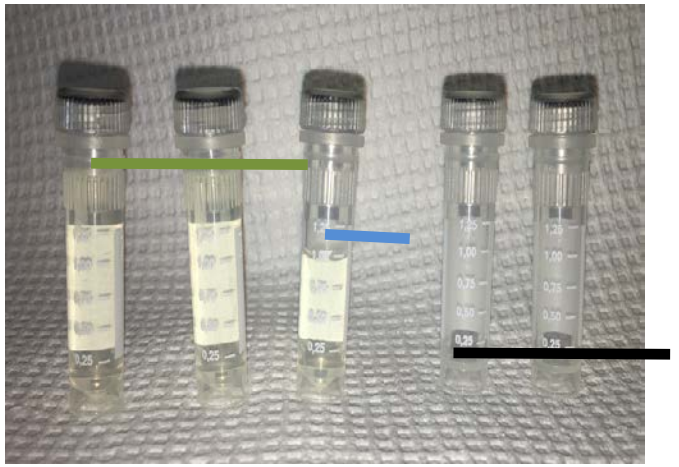
- Ensure all study required samples are collected.
  - Collect volumes indicated in the SSP
  - Enter exact volumes in LDMS (insert volumes collected).



Sample Completeness cont.

- Process and store aliquots as per SSP

- Inform HPTN LC of any short storage
  - Less than 3 aliquots of plasma (e.g. HPTN 084)



1.8 mL **1.0 mL** **0.0 mL** (0.01mL, QNS)

LDMS Reconciliation

Stored specimens are key!

- Minimize problems with LDMS
- Ensure that all samples are appropriately collected, labeled and stored

The Laboratory Manager, QA/QC coordinator or designee, and clinic/site personnel must review on a weekly basis:

LDMS tracking sheets vs.
LDMS entry vs.
Clinic collection and CRFs

Summary

HPTN LC are available for lab consultations.

- Keep PAL updated
- Collaborate with HPTN LC on EQA performance
- Meet with clinic on LDMS issues and blood volumes
- Track shipments

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