# Laboratory Technology Transfer

HIV VIRAL LOAD AND DBS TESTING

Dr Brian Armour HIV Coordinating Unit Ministry of Health 11<sup>th</sup> May 2011

# Outline

- Overview of key processes in transfer
- Enablers and challenges
- Post transfer Implementation issues
- Recommendations for future processes
- Current next steps

# Key processes

### Initiation:

- CAREC notified the Ministry of Health of its intention to cease HIV viral load testing as of December 31, 2009.
- Key stakeholders: MoH, CHAI, NACC, NCRHA (finance, legal, CEO, Tenders, Evaluation, Board, Laboratory, Complex manager)

## **Overview: Key processes**

#### Procurement: Main Equipment

**January 2009**: NCRHA Request for Proposal (RFP)

- June 22, 2009 RFP for Supply and Commissioning of Equipment for a Molecular Biology Laboratory Service under a reagent Rental Agreement at the Eric Williams Medical Sciences Complex published
- August 3, 2009 Following an extension, the bids were closed
- August 25, 2009 Evaluation of bids completed
- November 18, 2009 Based on approval by the Tenders Committee of the NCRHA, the award of the contract for the supply, installation and commissioning of the equipment was made.

# **Overview: Key Processes**

- **x** Contract : Main Equipment
- \* December 28, 2009. Finalization of terms and conditions of the contract
- **\* March 4, 2010**: Based on negotiations between the parties the contract was signed
- NB: Included refurbishment works, knowledge transfer biomedical technicians

#### **Overview: Key Processes**

- Procurement of ancillary equipment
- Specifications were prepared by the NCRHA Biomedical Department
- A Tender notice was published in the print media in February 2010 with a closing date of March 8, 2010. Four bids were received for evaluation.
- An evaluation team was appointed and the preferred bidders were selected. The tenders were approved by the Tenders Committee of the NCRHA on April 28, 2010.

## Progress to date as at May 8, 2010

- The refurbishment and pre commissioning works commenced mid-April 2010
  - Installation of air conditioning
  - Sealing of roof
  - Installation of air extraction system
  - Power supply for TaqMan and AmpliPrep
  - Delivery of TaqMan and Cobas AmpliPrep
  - Orders placed for reagents and consumables
  - Orders for ancillary equipment placed

Some ancillary equipment and consumables have been delivered

## Pre refurbishment



DESIGNATED FOR MOLECULAR LABORATORY

## Pre refurbishment



PRE ANALYTICAL AND SET UP AREA FOR MOLECULAR LABORATORY

#### DELIVERY OF MOLECULAR EQUIPMENT



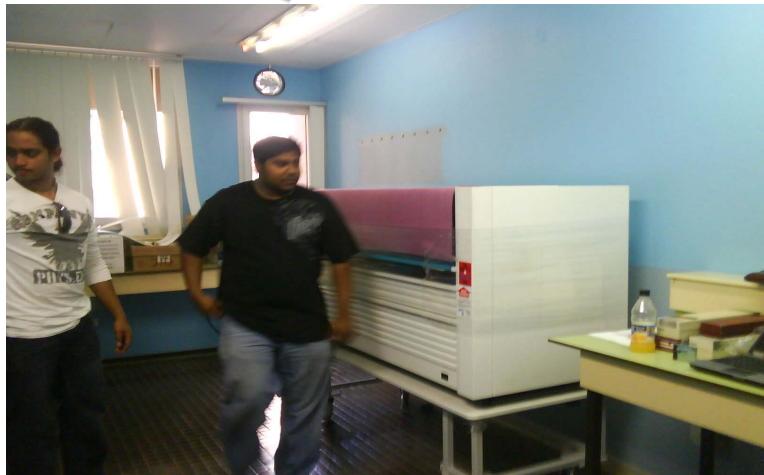
**ESUNICIANS ASSEMBLING THE STAND FOR THE AMPLIPREP** 

#### DELIVERY OF MOLECULAR EQUIPMENT



FIGURING OUT THE LOGISTICS OF POSITIONING THE AMPLIPREP

#### DELIVERY OF MOLECULAR EQUIPMENT



#### AMPLIPREP UNCRATED AND IN PLACE

# Enablers and challenges

- High level steering guidance (CMO, CEO, NACC)
- High level stakeholder interest (World Bank)
- Rental lease, Refurbishment works and biomed knowledge transfer included
- Good Laboratory Manager
- Good contract negotiator

- Procurement process: 9 months Rate limiting step RFP 6 months
- Quorum for meetings for contract finalization/staff turnover
- Procurement of ancillary equipment sequential after main equipment

#### Enablers

#### Challenges

- Paying attention to
  - HR: New staff, redeployment of existing staff (4 persons), consultant
  - Finance: Capital, true cost (overhead); recurrent budget cost

#### Paying attention to

- Quality Management systems (CAREC, MoH)
  - Standard Operating Procedures
  - Laboratory surveillance
  - Equipment validation
  - Vendor training user competency
  - Notification of all end users

**Consultant hired** 

- Start July 22, 2011
- Initial issues with volumes, sample rejection as this equipment required higher volumes than equipment used at CAREC
- Physicians trust and confidence in the system
- Issues resolved through communication and appreciation of quality management systems

- Monthly reports: MoH (HIV Unit, Finance)
- Downtime: January 2011: However contract and vendor performance to resolve highly satisfactory
- DBS testing
- Continued equipment validation

# Recommendations to consider for future transfers

- Take into account procurement process timelines for transfer
- CAREC to indicate both capital and ancillary equipment needed for technology transfer
- Finance assessment must be formative to work out true cost to inform RHA (CAREC willing to assist financiers):
  - Capital, major equipment
  - Recurrent maintenance, HR
  - Ancillary equipment costs
  - Training/knowledge transfer
  - Refurbishment infrastructural works

# Recommendations to consider for future transfers

- Commitment by RHA to have a core team in the contract process (negotiation) with lab and business manager essential
- Quality management systems need involvement by CAREC
  - SOP,
  - facilitating EQAS
  - Facilitating change management RHA/National

## Next steps

- QUALITY MANAGEMENT SYSTEMS
- HR SUSTAINABILITY

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# THANK YOU