Laboratory Guidance for Non-Designated Hospitals

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Motivation and process:

- Guidance requested by multiple hospitals on tests, methods and instruments for evaluation, stabilization, management and care of EVD PUIs
- Assessed available options and likely situations
- Discussions with multiple ID and ED clinicians, laboratory directors
- Reduced to minimum available capability necessary for short term care

Guidance document on minimum capability

- Explains the purpose and scope of the guidance
- Lists the minimum recommended laboratory testing capabilities
- Reiterates the two options for laboratory testing:
 - core laboratory
 - "point-of-care" (POC) laboratory

For POC testing

- Provides examples of POC equipment that could be used for each type of test (not endorsing)
- Describes the minimal facility requirements
- Describes the minimal personnel recommendations - qualifications and training

Likely patient scenarios

Sx for 3+ days, not severely ill at initial presentation

- Additional testing needed (while awaiting EVD PCR) will depend on illness severity and delay in final EVD result
- May be possible to delay all additional laboratory testing
- However, appropriate clinical management without some/all of the following may be challenging:
 - blood gas, lactate, electrolytes, Hgb/Hct, chemistry panel, CBC, urinalysis

Sx for <3 days, not severely ill at initial presentation

- May be a delay in confirmation of EVD neg/pos while await 3 day window and repeat testing
- May be possible to delay additional lab testing depending on severity of illness and how long till reach 3 day window
- Appropriate clinical management without the following may be challenging:
 - blood gas, lactate, electrolytes, Hgb/Hct, chemistry panel, CBC, urinalysis
- Additional testing may be necessary, especially if patient condition deteriorates
 - blood cultures, coag, LFTs

Patient moderately to severely ill or rapidly progressing

- Appropriate clinical management will, in most cases, be impaired without the availability of some/all of the recommended tests
- Laboratory testing to assess these various parameters should therefore not be delayed
- Note arrangements must be in place for malaria testing

Clinical situations that require similar capability

- Sepsis protocols
 DOH guidance requires early screening protocols be in place for suspected sepsis cases
 - Full implementation of sepsis protocols within 3 hours for severe sepsis incl WCC, lactate, coag (INR)
- Some of the PUIs seen (symptoms + travel history, care included laboratory testing):
 - Malaria
 - Pregnant patient
 - HIV infected children
 - · HIV infected pregnant patient
 - · Salmonella bacteremia
 - Dengue-Chikungunya-like illness
 - Co-infections e.g. malaria + bacteremia