Sustainable Laboratories for High-Consequence Pathogens in Africa

Professor David R Harper

Centre on Global Health Security

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Chatham House Sustainable Labs Initiative

- Capability gap – diagnosis, storage, transport.... of high-consequence pathogens
- Counterpoint to international donor approach for high-tech, high-cost laboratories in low-resource environments

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Context

- Approach - based on local risk assessment
- Local optimum – taking account of *biosafety* and *biosecurity* requirements, standards and ‘expectations’
- Challenges – finance, human resource, operations, infrastructure and utilities....
- Key elements - ‘pull’ and ownership by African countries and input of African partners and experts
Priorities - Abuja, February 2018

- ‘Tool’ to aid initial discussion and decision-making
- Core specifications for sustainable laboratory
- Feasibility of a ‘Regional’ training facility
‘Tool’ to aid initial discussion

• Labelling and framing is important, hence working description - ‘Prior Assessment Tool’

• Funding partner and recipient country should agree how the assessment should be done, and who should be involved

• Country may need help identifying its needs and capabilities in order to complete the assessment

• Could be scope for a funding partner to support a process of capacity building
Prior Assessment Tool

• Prior assessment phase should include:
  – Situation analysis - assess existing capacities
  – Needs assessment - define context for operation of laboratory
  – Detailed planning – consider programme of work, risk-based approach, financial planning, roles and responsibilities....

• Build the tool around the essential elements for developing a business plan
  – Finance
  – Staffing
  – Operations
  – Risks
• Guide the early conversation between funding partner and recipient country
• Help the recipient country to identify strengths, weaknesses and gaps and where to seek expert advice
• Help the funding partner in due diligence process
The Chatham House Sustainable Laboratories Initiative
Prior assessment tool
David R Harper, Emma Ross and Ben Wakefield
Navigating the tool

- National Strategic Engagement
- Finance
- Human Resources
- General Framing
- Operations
- Infrastructure and Utilities
National strategic engagement

A clear vision for the laboratory’s role in addressing national strategic goals is fundamental. Political support for the project and demonstrable commitment from the relevant government agency are essential for embedding the laboratory in the country’s systems and strategies, and for the ongoing support that the laboratory will need to be sustainable. National strategic engagement is an overwhelming requirement for success. It entails the participation of the full range of necessary stakeholders. A primary agency should be designated to deliver the laboratory, and an appropriate person assigned to lead the project. The support of a champion within the government should be secured to ensure sustainable funding and facilitate troubleshooting. To address some of the questions in this section, it might be necessary for discussion to move to other sections of this tool in order to build the business case to secure demonstrable government commitment.

- What national strategic goals will the laboratory address?
- Consider, for example, goals related to:
  - National laboratory network
  - Surveillance programme
  - Emergency plan

What will the contingency plans be?

What demonstrable commitment will be made?

Which government agency will be accountable?

Who will the responsible person be?

What government approval is needed?

What will be provided by the government?
Finance

Attention to financing issues and early awareness of the costs are key to laboratory sustainability, and discussion of finance is likely to run throughout the conversation, across the other sections of this tool. These questions help identify what needs to be considered in determining the cost of establishing, operating and maintaining the laboratory, and in planning for sustainable financing. It is important to take account of the relative contribution that each partner is able or prepared to make at various stages of the laboratory’s life-course, to minimize the risk of a “cliff-edge” when a transition to national financing occurs.

- What will the costs be to establish and run the laboratory?
- What are the one-off costs?

Consider, for example:
- Scoping
- Design
- Construction/repurposing
- Commissioning
- Site (e.g. analysis, acquisition and preparation)
- Equipment (e.g. purchase)
- Project management

- What are the ongoing costs?

Consider, for example:
- Staff (e.g. recruitment, retention, and ongoing training)
- Utilities (e.g. power, water, waste treatment and disposal)
- Laboratory maintenance
- Servicing and calibration of equipment
- Consumables and reagents
- Repair and replacement of equipment
- Regulatory requirements (e.g. customs clearance, waivers and exemptions)
Next steps for Prior Assessment Tool

- Awareness raising, socializing....
- Testing in different contexts....
- Testing in other countries....
Thank you

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Global Affairs Canada
Defence Science and Technology Laboratory
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Pan African Veterinary Vaccine Center
37 Military Hospital, Accra, Ghana
Noguchi Memorial Institute for Medical Research

David R Harper, Emma Ross, Ben Wakefield
Trevor Smith, Ken Ugwu, Nataly Spears
Dave Elliott
Heather Sheeley, Nigel Silman
Keith Hamilton, Jennifer Lasley
Chikwe Ihekweazu, Anthony Ahumibe
Maureen Ellis
Nick Nwankpa
Edward Nyarko
Kwadwo Koram

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