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## The Maputo Declaration on Strengthening of Laboratory Systems

We, representatives of governments, multilateral agencies, development partners, professional associations, and academic institutions, participated in a Consensus Meeting on Clinical Laboratory Testing Harmonization and Standardization in Maputo, Mozambique, on 22<sup>nd</sup> - 24<sup>th</sup> January 2008. The meeting sought to address laboratory challenges that limit the scale-up of services for tuberculosis, malaria and HIV diagnosis and care.

The objectives of the Maputo meeting were:

- To review and agree on a list of supplies and tests needed at each level of an integrated tiered laboratory network;
- To develop a consensus to guide standardization of laboratory equipment at each level of the laboratory network;
- To develop a consensus on key considerations to guide maintenance and service contracts for equipment at various levels of the laboratory network.

**Recognize** the burden of the priority diseases HIV, malaria and tuberculosis. Globally, some 33.2 million individuals are living with HIV but of those just 10% are aware of their sero-status<sup>1</sup>. In spite of efforts to limit transmission, the incidence of HIV infection remains high. Similarly, 8.8 million new cases of tuberculosis occur annually while the prevalence of multi- and extensively-drug resistant tuberculosis continues to increase with only a fraction of cases being detected<sup>2</sup>. Co-infection with HIV and tuberculosis remains a difficult clinical challenge in many settings. In many countries, malaria remains the largest contributor to mortality primarily among infants and children, with about 1 million deaths per year<sup>3</sup>.

**Recognize** the need to expand and further develop quality-assured laboratory services as part of a greater framework of health system strengthening within resource-limited settings. Increasingly, countries and implementing partners have identified that limited laboratory capacity represents a major barrier to implementation and sustainability of prevention, treatment and care programs for HIV, malaria and tuberculosis.

**Recognize** that in resource-limited settings, several challenges have resulted in inadequate laboratory systems to support the scale-up of programs. These include a lack of leadership and advocacy, human resources, career path and retention of staff, national laboratory policy, strategic planning (budgetary concerns), insufficient physical infrastructure, supply chain management, and quality management systems (quality assurance).

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<sup>1</sup> Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO) 2007 AIDS Epidemic Update. Accessed at [http://data.unaids.org/pub/EPISlides/2007/071119\\_epi\\_pressrelease\\_en.pdf](http://data.unaids.org/pub/EPISlides/2007/071119_epi_pressrelease_en.pdf) on 24 January 2008

<sup>2</sup> WHO factsheet no. 104 - Tuberculosis

Accessed at <http://www.who.int/mediacentre/factsheets/fs104/en/index.html> on 24 January 2008

<sup>3</sup> WHO/GMP frequently asked questions Accessed at <http://www.who.int/malaria/faq.html> on 24 January 2008

**Note** that there has been a substantial increase in funding to fight HIV, tuberculosis, and malaria. For instance, a total contribution of US\$10 billion per annum has been secured from donors towards prevention, treatment and care programs for the three diseases through funding bodies such as the Global Fund to fight AIDS, Tuberculosis and Malaria, The US Presidents Emergency Plan for AIDS Relief, US President's Malaria Initiative, the World Bank, and the Bill and Melinda Gates Foundation. This represents a significant increase on previous commitments that totalled US\$1 billion in 2001 for disease control programs for high burden diseases in resource-limited settings.

**Recognize** that in order to improve and sustain access to laboratory services, there must be an integration of laboratory support for tuberculosis, malaria and HIV disease programs. The aim of this effort should be to sustain any improvements made to a laboratory as part of the greater health system from a public health perspective.

**Call** on national governments to support laboratory systems as a priority by developing a national laboratory policy within the national health development plan that will guide the implementation of a national strategic laboratory plan. Governments should establish a department of laboratory systems within the Ministry of Health.

**Call** on national governments with support of their donors and partners in resource-limited settings to develop national strategic laboratory plans that integrate laboratory support for the major diseases of public health importance including HIV, tuberculosis, and malaria.

**Call** on donors and implementing partners to ensure that in supporting laboratory strengthening that proper consideration is given to fostering national ownership.

**Call** on countries and all partners to urgently address the broader laboratory human resources agenda for laboratory strengthening including training, recruitment and retention of laboratory workers and their adequate financing.

**Call** on donors and development partners to **commit** to work collaboratively with each other and with coordination from the national governments to support strengthening of laboratory systems in order to create one unified, integrated national laboratory network. These laboratory strengthening efforts should seek to build public private partnerships.

**Call** on academic institutions and research funders to accelerate efforts to develop new diagnostic tools applicable to resourced-limited settings

**Done in Maputo, Mozambique on 24 January 2008**