ASLM
AFRICAN SOCIETY FOR LABORATORY MEDICINE

Blueprint: Laboratory Leaders of the Future

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Executive Summary

This ***Blueprint*** document provides concrete recommendations to countries, regional entities, and global organizations involved in building the future of laboratory leadership on the African continent. True to its name, this ***Blueprint*** provides a plan that can guide multiple teams as they work together towards a common vision. While blueprints attempt to establish a common framework for action, the actual product they aspire to realize is ultimately shaped and optimized by the teams executing the plan.

Cognizant of the variation of political, social-economic, and epidemiological contexts across the continent, as well as the diversity of opinions and perspectives on the topics addressed in this ***Blueprint***, its contents are best interpreted from the lens of evidence-based recommendations without imposition or prescription. Indeed, the precursor to this document, the ***Status Report on Laboratory Leadership in Africa published by ASLM in 2024***, highlighted the range of attitudes and views on the issues of laboratory leadership and management in Africa. This ***Blueprint*** endeavors to capture the many important suggestions and contributions of consulted stakeholders and consolidate them into clear action items. These items are shortlisted in the ***Blueprint*** Action Table section, and are derived from the overarching themes of Structure, Strategy, Competencies, Professionalization, and Advocacy.

The actions presented in this ***Blueprint*** require execution and funding. Given the variation in needs and priorities across countries and stakeholders, individual elements of this plan are not costed. However, a costing methodology is offered, together with recommendations on how to frame discussions around investments in laboratory leadership and management in the global space. ASLM believes that timely and adequate investment in the action points set out in this ***Blueprint*** will generate savings and reap dividends in the future for National Laboratory Directorates or their equivalent entities and the network of regional and global organizations that support them.

ASLM encourages readers to critically assess their role and potential contribution to these collective efforts that require action at every level and in every country. From the mundane to the exciting, the elements of this ***Blueprint*** are in your hands – let's get building!

Context

Building on the 2024 Status Report

In late 2024, ASLM published a ***Status Report***[1] that summarized the trends and realities of laboratory leadership and management in Africa, from the perspective of national laboratory directorates (NLD) or their equivalent[2] as well as regional and global stakeholders. The report drew from a diverse range of sources, including literature reviews, structured surveys, and in-depth interviews with country teams, subject matter experts, and thought leaders in the fields of laboratory and diagnostics.

The ***Status Report informs*** this ***Blueprint*** document. As such, this document does not repeat the detailed findings from the Status Report. Rather, it draws on the topics and themes established in the Status Report to provide solutions and a way forward.

Nonetheless, revisiting the main findings of the Status Report is an important starting point. The ***Status Report*** outlines key findings grouped into the following four categories:

[1] ASLM (2024) Status Report on Laboratory Leadership in Africa

[2] See the Status Report for broader discussion on NLDs and related terminology.

Structure & Mandate, addressing the fundamentals of organization and empowerment. This included the complex topic of scope and composition of NLDs in the myriad country contexts throughout the continent.

Core Capabilities, related to the competence for key leadership and management skills. This explored the types of soft and hard skills of need, as well as the existing programs designed to develop and cultivate these skillsets.

Guidance & Agendas, referencing broader global and regional trends, priorities, and normative guidance. From political declarations to donor posturing, this category covered the evolution of the normative context over time.

Advocacy & Voice, related to the importance of enabling NLDs to fulfill their mandates. This topic was identified as cross-cutting in nature.

The Blueprint Elements section of this document repackages these themes to promote distinct action items for the many topics and themes explored under the broad scope of leadership and management. The rational and details of the new themes can be found in that section.

The Status Report also highlighted three overlapping domains for attention and action:

1. Governance
2. Leadership
3. Management and Administration

The nuances of the difference between these domains are unpacked in the Status Report. Briefly, we distinguish between the two concepts of leadership and governance: leadership refers to the cadre and skills of those heading NLDs while governance entails the contextual elements outside the NLDs themselves, such as the institutional hierarchy above a given NLD within a Ministry of Health and the technical working groups that help guide and govern laboratory decisions in country. Management and leadership are often conflated or combined, but for the sake of this report they are treated separately, with leadership typically reserved for soft skills such as strategic vision and management reserved for hard skills such as budgeting. Related, management and administration are sometimes conceptualized distinctly, but we treat them as interchangeable terms referring to all managerial and administrative tasks. For the purposes of this Blueprint document, these three domains simply serve as a reminder of the importance of strengthening actions at all levels. In recognition of the complex contexts in which laboratory networks and NLDs operate, these domain considerations are highlighted in the conceptual rendering below, directly reproduced from the Status Report (Figure 1).

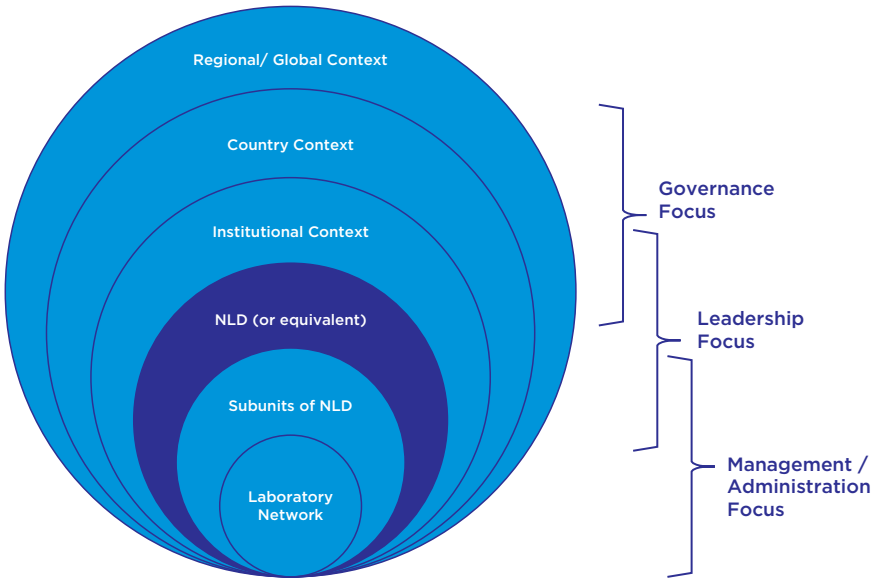

Figure 1. Revisiting the contexts and domains addressed in the 2024 Status Report

These assertations reiterate that nothing in the Status Report perfectly described the issues facing a given country, and nothing in the ***Blueprint*** will perfectly prescribe a solution. However, the overall trends and consensus that emerge from these documents will help individual countries navigate their own contextual considerations moving forward.

Momentum Since the 2024 *Status Report*

The Status Report, while recent and well-sourced, is inevitably a document that captured the sentiments and perspectives at the time of its data collection, analysis and publication. In the context of a rapidly changing world – be it political, technological or epidemiological in nature – every effort to remain current is prudent.

For example, this ***Blueprint*** document benefits from, among other events and developments, the 2024 ASLM Special Convention on Diagnostics meeting held in November [3], where many topics and themes embedded in the Status Report were discussed by participants from 49 countries across Africa, as well as India, Europe, and North America and several partner organizations. The meeting culminated in a renewed call to action [4] with important language around NLD mandates, adding to the arsenal of high-level aspirational documents beyond those highlighted in the Status Report that NLDs can access, cite, and leverage in discussions within their country contexts.

Another notable event was the Federation of Laboratory Professionals in Africa (FeLPA) convening of stakeholders in October 2024 to discuss opportunities and solutions for the advancement of the laboratory profession across the continent. [5] This ***Blueprint*** highlights the need for further professionalization of the laboratory workforce and career paths, making events such as these both welcome and timely.

Finally, antimicrobial resistance (AMR) was in focus at the United Nations General Assembly (UNGA) in September 2024, with a strong declaration [6] issued that included call outs for the role of diagnostics and laboratory systems in the fight against AMR. AMR and broader One Health agendas exemplify the growing role and complexity of laboratory systems and laboratory stakeholders in supporting individual and public health in countries throughout Africa.

[3] 2024 ASLM Special Convention on Diagnostics meeting report: https://aslm.org/wp-content/

[4] Call to Action: Strengthening Laboratory Systems and Networks in Africa to Increase Access to Quality Diagnostics. Special Ministerial Session at the ASLM Special Convention on Diagnostics in Abidjan, Cote D'Ivoire, November 2024.

[5] https://aslm.org/news-article/felpa-continues-to-mobilize-laboratory-professionals-across-africa/

[6] https://www.un.org/pga/wp-content/uploads/sites/108/2024/09/FINAL-Text-AMR-to-PGA.pdf

These three events in a short period of time highlight the important momentum being built across countries and stakeholders related to the problems and solutions in the laboratory leadership and management space in Africa. This momentum should now be capitalized upon to push for gains at every level of the laboratory community – from country level laboratories and NLDs to regional and global actors. This ***Blueprint*** provides one such opportunity to turn aspirational calls to action, declarations, and resolutions into tangible results.

Blueprint Elements

This ***Blueprint*** draws on the Status Report but reframes and renames the categories to best capture areas for action moving forward. These expanded categories accommodate more solutions on strategic frameworks, enabling contexts, and the 'upstream' cultivation of leaders and managers well before they are employed or appointed into positions of leadership.

This categorization is a convenience for framing the conversation. Yet, there is considerable overlap across categories, which results in some duplication if not in theory, then certainly in practice. Not every

instance of such synergy is called out in this document, though it is typically evident or implied. Importantly, this document focuses on action to move the laboratory community forward. The primary focus is on the action items, not their classification.

This Elements section identifies opportunities in each of these five categories, paired with call outs summarizing the main proposed action points. These action points are then collated in the subsequent section of this report in the Blueprint Action Table.

Structure

This category covers the fundamental, existential questions for NLDs. As described in the Status Report, countries are at varying stages in terms of the existence and maturity of their NLD or its equivalent. Structure is invariably intertwined with questions of mandate – the essential matters of the role a given NLD plays in its country.

Action 1

Any effort to establish, grow, or reform an NLD should begin with an assessment to clearly define the current structure and mandate and explore ways it could be improved. While no perfect or standardized structure or mandate exists, countries would benefit from several resources to help them envision a more effective and efficient NLD.

One opportunity is to offer guidance for assessments based on a theoretical spectrum to see where countries are currently positioned in terms of structure and mandate. Ideally, key elements would be assessed in terms of a maturity matrix, based on 'gold standard' statements. Table 1 provides examples of the types of considerations recommended for inclusion in an assessment tool, should the existence of a national laboratory network coordination entity (such as an NLD) exist. Assessments could be self-guided, conducted with broader stakeholders such as in technical working groups (TWGs), or facilitated by bodies like ASLM. They should be able to provide some quantitative and/or qualitative data to inform changes to the NLD structure. Consider using existing tools, assessments, and/or standards that focus on the specific leadership and management topics required, if available; however, this assessment tool would not prioritize technical elements of the laboratory space.

Table 1. Examples of potential gold standard statements for structure and mandate

"NLD has mandate formalized in legislature or official order/decree/directive"
"NLD has autonomy in decision making for laboratory domains and systems in country"
"NLD has direct and unbrokered access to Minister of Health and/or Permanent Secretary"
"NLD has mandate that covers public, private, NGO/CSO, WASH, surveillance, food safety, veterinary, academic, research, ... laboratories"
"NLD has mandate that covers all geographic and subnational jurisdictions in country"
"NLD has director and deputy director positions with clear roles and responsibilities"
"NLD has subunits/departments to coordinate at a minimum: procurement/supply chain, information systems, accreditation, quality, ..."

This assessment would focus on big picture issues without getting into details on strategies, skillsets, or other important elements addressed elsewhere in the Blueprint. All 'downstream' considerations are enabled by establishing or reforming NLDs to these gold standards to the extent possible in each country.

Action 1

Provide countries an assessment tool for structure and mandate (cast as a spectrum or maturity matrix).
(Suggested lead: ASLM)

Avail facilitation and/or technical assistance in conducting assessments of structure and mandate.
(Suggested lead: ASLM, NLDs)

Action 2

To help clarify the ideal structures, mandates, roles, and responsibilities of NLDs, ASLM or a similar entity could develop two pieces of guidance based on best practices and successful examples: one for high-level decision makers and one for NLDs themselves. These would be readily adaptable to country, political, and linguistic context. The guidance would cite major political declarations and calls to action to

promote comprehensive and self-contained laboratory directorates. Ideally, model NLD structures with proven track records for success could be endorsed by regional entities (such as Africa CDC or the African Union) as go-to models for countries looking to glean from the experience of their neighbors.

Action 2

Develop documentation on ideal structures, mandates, roles, and responsibilities for NLDs and circulate to countries for feedback and sharing (two versions: Ministerial level and NLD level).
(Suggested lead: ASLM, Africa CDC, Laboratory Directors Forum)

Consider endorsement of a select few models as prioritized options – these could be regional or overarching.
(Suggested lead: African Union, Africa CDC)

Action 3

Drawing on the experience of mature NLDs might inspire models for emerging NLDs. This could include documentation of examples from different approaches, such as South Africa's parastatal model and Ethiopia's semi-autonomous model. Case studies, such as simplified explanations using visuals, would be ideal for circulation, while experience sharing at conferences/fora and/or via country visits would provide more in-depth inspiration and knowledge sharing. A common recommendation voiced by interviewees on this topic was to ensure regional variations are accounted for, such as providing exposure to successful models in the West African context for other West African nations.

Action 3

Develop documentation for potential NLD models based on real examples. ***(Suggested lead: ASLM)***

Develop adaptable costing models for potential NLD models.
(Suggested lead: ASLM)

Encourage and facilitate country-to-country communication between countries with mature NLDs and countries with emerging NLDs to help the latter discern the pros and cons of different NLD structures.
(Suggested lead: ASLM, NLDs)

Action 4

The assessments, guidance documents, model sharing, and experience sharing would then inform actions at the country level. This could be major reforms (establish or restructure NLDs) requiring high-level political action. It could also be minor actions if the existing founding decrees/policies are generic enough to accommodate minor changes or a smaller-scale refresh. For example, contexts with appetite and political will for major reforms might look to reform to a parastatal model, consolidate public and private domains, consolidate medical and public health domains, and/or consolidate human and animal health domains. If the political window is not available, smaller reforms may be more prudent until a more favorable opportunity for broader change manifests.

Stemming from the overall macro structure of NLDs are questions related to internal structures. Internal structures are important elements for consideration for potential reforms and priority setting while evaluating overall structure and mandate. Subunits, subdivisions, or departments within an NLD will vary considerably country to country. Nonetheless, the Status Report highlighted issues that are commonly overlooked. These include functional groups that play important coordination roles with third parties, such as: procurement and supply chain focal persons who deal with Central Medical Stores or other entities; maintenance focal persons who deal with manufacturers and tender/contract administrators; regulatory focal persons who deal with regulatory bodies; and information management focal persons who deal with other IT systems/ departments for logistics management, laboratory management, surveillance, and other data systems. Other internal subunits typically follow more conventional and familiar matters related to personnel, training, and quality, for example – these tend to be better structured due in part to their familiarity among those who make a career in laboratory settings.

Action 4

Include in guidance to countries/NLDs on subunit best practices. ***(Suggested lead: ASLM)***

Provide practical descriptions of the often neglected or underserved functions that NLDs should implement, such as focal point persons for coordination with outside departments, systems, and structures. ***(Suggested lead: ASLM)***

Action 5

In larger NLDs, subunits themselves have directors or leaders with delegation of responsibility. These key leadership and management roles constitute another layer of personnel that should receive capacity building for hard and soft skills to be efficient and effective (in other words, the core competencies addressed later in this Blueprint). A final consideration for the team composition within an NLD is that of deputy director or its equivalent. Redundancy is helpful to ensure continuity of strategy and execution, while also reducing friction and losses due to turnover of directors over time.

Action 5

Support NLDs to have 'depth' in their capacity and skillset building to ensure all elements in the structure of the NLD (subunits) have competent leaders and managers in place. ***(Suggested lead: ASLM)***

Encourage NLDs to include a deputy director position in their internal structure. ***(Suggested lead: ASLM)***

Strategy

A set of strong national laboratory policy and strategy documents segues from a clear and robust mandate and structure addressed in the previous section. This is a clear action item recommended in the watershed Maputo Declaration in 2008 and in several follow up declarations since. Regardless of the appetite for change in the structure and mandate space, NLDs can always improve their effectiveness and efficiency in their current setup and context by establishing and/or updating their national policies and strategies. Specific guidance exists on these high-level documents, including resources listed in Table 2, but anecdotally countries do not always have knowledge of or access to these documents.

Action 6

There are two clear opportunities for supporting stronger national laboratory policies and strategies: 1) sharing examples from countries that approve their circulation, and 2) providing multilingual templates as a starting point and ideas for countries developing or refining their high-level documents. An important consideration for the latter is to keep these documents generic enough to accommodate changes over time. For example, a national laboratory strategy may typically govern a 5-year period or other periodicity that aligns well with other government planning cycles in country, so it should not be tied to a short-term trend or priority (e.g. deploy COVID-19 specific tools). Instead, additional strategic plans (such as those often developed in a cross-sectoral way, such as AMR, One Health, etc) and costed operational plans for specific laboratory projects, programs, and priorities fit within the overall generic national strategic plan.

By promoting a disease-agnostic framework to guide the laboratory sector in country, NLDs can establish and promote their priorities. These priorities then become the guideposts for fundraising and alignment of projects, programs, and investments. Positioning in this way further helps identify synergies among donors and helps NLDs move away from fragmented, vertical programming. Further, ideally the high-level documents do not delve into technical themes often at the forefront of NLD mentalities such as quality systems, procurement, maintenance, data management, and accreditation, among others. Instead, national-level guiding documents should address normative themes that transcend technical topics. As such, the documents would better focus on area like NLD operations, strategic priorities, execution plan, financing parameters, and human resources. Countries would benefit from guidance and examples related to these areas.

Action 6

NLDs establish or update national policies and strategies. Reviewing for sustained relevance on a regular basis. (***Suggested lead: NLDs)***

Create online repository for NLDs with examples of policies and strategies as well as generic templates. ***(Suggested lead: ASLM)***

Provide guidance and suggested themes to include in national high-level documents around macro topics that are often overlooked such as strategic priorities, sustainability, human resources, regulatory mechanisms, domestic financing, etc. ***(Suggested lead: ASLM, African Union, Africa CDC)***

Action 7

To help NLD directors with this endeavor, including justifying the importance of these documents (and broader reforms, as applicable) to their superiors, simplified summaries of key global and regional declarations have been suggested to improve awareness and comprehension of these documents. Table 2 lists a recommended minimum set of declarations to include.

Table 2. Recommended minimum list of declarations and call documents for inclusion in summary document

WHO AFRO Maputo "Strengthening of Laboratory Systems" Declaration (2008)
WHO AFRO Yaoundé "Strengthening Public Health Laboratories" Declaration (2008)
WHO AFRO "Regional Strategy on Diagnostic and Laboratory Services and Systems, 2023–2032 for the WHO African Region" (2023)
World Health Assembly "Strengthening Diagnostics Capacity" Declaration (2023)
Laboratory Directors Forum "Enabling Governance" Call to Action (2023)
Special Convention on Diagnostics in Abidjan "Strengthening Laboratory Systems and Networks in Africa to Increase Access to Quality Diagnostics" Call to Action (2024)
"NLD has subunits/departments to coordinate at a minimum: procurement/supply chain, information systems, accreditation, quality, …"

Action 7

Consolidate and develop lay summaries of historical and recent declarations that conveys their meaning in clear and simple terms. ***(Suggested lead: ASLM)***

Action 8

Strong policies, strategies, and plans help a country define its priorities instead of following trends from the donor community or other external stakeholders, especially in a setting without clearly articulated priorities and plans. Another important consideration is to ensure all stakeholders – in this case especially donors and partners – are aware of country strategies and plans to avoid duplication or other inefficiencies such as funding or programmatic gaps. To facilitate this, costed strategic plans or costed operational plans are essential. While at this level of detail some contexts may require disease-specific workplans, ideally a broader framing is used, such as costed plans for endemic diseases generically and emerging diseases generically, for example. As with the higher-level documents, access to successful examples and/or suggested templates would facilitate these tasks for NLDs.

Once developed, these policies, strategies, and plans should form the basis of all technical work in-country. Donors and implementing partners should refer to these regularly and ensure any activities are in line with national strategic plans that are developed and managed by the NLD and country stakeholders.

Action 8

NLDs publish policy, strategy, and planning documents, in accessible formats for use as collaborative reference points with donors, partners, and other stakeholders. ***(Suggested lead: NLDs)***

NLDs develop costed plans (strategic or operational) based on higher-level documents. ***(Suggested lead: NLDs)***

Create an online repository for NLDs with examples of costed plans as well as generic templates. ***(Suggested lead: ASLM)***

Action 9

These important elements will be developed in different formats and using different approaches in each country. However, best practice would support the establishment or strengthening of technical working groups (TWGs) to support NLDs in this endeavor. TWGs form an important part of the governance context for NLDs, allowing for inclusivity of broad thinking and decision-making as well as being collaborative and cross-cutting across relevant national disease and public health services. Despite their name, the scope of TWGs ideally extends beyond technical discussions and can include support in the development of key high-level documents and strategies. These may alternatively be branded task force groups or laboratory committees. In essence, no matter the naming convention, this group would bring all laboratories across the country, as well as other key technical stakeholders (e.g. clinicians, disease program colleagues, etc) together for better collaboration and coordination.

Action 9

Establish/strengthen TWGs that support NLDs in strategy development and planning. ***(Suggested lead: NLDs)***

Action 10

Recently, the Lusaka Agenda [7] has emerged as an important expression of the frustrations in the health sector especially with regards to some of the largest funding mechanisms. It calls for better alignment and efficiency in how countries administer health sector investments. Importantly, it reminds all stakeholders that external partners should align with in-country government mechanisms, not the other way around. The Lusaka Agenda also highlights the importance of government-led agenda-setting. While it targets higher-level change to the global funding architecture, the principles of the agenda—hinging largely on respect and efficiency—would be welcome if applied at the department or directorate level.

7 https://futureofghis.org/final-outputs/lusaka-agenda/

Action 10

Support the reforms outlined in the Lusaka Agenda for more cohesive, efficient, and country-led health financing and apply the principles to engagement at the NLD level. ***(Suggested lead: ASLM, African Union, Africa CDC, Donors, Partners)***

Action 11

In many countries, donors and partners can play an important role in this process. To ensure this involvement is constructive and impactful, the partner community can also promote participation in TWGs and make constructive contributions to NLD strategy formulation based on long-term goals instead of short-term funding. This community should also be cognizant of the grievances aired in the Status Report related to NLDs often not being at the table during proposal development and budget allocations with many of the largest donors in the health sector.

Action 11

Include donors and partners in TWGs to support the collaborative environment and ensure that their activities meet needs included within national strategy, policy, and plans documents. ***(Suggested lead: NLDs)***

Sensitize donors and partners on the importance of NLD input on investments, grants, and budgets, from early scoping to final details. In some contexts, this advocacy work is required within the MoH as well to ensure NLD is invited and present in these meetings and processes. ***(Suggested lead: ASLM, African Union, Africa CDC)***

Action 12

Another set of stakeholders that requires action under this theme is the convening bodies and normative agencies at global and regional level. Most of the strategic guidance cited as progress for laboratory leadership over the years (such as those listed in Table 2) has come from WHO HQ (Geneva), WHO AFRO, or the African Union. These entities have an important role to play in establishing consensus on agendas and priorities. They also, together with agencies like Africa CDC and associations like ASLM, have a respected voice and can influence national-level member state policy through declarations, guidelines, and endorsements. While many documents and publications from this set of stakeholders are helpful for NLDs, the Status Report highlighted the challenges with these initiatives when they are not accompanied by funding commitments, guidance for operationalization, and/or mechanisms for enforcement. For example, there has been significant emphasis in recent years on the One Health agenda, which has undisputed importance. However, it serves as a practical example of the lag between high-level agenda-setting and actual implementation. While not a new

problem, stakeholders have voiced concerns that the increased frequency of ever-more aspirational declarations are at risk of losing their potency if follow-up action is not cultivated at all levels.

Action 12

Declarations, resolutions, and calls to action should be led and driven by country needs. ***(Suggested lead: ASLM, African Union, Africa CDC, Donors, Partners)***

Ensure declarations are enforced, funded, implemented, and operationalized. ***(Suggested lead: ASLM, African Union, Africa CDC, Donors, Partners)***

Core Competencies

This category is what many stakeholders first emphasize when discussing laboratory leadership and management. As with the Status Report, this Blueprint focuses on soft and hard skills for leaders and managers of NLDs or their equivalent, not of physical individual laboratories themselves.

Action 13

The objective of this Blueprint is not to outline the core skills necessary for a strong leader or manager. Significant work has already been done on this, including important contributions from experts around the world in the development of competency frameworks, such as the Global Laboratory Leadership Programme (GLLP) [8, 9], (see Table 3). Indeed, the discussions informing the Status Report drew from such frameworks, albeit taking a more granular approach to skills within the larger buckets of Systems, Leadership, Management, Communication, as seen in Table 4.

While this Blueprint advocates many action items related to the excellent work of existing training and competency frameworks to date, it is worth cautioning that when framing leadership and management the laboratory community as a whole tends to shift towards more technical laboratory considerations. This is to the detriment of the core leadership and management competency skills needed to underpin successful NLDs before they implement any technical functions. The Status Report contrasts the plethora of guidance and trainings for technical issues with the limited capacity building on core leadership and management skills this Blueprint promotes.

[8] Laboratory leadership competency framework. Geneva: World Health Organization; 2019

[9] Albetkova A, Chaignat E, Gasquet P, Heilmann M, Isadore J, Jasir A, Martin B and Wilcke B (2019) A Competency Framework for Developing Global Laboratory Leaders. Front. Public Health 7:199. doi: 10.3389/fpubh.2019.00199

Table 3. GLLP Competency Framework Summary

Competency 1. Laboratory System	
Domain 1.1	Policy and legal framework
Domain 1.2	Information Systems
Domain 1.3	Infrastructure
Domain 1.4	Workforce

Competency 2. Leadership	
Domain 2.1	Strategic planning
Domain 2.2	Organizational leadership
Domain 2.3	Critical thinking, problem-solving and decision-making
Domain 2.4	Partnerships and coalition building
Domain 2.5	Ethics and integrity

Competency 3. Management	
Domain 3.1	Laboratory Management
Domain 3.2	Resource Management Subdomain 3.2a *Budgeting and financial management* Subdomain 3.2b *People management*

Competency 4. Communication	
Domain 4.1	General communication skills
Domain 4.2	Proposal writing
Domain 4.3	Communication with media
Domain 4.4	Risk communication
Domain 4.5	Scientific communication

Competency 5. Quality Management System	
Domain 5.1	Process management Subdomain 5.1a *Sample management* Subdomain 5.1b *Process control*
Domain 5.2	Document and record management
Domain 5.3	Equipment and consumables
Domain 5.4	Purchasing and inventory
Domain 5.5	Nonconforming events management
Domain 5.6	Assessments Subdomain 5.6a *Audits* Subdomain 5.6b *External Quality Assessment* Subdomain 5.6c *Norms and accreditation*
Domain 5.7	Continual improvement
Domain 5.8	Customer focus

Competency 6. Biosafety and Biosecurity	
Domain 6.1	Biosafety
Domain 6.2	Biosecurity
Domain 6.3	Shipment of dangerous goods including nonbiological goods

Competency 7. Disease Surveillance and Outbreak Investigation	
Domain 7.1	Surveillance
Domain 7.2	Outbreak investigation

Competency 8. Emergency Preparedness, Response and Recovery	
Domain 8.1	Preparedness
Domain 8.2	Response
Domain 8.3	Recovery

Competency 9. Research	
Domain 9.1	Health research
Domain 9.2	Innovation and development

Table 4. Core Competencies as expressed in the Status Report

Examples of Leadership Core Competencies	Examples of Management Core Competencies
Strategic Vision and Planning • Strategic planning and policy formation • Vision and mission • National Laboratory Strategy / Policy development • Strategic frameworks • Resource mobilization	**Laboratory and Resource Management** • Laboratory management • Resource management • Budgeting and financial management • People management
Organizational Leadership • Organizational leadership • Leadership styles • Political leadership	**Coordination and Oversight** • Coordination mechanisms • Oversight • Stewardship
Critical Thinking and Decision Making • Critical thinking • Problem solving • Decision making • SWOT analyses and other tools	**Operational and Technical Management** • Process improvements and change management • Systems thinking • Project management • Performance management
Ethics and Integrity • Ethics • Integrity • Accountability • Transparency	**Policy and Compliance Management** • Policies, guidance, and regulations • Contracting and compliance • Legislative and regulatory frameworks • Reforms • Financing
Collaboration and Stakeholder Engagement • Partnerships • Stakeholder analysis • Coalition-building • Stakeholder voice and engagement • Communication	**Communication and Team Management** • Delegation • Constructive feedback • Team management • Conflict resolution • Grant writing

Action 13

Encourage capacity building programs that avoid dilution of leadership and management skills by technical content. ***(Suggested lead: ASLM, African Union, Africa CDC, Donors, Partners)***

Action 14

The Status Report highlights several important existing capacity building programs that endeavor to strengthen leadership and management skills. However, it also highlighted several of the challenges raised by stakeholders related to these programs, for which opportunities for improvement are the focus of this section of the Blueprint.

Existing regional or global competency frameworks can be leveraged for widespread uptake, such as GLLP. It benefits from several years of curriculum development by dozens of subject matter experts and has the support of many of the world's most renowned laboratory stakeholders. However, leadership within these existing competency frameworks may need to be responsive to the needs of African NLDs. This Blueprint recommends focusing resources on existing competency frameworks, if possible, and avoiding further fragmentation of the capacity building landscape, thereby increasing the efficiency by which countries can strengthen these core skills. However, it is noted that in some cases multiple leadership courses could be beneficial in covering all critical topics and/or broader participation.

Action 14

Promote and endorse existing competency frameworks, if possible, to avoid overlapping or duplicative efforts ***(Suggested lead: ASLM, African Union, Africa CDC, Donors, Partners)***

Action 15

Due to their often global nature, however, existing competency frameworks such as GLLP could be more impactful if tailored to the regional context for its implementation within African countries. Stakeholders dedicated to the African settings, such as ASLM and Africa CDC, could help guide this process of adaptation for an African-specific competency framework that would make content more contextualized and pave the way for endorsement from major stakeholders on the continent.

The existing competency frameworks are relatively new and generally have not been formally evaluated in terms of impact. This Blueprint suggests taking the opportunity

to evaluate them with two objectives: 1) evaluate the impact in the African setting, and 2) evaluate the curriculum with an eye for contextualization to the African setting. The former would help garner support for adoption of selected existing competency frameworks in general and the latter would help enrich it for an African adaptation, from localization of the examples and case studies used, to the scope of the content to ensure all necessary soft and hard skills are adequately included in light of the political, economic, and social realities of African countries.

Action 15

Evaluate the impact of existing competency frameworks in African pilot settings. ***(Suggested lead: ASLM, GLLP/others)***

Evaluate the content of existing competency frameworks with an African lens. ***(Suggested lead: ASLM, GLLP/others)***

Adapt and endorse an African-focused competency framework based on quantitative and qualitative evaluations, including review of the scope of soft skills to ensure it covers all concerns raised in the Status Report and any subsequent evaluations/adaptations of existing global competency frameworks. ***(Suggested lead: ASLM, African Union, Africa CDC, GLLP/others)***

Action 16

Existing global or future regional competency frameworks would further benefit from a two-pronged offering: 1) its current robust form, which develops full cohorts with strong country buy-in and time-intensive curriculum with 200 didactic hours and several practical components; and 2) a more modular on demand form, for individuals to access content without the full engagement, in scenarios where country cohorts are not ready, require only refresher training, or funding is not yet in place for the full program. The recommendation is to have all modalities of training drawing from a single pool of content, thereby cultivating a skillset and knowledge base across NLDs that partners and donors can count on and support without recourse to many additional third-party trainings or programs. That said, the preferred modality would remain the current, robust approach that promotes cohorts that builds up institutions and groups instead of just individuals, considering the known challenges related to turnover of human resources. National and regional laboratory leadership should, therefore, continue to encourage implementation with a stakeholder group that captures the depth and breadth of the NLD's composition – keeping in mind future potential leaders, deputies, and other key positions.

Action 16

Encourage the full cohort model for the selected competency training program. ***(Suggested lead: ASLM, African Union, Africa CDC, Donors, Partners, NLDs)***

Develop modular approach for alterative access to the selected competency training program. ***(Suggested lead: ASLM, African Union, Africa CDC, GLLP/others)***

Action 17

Suggestions from stakeholders have also included the proposal to introduce incentives for participation in a high-quality competency training course, given the length and depth proposed in Action 16 (eg. 200 didactic hours with several practical components mirrors some traditional academic achievements). This could take the form of Continuing Professional Development points or formal certificates, ranging from completion or recognition to diplomas or degrees to integration with local academic institutions for master's level credentialing. The other side of the incentive discussion involves how donors and partners position the importance of competency training when discussing investments in country. Large funding partners such as Global Fund, Gates Foundation, or other entities could explore creative funding mechanisms such as stepwise release of discretionary funding for NLDs upon completion of the competency training, among other options. Such push and pull mechanisms may work well together, especially if higher levels of MoH are involved. However, it is important to note the financial climate at present in the first half of 2025 and whether this funding mechanism may be a sustainable approach.

Action 17

Develop incentives for completed competency trainings, exploring in-country credentialling or accreditation options and donor-supported options. ***(Suggested lead: NLDs, National universities, GLLP/others, Donors)***

Action 18

Finally, competency training would be ideally paired with a mid-long term mentorship model, beyond that within the training program itself, preferably via a South-to-South mechanism drawing from a pool of seasoned leaders. These leaders could be from the laboratory space with previous NLD or Ministerial experience or they could be leaders in other successful public health arenas or the private sector. To address the funding need for such a program, it would best be worked into the initial training budget countries draw up, instead of a separate or siloed activity. The ideal solution would be a multi-year mentorship engagement with emphasis on coaching for the softer skills that require time and experience to cultivate and polish.

Action 18

Develop mentorship model, ideally multi-year South-to-South engagements. ***(Suggested lead: ASLM, GLLP/others)***

Action 19

Even with a robust competency training framework promoted throughout the continent and a strong mentorship program, a subset of skills may remain a challenge to cultivate due to rapidly changing contexts, nuanced expertise, and/or the need for exposure across several countries instead of within a single one. One such skillset relates to fundraising. While fundamentals can be and are covered in existing competency frameworks, this Blueprint recommends engaging a resource mobilization consultant who can work with individual NLDs at country level to access funding opportunities regionally and globally, in addition to optimizing their in-country resource mobilization within governments or via bilateral partners. This comprehensive mobilization plan would be closely linked to the national strategies, policies, and plans in order to support identification of resources that can be directly applied to support country-identified key activities. Potential topics in need of this special attention are listed in Table 5.

Table 5. Recommended areas for additional capacity building on fundraising skills and financial literacy beyond existing competency frameworks

Guidance for approaches to make accurate cost estimates for budget requests, especially for often-overlooked elements including:
- Deputy directors at NLDs - Competency training implementation and mentorship - Emergency outbreaks and surveillance provisions - Buffering and contingencies for procurement quantifications - Total cost of ownership for laboratory network including all aspects of testing, maintenance, human resources, amortization, and operations – especially with lens of sustainability
Develop a generic, comprehensive resource mobilization tool and materials
Guidance and practical mentorship for proposal development, fund planning, grant writing skills
Guidance on how investment in networks, education, and/or infrastructure could be optimized (i.e. how do they maximize donor and domestic funds better for more efficient systems)

Action 19

Engage resource mobilization expert(s) to provide additional/ surge capacity building for fundraising, grant-writing, and financial management themes beyond competency training curriculum. ***(Suggested lead: ASLM)***

Professionalization

A lament raised by many stakeholders within the Status Report was the lack of professionalization efforts in many African settings. There are indeed several options and opportunities to cultivate the laboratory sector into a more organized, unified, and attractive workforce and ultimately a more respected profession. The core suggested interventions involve associations, academic structures, and career pathways.

Action 20

One key opportunity involves establishing or promoting professional laboratory associations both regionally and within countries. As highlighted in the Momentum section, progress is being made by some actors whose experience can be better leveraged across the continent. Professional associations may vary widely in their purpose and remit. However, the assumption around recommendations for more of them is that their existence and promotion will increase visibility around laboratory personnel and services, provide opportunities for advocacy, and generate oversight and momentum towards improved standards and practices in the laboratory community. Interested stakeholders at a country level may benefit from guidance on the potential structure and role that would make them successful civil society entities in their given context. Details such as legal mechanisms for formation could be sourced from local legal advisors for a fee but reaching out to existing associations in the health space, where medical doctors often already have a professional body, may be more prudent.

Action 20

Compile and share examples (south-to-south learning) of successful laboratory-related professional associations in African settings. ***(Suggested lead: ASLM)***

Provide technical guidance on potential structures and formation approaches for professional societies, leveraging where possible existing health-sector actors. ***(Suggested lead: ASLM)***

Encourage formation of laboratory-related professional associations within each country context. ***(Suggested lead: ASLM, NLDs)***

Action 21

There are also many opportunities to improve laboratory programs in academia. Development of university degrees specific to laboratory and related specializations, particularly master's and doctorate programs, is an important consideration for academic institutions within African countries. Where they do not yet exist, such programs would help ensure laboratory colleagues are more on par with medical doctors in terms of academic achievement and content knowledge, an important step in cultivating more respect for the laboratory profession within the health sector and in society more broadly. Countries may consider a medical residency program in laboratory systems to train medical laboratory scientists and develop more laboratory specialists. Finally, the inclusion of laboratory scientists as professors and teachers as part of university faculty would further improve the prestige and professionalization of laboratory leaders. In order to achieve these aims, which may take several years to establish in some settings, NLDs may be well positioned to lead the advocacy effort with academic institutions in country who might make the necessary investments in new degrees or programs. NLDs could be supported in this effort by entities like ASLM to make the pitch to universities based on their modus operandi (e.g. profit-driven, public endowment, etc) to encourage investment in this field.

Further, research laboratories play an important role to support evidence generation and science development that generates national and global interest as well as additional financing. Research laboratories can support NLDs through being a collaborative partner as training centres for laboratory professionals.

Action 21

Promote the development of master's degrees, doctoral programs, and medical residencies for the laboratory profession, that also include leadership and management competencies. ***(Suggested lead: Africa CDC, NLDs)***

Promote the establishment of positions for laboratory professors/ faculty in universities. ***(Suggested lead: Africa CDC, NLDs)***

Develop a pitchbook for NLDs and stakeholders to use for promoting the evolution of laboratory-focused academic programs in country. ***(Suggested lead: ASLM)***

Reinforce and promote the role of research laboratories in their dual function of scientific advancement and the training of laboratory professionals. ***(Suggested lead: ASLM, NLDs)***

Action 22

Another essential set of actions includes formalizing and communicating career path opportunities for laboratory professionals. A generic progression could be developed (e.g. laboratory technician to director of a laboratory to NLD leadership to university professor), though this remains highly specific to each country. A simple blog, opinion piece, or community of practice session (such as ASLM's LabCoP) on this topic could encourage countries to develop and share career development opportunities within their setting, piquing the interest of young and/or aspiring leaders. Such guidance would be most effective if paired with resources for cultivating foundational skills and accessing career opportunities. For example, countries could maintain a repository of resources (courses, trainings, career fairs, networking events, etc) that a motivated individual could pursue as they trace out a potential career in the laboratory culminating in high-level leadership positions in country. Further, positioning a job at the NLD as a career goal will help NLDs create strategies to attract and retain talent, fostered by the prestige afforded a laboratory leadership position emboldened by professionalization efforts.

Action 22

Collect examples to create a set of generic career pathways for laboratory professionals. ***(Suggested lead: ASLM)***

Encourage countries to develop/contextualize their own career path document, supplemented with a resource repository for interested professionals. ***(Suggested lead: ASLM, NLDs)***

Encourage NLDs to develop talent plans to attract and retain prepared leaders and management from the pool of qualified professionals cultivated by investments in young and/or upcoming potential hires. ***(Suggested lead: ASLM, NLDs)***

Action 23

Cultivating the professionalization efforts outlined above may feel unfamiliar or out of scope for NLDs themselves, presenting an opportunity for engagement with other stakeholders and groups by the broader laboratory community. They may also seem beyond the scope of current engagements with many partners and donors, who would benefit from recognizing the long-term efficiencies of building up the programs and

infrastructure required to cultivate laboratory leaders. By creating a pool of skilled upcoming leaders, money is saved over time by avoiding more ad hoc efforts training new NLD staff from scratch.

Action 23

Create advocacy materials for donors on the advantages – including their own savings – of promoting sector-wide professionalization efforts. ***(Suggested lead: ASLM)***

Advocacy

The need for stronger advocacy and a more prominent voice for the laboratory community broadly and NLDs specifically was a cross-cutting theme identified in the Status Report. Indeed, there are many opportunities to elevate the laboratory sector in ways that improve the role and impact of country NLDs along with broader continent-wide achievements among the community of laboratory stakeholders. An overarching theme of this section is to promote discussion around laboratory programs and budgets in compelling and robust language tied to broader public health outcomes that resonate with wider audiences, especially decision-makers and donors that may not fully comprehend laboratory priorities in the way they are currently often expressed by NLDs.

While several components of advocacy are included in skills outlined in the Core Competencies section, such as communications and partnership building, this Blueprint calls out additional actions needed beyond promoting those core skills among NLD directors.

Action 24

The position of this Blueprint is that expertise should be leveraged, likely contracted by an entity like ASLM, to develop a suite of advocacy materials. Depending on the final scope and nature of the role, this would ideally include the items listed in Table 6. These resources and tools would provide generic templates for use by countries who could then customize and finalize them for their context and needs – ideally with the assistance of the original content creators when needed.

Table 6. Recommended areas or tools for development by advocacy/communications/economist/ informatics expert(s)

Briefs (1-5 pages with visuals and callouts, light on technical details) for sensitization of stakeholders for the following topics:
- Benefits, needs, challenges, priorities for laboratories - Framing laboratories in terms of patient lives, burden of disease, morbidity/ mortality (instead of commodities, equipment and expiration dates) - Awareness of major accomplishments in laboratories/diagnostics - Awareness of what laboratories and NLDs actually do (full scope of activities, roles, services, functions, etc) and how they are critically linked to other public health measures (ie. prevention, treatment, etc)

Scenarios and/or scenario building: - Top n priorities together with impact (health outcomes and/or financial outcomes) - What could be accomplished with n million dollars - Demonstration of cost-effectiveness of laboratories (e.g. number of deaths due to X; $ will resolve Y to move towards Z target; money saved because of A, B, C in lab)
Adaptable list of Top 10 Opportunities in Diagnostics
Generic business/investment case and/or cost-benefit workups for laboratory network
Frameworks or 'recipes' for how laboratories fit within the public health objectives at high level
Parsed summaries and compelling graphics of the Lancet Commission and/or other key documents to highlight key elements for country use
Generic materials for telling compelling stories and communicating within the Ministry of Health
Education materials to inform and engage community, including social media considerations and best practices
Generic web content starters for NLDs to promote and publish laboratory material on MoH website(s)

The content for the suite of documents, tools, and templates would necessarily draw from the expertise of additional technical resources including economists and health information specialists. This Blueprint recommends engaging technical subject matter experts to develop compelling metrics, arguments, and data-based approaches to express the impact, importance, and cost-effectiveness of laboratory systems and diagnostics. This would include the most compelling way to analyze, visualize, and present these findings to different audiences. An important consideration is to encourage framing laboratory priorities in terms of public health impact language instead of common laboratory-specific terms such as number of tests or other technical jargon. While some of this storytelling can be done in a one-off package of materials, the ideal output would be accompanied by simplified templates and methodologies that countries can use to tailor to their own datasets and settings over time.

Action 24

ASLM or similar entity hire expertise in the areas of advocacy, communication, economics, and/or health informatics to develop adaptable materials as part of a suite of advocacy tools for use by NLDs. ***(Suggested lead: ASLM)***

Action 25

Depending on the structure, ideally the expert(s) would also be available to provide trainings to NLDs on these topics and resources as needed, through either creating standardized aids or providing virtual and/or in-person support. Some specific training opportunities are listed in Table 7. As noted above, these are called out as unique capacity building opportunities based on key gaps highlighted in the Status Report. They therefore go beyond what might be considered as part of the core competencies for leadership and management. This Blueprint, therefore, recommends engaging subject matter experts to drive these areas forward that may be underrepresented or overlooked in the curriculum of the mainstream core competencies trainings. Building these capacities will require regular and consistent support within routine and practical activities. While efforts towards an African-focused competency framework as suggested elsewhere in this document might do well to consider integration of these topics, this Blueprint nevertheless recommends their distinct treatment for more immediate action with well-positioned groups like ASLM in the short- and mid-term.

Table 7. Recommended "how to" advocacy-related trainings beyond core competency framework

How to succeed in (upward) sensitization of and education for ministry leadership, other directorates/department heads, hospital directors, donors/partners
How to engage and leverage the press and media outlets
How to session for slide-making and visuals for better idea expression
How to adopt and contextualize the suite of advocacy tools for a country's setting and use cases
How to prepare a set of advocacy materials and plans, events, learning from (and synergistic with) HIV civil society or other successful programs in country
How to clearly articulate a plan to diverse audiences
How to cultivate and demonstrate stewardship of resources

Action 25

Provide practical training to NLDs on the areas of advocacy, communication, economics, and/or health informatics. ***(Suggested lead: ASLM, Laboratory Director's Forum, NLDs)***

Provide support to NLDs for the adaptation of the suite of advocacy tools to country contexts. ***(Suggested lead: ASLM, Laboratory Director's Forum, NLDs)***

Action 26

At a higher level, ASLM and other stakeholders would ideally engage MoH leadership to present key investment case and advocacy briefs in support of NLDs. This would involve sending small delegations to countries – ideally in a multi-agency group composed of available personnel from ASLM, the African Union, Africa CDC, and Laboratory Director's Forum, among others – to meet with MoH leadership in support of NLD priorities. The nature of this engagement would vary significantly by context, with some countries benefiting from a high-level visit about structure and mandate, while others focusing on promoting the existing competency training program, (re) formulating strategic plans, professionalization, and/or advocacy efforts. Depending on NLD needs and confidence, these delegations could weigh in to support existing NLD endeavors or, if needed, plant the seed for NLD action after which NLD leaders could more confidently make their pitch to their superiors knowing they have the moral and strategic support of strong and respected regional bodies.

Action 26

Avail delegations from respected regional entities (such as ASLM, African Union, Africa CDC) to countries in support of NLD-specific objectives. ***(Suggested lead: ASLM, African Union, Africa CDC, NLDs)***

Action 27

At the regional level, additional guidance documents can contribute to overall advocacy efforts. While the Status Report showed mixed appetite among key laboratory stakeholders for additional high-level political declarations and calls to action, these types of documents will inevitably continue to be issued as the main mechanism for shaping the political dialogue among convening parties such as the African Union or regional blocs. As such, they should be welcomed by the community and slotted into the action items related to turning high level guidance into effective and efficient operations, to the extent politically and financially feasible. While declarations and calls to action may follow the ebb and tide of geopolitical trends, Table 8 shows the types of other higher-level documents that would be useful at any time when generated by or developed in collaboration with these multilateral bodies.

Further, engaging in meaningful discourse with the African Union and other global multilateral agencies (e.g. United Nations General Assembly) to increase political will and financing will be critical.

Table 8. Suggested high-level products to support advocacy efforts

High-level importance of laboratories document for member states
Legislation templates to share with countries to adapt and adopt
Political navigation best practices document to support better communication within political arenas and fundraising to national governments (through understanding legislature and how parliaments work)
Roster of lab champions (at high levels of MoH) that can be engaged in peer-to-peer exchanges
Best practices document or case studies on laboratory directorate: can be country-agnostic or unnamed
Political declarations and calls to action, ideally with accompanying guidance on implementation and funding allocations
How to cultivate and demonstrate stewardship of resources

Action 27

Promote the development of high-level products that help stakeholders digest updated guidance, navigate political bodies, and help turn political will into concrete gains towards laboratory priorities. This could be done with support from a political or policy specialist. ***(Suggested lead: ASLM, African Union, Africa CDC)***

Engage in regular discourse with key regional and global political bodies, such as the African Union and United Nations General Assembly. ***(Suggested lead: ASLM, Laboratory Director's Forum, NLDs)***

Action 28

The donor and partner community should advocate for empowered and adequately funded Ministries of Health, and NLDs specifically. As outlined in the Cost Methodologies section, advocacy efforts paired with the other action items in this Blueprint can result in overall more efficient investments and grants by improving the enabling environment of laboratory systems and networks. Ultimately, only a robust, skilled, and respected NLD will be able to make investments work at an implementation and operational level.

Action 28

Donor and partner community ensure advocacy efforts for laboratory priorities are given ample consideration in funding portfolios. ***(Suggested lead: Partners, Donors)***

Action 29

At an aggregate level, the donor and partner community can help drive change through improved alignment with political declarations and calls to action that require corresponding funding commitments in order to be effective. This aligns with appeals, such as the Lusaka Agenda, to better align funding in global health to country-driven priorities and processes.

Action 29

Donor and partner community increase coordination efforts to align funding opportunities with high level political declarations and calls to action, and in recognition of and directly supporting member state priorities. ***(Suggested lead: Partners, Donors)***

Costing Methodologies

As with political declarations, a Blueprint for action without corresponding funding may be met by resistance or face limited prospects of implementation. This section seeks to facilitate the crafting of budgets and proposals as stakeholders endeavor to fund this Blueprint's action points that are relevant to specific NLDs or the whole region.

Pitches

As mentioned in the above sections, there are many opportunities to better present laboratory and diagnostics investment needs. However, while important advocacy tips were highlighted above, the pitch to fund the elements within this Blueprint require a slightly nuanced approach as it relates to NLD leadership and management specifically, not laboratory activities and networks themselves. Convincing others of the relevance of building NLD core capacities, for example, may be more difficult than convincing others to invest in laboratory service delivery improvements to save lives. Nonetheless, and to this end, NLDs and stakeholders have several positioning options, including those listed in Table 9, when assembling pitches or investment cases to implement key elements of this Blueprint or related endeavors.

Table 9. Additional options for framing costs and opportunities

Improved efficiency of NLDs themselves extend to efficiencies in laboratory activities and networks as well as expanded access to diagnostics
Net savings over the mid-term horizon from improved effectiveness and efficiency
Generation of savings from efficiencies
Improved capacity translates into better stewardship of funds
Better on-budget absorption with less funding held up by or sent back to Ministry of Finance
Reduced overlap in funding when NLD is empowered to coordinate across grants instead of within grants
Improved capacity reduces reliance on donor technical assistance, third parties, consultants, etc
Fewer emergency / ad hoc requests to and from donors
Less wastage downstream in laboratory network(s)
Avoid zero sum language so that savings arguments can be made
Show opportunity cost of not investing in NLD capacity
Shared burden, such as promoting investments within academia for expanded degree offerings

Estimating Costs

Unfortunately, even with convincing arguments in play, it is unlikely that all action points recommended in this Blueprint will be pursued or funded. Some elements are more continental in nature, while at the country level many of the action points can be read as a menu of ideas for which funding can be mobilized. As is evident above, core concerns related to structure and mandate would ideally be prioritized in settings where this needs immediate attention, while the action points in other categories would be pursued once a firm foundation is in place.

Indeed, in a setting of constrained resources and unfair tradeoffs, cost will likely drive discussions around what is feasible to implement from this Blueprint – and when. To facilitate the estimates that will be made to inform these discussions, Table 10 outlines several generic costing approaches for consideration. In the next section, these approaches are loosely mapped to action items in the Blueprint for a suggested starting point.

[10] Note that donors and partners are not listed here. Their role in shared costs is best captured in the Country Type A and Country Type B (and in some cases, the Regional Types). Hence, Country Type C refers primarily to in-country domestic opportunities that do not directly rely on NLD or other public entity funding.

Table 10. Potential Costing Approaches

Costing Approach	Description	Main Cost Driver Considerations
Country Type A "Head count"	NLD or other in-country group requires meeting, training, or joint activity.	Logistics: use all-in prorated historical averages for training costs based on head count and frequency
Country Type B "Investment"	In-country investment (time and/or funding) towards specific goals.	FTEs and/or big-ticket procurement of services or products
Country Type C "Shared"	Shared cost model where other entities [10] (private, academic, civil society) absorb some or most of the costs.	% or split of costs, typically unique to each arrangement or opportunity
Regional Type A "In-house"	Existing regional entities and teams can likely develop the resource or implement the action item with existing bandwidth.	FTEs with all-in cost of doing business assumptions at-cost

Costing Approach	Description	Main Cost Driver Considerations
Regional Type B "Contract"	Item would be best completed by engaging outside support from subject matter experts or consultants.	Contractor rates: estimate by average fees and time needed to execute.
Regional Type C "International travel"	Trainings or visits that require international trips to individual countries.	Logistics: estimate by 3 to 5 day trip historical averages, head count, and frequency

NLDs should be tasked with estimating or funding these items alone. Indeed, many partners and donors are often eager to assist with cost estimates and would ideally be engaged to help contextualize the Blueprint to a country context and help estimate costs – and help advocate for and mobilize the necessary funding thereafter. In fact, many donors and partners already provide funding and/or technical support to NLDs that could be optimized when revisited from the lens of this Blueprint.

Of note, many activities require a combination of stakeholders working together. For example, an in-person training between an advocacy expert and a NLD leader and deputy will rely on at least two costing approaches: the travel of the regional resources and the internal logistics of the country resources. As such, Table 11 in the next section may list more than one costing approach for a single action item.

Blueprint Action Table

Table 11 consolidates the various recommendations outlined in this report. It offers recommendations for potential owners or leads for interventions, together with suggested costing approaches from those outlined above in Table 10. As highlighted elsewhere, these are recommendations, not prescriptions. Significant variation exists across contexts and stakeholders, and alternative or even superior approaches may emerge over time. Regardless, at the time of this publication—based on the Status Report and paired with the recommendations of subject matter experts—the action items summarized below constitute a welcome and needed way forward towards the common vision of stronger NLD leadership and management across Africa.

Table 11. Blueprint Action Table

Action #	Action Item	Suggested Lead(s)	Costing Approach
Structure			
1.1	Provide countries an assessment tool for structure and mandate (cast as a spectrum or maturity matrix).	ASLM	Regional Type A
1.2	Avail facilitation and/or technical assistance in conducting assessments of structure and mandate.	ASLM NLDs	Regional Type A Regional Type C Country Type A
2.1	Develop documentation on ideal structures, mandates, roles, and responsibilities for NLDs and circulate to countries for feedback and sharing (two versions: Ministerial level and NLD level).	ASLM Africa CDC	Regional Type A
2.2	Consider endorsement of a select few models for go-to options.	African Union Africa CDC	Regional Type A
3.1	Develop documentation for potential NLD models based on real examples.	ASLM	Regional Type A Regional Type B
3.2	Develop adaptable costing models for potential NLD models	ASLM	Regional Type A
3.3	Encourage and facilitate country-to-country communication between countries with mature NLDs and countries with emerging NLDs to help the latter discern the pros and cons of different NLD structures.	ASLM NLDs	Regional Type A Country Type B

Action #	Action Item	Suggested Lead(s)	Costing Approach
4.1	Include in guidance to countries/NLDs on subunit best practices.	ASLM	Regional Type A
4.2	Provide practical descriptions of the often neglected or underserved functions the NLDs need to accommodate such as focal point persons for coordination with outside departments, systems, and structures.	ASLM	Regional Type A
5.1	Support NLDs to have 'depth' in their capacity building to ensure all elements in the structure of the NLD (subunits) have competent leaders and managers in place.	ASLM	Regional Type A
5.2	Encourage NLDs to include a deputy director position in their internal structure.	ASLM	Regional Type A
Strategy			
6.1	NLDs establish or update national policies and strategies. Reviewing for sustained relevance on a regular basis.	NLDs	Country Type B
6.2	Create online repository for NLDs with examples of policies and strategies as well as generic templates.	ASLM	Regional Type A
6.3	Provide guidance and suggested themes to include in national high-level documents around macro topics that are often overlooked such as sustainability, human resources, regulatory mechanisms, domestic financing, etc.	ASLM African Union Africa CDC	Regional Type A
7	Consolidate and develop lay summaries of historical and recent declarations that conveys their meaning in clear and simple terms.	ASLM	Regional Type A
8.1	NLDs publish policy, strategy, and planning documents, in accessible formats for use as collaborative reference points with donors, partners, and other stakeholders.	NLDs	Country Type B
8.2	NLDs develop costed plans (strategic or operational) based on higher-level documents.	NLDs	Country Type B
8.3	Create online repository for NLDs with examples of costed plans as well as generic templates.	ASLM	Regional Type A

Action #	Action Item	Suggested Lead(s)	Costing Approach
9	Include in guidance to countries/NLDs on subunit best practices.	ASLM	Country Type A Country Type B
10	Support the reforms outlined in the Lusaka Agenda for more cohesive, efficient, and country-led health financing and apply the principles to engagement at the NLD level.	ASLM African Union Africa CDC Donors Partners	Regional Type A
11.1	Include donors and partners in TWGs to support the collaborative environment and ensure that their activities meet needs included within national strategy, policy, and plans documents.	NLDs	Country Type A
11.2	Sensitize donors and partners on the importance of NLD input on investments, grants, and budgets, from early scoping to final details. In some contexts, this advocacy work is required within the MoH as well to ensure NLD is invited and present in these meetings and processes.	ASLM African Union Africa CDC	Regional Type A
12.1	Declarations, resolutions, and calls to action should be led and driven by country needs.	ASLM African Union Africa CDC Donors Partners	Regional Type A
12.2	Ensure declarations are enforced, funded, implemented, and operationalized.	ASLM African Union Africa CDC Donors Partners	Regional Type A
Core Competencies			
13	Encourage capacity building programs that avoid dilution of leadership and management skills by technical content.	ASLM African Union Africa CDC	Regional Type A

Action #	Action Item	Suggested Lead(s)	Costing Approach
		Donors Partners	
14	Promote and endorse existing competency frameworks, if possible, to avoid overlapping or duplicative efforts.	ASLM African Union Africa CDC Donors Partners NLDs	Regional Type A Country Type A
15.1	Evaluate impact of existing competency frameworks in African pilot settings.	ASLM GLLP/others	Regional Type B
15.2	Evaluate the content of existing competency frameworks with an African lens.	ASLM GLLP/others	Regional Type B
15.3	Adapt and endorse an African-focused competency framework based on quantitative and qualitative evaluations, including review of the scope of soft skills to ensure it covers all concerns raised in the Status Report and any subsequent evaluations/adaptations of existing global competency frameworks.	ASLM African Union Africa CDC GLLP/others	Regional Type B
16.1	Encourage full cohort model for the selected competency training program.	ASLM African Union Africa CDC Donors Partners NLDs	Regional Type A Country Type A
16.2	Develop modular approach for alterative access to the selected competency training program.	ASLM African Union Africa CDC GLLP/others	Regional Type B
17	Develop incentives for completed competency trainings, exploring in-country credentialling or accreditation options and donor-supported options.	NLDs National universities GLLP/others Donors	Regional Type B

Action #	Action Item	Suggested Lead(s)	Costing Approach
Structure			
18	Develop mentorship model, ideally multi-year South-to-South engagements.	ASLM GLLP/others	Regional Type B
19	Engage resource mobilization expert(s) to provide additional/surge capacity building for fundraising, grant-writing, and financial management themes beyond competency training curriculum.	ASLM	Regional Type B
Professionalization			
20.1	Compile and share examples (south-to-south learning) of successful laboratory-related professional associations in African settings.	ASLM	Regional Type B
20.2	Provide technical guidance on potential structures and formation approaches for professional societies, leveraging where possible existing health-sector actors.	ASLM	Regional Type B
20.3	Encourage formation of laboratory-related professional associations within each country context.	ASLM NLDs	Regional Type B Country Type C
21.1	Promote the development of master's degrees, doctoral programs, and medical residencies for the laboratory profession, that also include leadership and management competencies.	Africa CDC NLDs	Country Type C
21.2	Promote the establishment of positions for laboratory professors/faculty in universities.	Africa CDC NLDs	Country Type C
21.3	Develop a pitchbook for NLDs and stakeholders to use for promoting the evolution of laboratory-focused academic programs in country.	ASLM	Regional Type B
21.4	Reinforce and promote the role of research laboratories in their dual function of scientific advancement and the training of laboratory professionals.	ASLM NLDs	Regional Type B Country Type C
22.1	Collect examples to create a set of generic career pathways for laboratory professionals.	ASLM	Regional Type B

Action #	Action Item	Suggested Lead(s)	Costing Approach
22.2	Encourage countries to develop/contextualize their own career path document, supplemented with resource repository for interested professionals.	ASLM NLDs	Regional Type B Country Type B
22.3	Encourage NLDs to develop talent plans to attract and retain prepared leaders and management from the pool of qualified professionals cultivated by investments in young and/or upcoming potential hires.	ASLM NLDs	Regional Type B Country Type B
23	Create advocacy materials for donors on the advantages – including their own savings – of promoting sector-wide professionalization efforts.	ASLM	Regional Type B
Advocacy			
24	ASLM or similar entity hire expertise in the areas of advocacy, communication, economics, and/or health informatics to develop adaptable materials as part of a suite of advocacy tools for use by NLDs.	ASLM	Regional Type B
25.1	Provide practical training to NLDs on the areas of advocacy, communication, economics, and/or health informatics.	ASLM Laboratory Director's Forum NLDs	Regional Type C Country Type A
25.2	Provide support to NLDs for the adaptation of the suite of advocacy tools to country contexts.	ASLM Laboratory Director's Forum NLDs	Regional Type C Country Type B
26	Avail delegations from respected regional entities (such as ASLM, African Union, Africa CDC) to countries in support of NLD-specific objectives.	ASLM African Union Africa CDC NLDs	Regional Type C Country Type B
27.1	Promote the development of high-level products that help stakeholders digest updated guidance, navigate political bodies, and help turn political will into concrete gains towards laboratory priorities.	ASLM African Union Africa CDC	Regional Type A

Action #	Action Item	Suggested Lead(s)	Costing Approach
27.2	Engage in regular discourse with key regional and global political bodies, such as the African Union and United Nations General Assembly	ASLM Laboratory Director's Forum NLDs	Regional Type A Regional Type C
28	Donor and partner community ensure advocacy efforts for laboratory priorities are given ample consideration in funding portfolios.	Partners Donors	Regional Type A
29	Donor and partner community increase coordination efforts to align funding opportunities with high level political declarations and calls to action, in recognition of member state priorities.	Partners Donors	Regional Type A

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