# Mid-term Evaluation of Unitaid's COVID-19 portfolio of investments

## Unitaid

8 April 2022

**Final Report – Supporting Appendices**

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# APPENDIX A - UNITAID OVERARCHING THEORY OF CHANGE FOR COVID-19 INVESTMENTS

This appendix presents Unitaid's overarching Theory of Change for their COVID-19 Investments.

## Theory of Change: Enhancing access to COVID-19 services within healthcare systems in LMICs

### Problem

**Public Health Need**

- The WHO declared the COVID-19 outbreak a pandemic on 11 March 2020. Since then, the global number of infections and deaths have increased exponentially. If transmission remains high in many LMICs, the virus will continue to have far reaching public health and economic consequences globally. Unpredictable case surges and market disruptions continue to affect access to critical tools to prevent, diagnose and treat COVID-19.
- Crucial gaps remain to limit transmission (particularly of new variants), and lower mortality by expanding equitable access to quality, affordable diagnostics and treatments (including medical oxygen) and provide fast, effective case management – particularly in LMIC where vaccine roll-out is lagging.

**Access Barriers**

- **Innovation & Availability**: limited number of proven COVID-19 tools suitable for use in LMIC
- **Quality**: lack of quality-assured COVID-19 tools and protracted regulatory and registration systems at country level
- **Affordability**: high cost of products and growing global demand influencing price spikes; small number of manufacturers concentrated mostly in high income countries
- **Demand and Adoption**: limited evidence on acceptability, feasibility and effectiveness of existing and upcoming diagnostics and therapeutics across key use cases in LMIC and mis-information about COVID-19; low or slow adoption of global guidance at the country level; poor demand visibility to secure sustainable supply
- **Supply and Delivery**: limited COVID-19 delivery models integrated into existing health services; weak infrastructure to scale supply and deliver COVID-19 tools; weak regulatory, supply chain and procurement systems; constrained supply availability in LMIC due to competing global demand

### Pathway to impact

**Input**

Direct
- Unitaid ACT-A Funds

Indirect (non-exhaustive)
- Other ACT-A sovereign donations
- C19RM
- The World Bank
- ACT-A SFF
- Domestic financing

**Outputs**

1. **R&D** for COVID-19 tools and **Evidence generation** on safety and efficacy of COVID-19 tools e.g., testing of new tools); **technology transfers** of COVID-19 tools
2. **Supply chain strengthening and catalytic introduction** of COVID-19 tools, including oxygen, within existing health systems
3. **Enabling environment** for policy/guideline development, adoption and regulatory approvals
4. **Demand creation** through improved demand visibility and generating evidence on acceptability, feasibility and cost-effectiveness, and operational guidance on innovative delivery models and for targeted use cases
5. **Effective transition and scale up** through linkages to national programs and funding sources e.g., C19RM

**Outcomes**

**Improved access to and uptake of effective COVID-19 tools in LMIC:**
- Rigorous evidence available on safety and efficacy of COVID-19 tools; improved competition and reduced prices of tools
- Strengthened national level policies, guidance and strategies accessible to sub-national levels
- COVID-19 case management packages integrated into health systems to support cost-effective delivery; clear use cases and delivery models to inform global and national guidance
- Impact of large commodity funding available for transition and scale-up accelerated
- Better clarity and visibility on demand, and stabilized supply for COVID-19 tools

**Impact**

**Public health impact:**
- Reduction of mortality and severe disease due to COVID-19
- Additional COVID-19 cases identified and treated/isolated to reduce transmission
- Improved pandemic preparedness & early detection of outbreaks

**Economic impact:**
- Minimized economic/social impact of COVID-19 and accelerated recovery
- More efficient response by integrating COVID-19 services into existing TB, HIV, malaria and MNCH platforms

**Equitable access to diagnosis and treatment**

### Key Risks

**Strategic**: Poor adoption of COVID-19 tools, limited pipeline of evidence-based therapeutic options, particularly for mild-moderate cases, challenges to effectively evaluate the contribution of Unitaid's investments in COVID-19, potential perception of duplication with other donors

**Implementation**: Delays in obtaining WHO and national ethical approvals that affect ability to complete and disseminate research within the time-frame, lack of regulatory approval and availability of key diagnostics and treatment tools, coordination between implementers on procurement, complex portfolio of interventions and partners

**Scalability & transition**: Lack of sustainable funding, delays in adoption into country policies and guidelines, low acceptability of recommended interventions (ie: self-testing, use of RDTs in asymptomatic patients); and lack of availability of therapeutics or low adherence; limited capacity of governments to expand recommended approaches beyond project areas

# APPENDIX B - BIBLIOGRAPHY

This annex presents the list of documents and datasets consulted during the core phase of the evaluation.

## B.1- Document Review

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## B.3 - Additional Resources


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# APPENDIX C - LIST OF INTERVIEWS CONDUCTED

This Appendix presents a list of stakeholders we have consulted during the evaluation, across the Inception and Core Phases. Tables C.1 lists Unitaid consultees; Table C.2 lists FIND and Unitaid Grantees stakeholder consultations; Table C.3 lists global stakeholder consultations; Table C.4 lists country stakeholder consultations; and Table C.5 lists manufacturer consultations.

*Table C.1: Unitaid Secretariat consultations*

| Name | Organisation | Position |
|---|---|---|
| Philippe Duneton | Unitaid (ED) | Executive Director |
| Robert Matiru | Unitaid (SMT) | Director, Programme Division |
| Janet Ginnard | Unitaid (SMT) | Director, Strategy |
| Vincent Bretin | Unitaid (SMT) | Director, Results |
| Carmen Perez Casas | Unitaid (Strat) | Technical Manager |
| Cherise Scott | Unitaid (Strat) | Technical Manager |
| Alexandra Cameron | Unitaid (Strat) | Technical Manager |
| Katerina Galluzzo | Unitaid (Strat) | Technical Manager |
| Ademola Osigbesan | Unitaid (Strat) | Programme Manager, PSM |
| Karin Timmermans | Unitaid (Strat) | Technical Manager |
| Anisa Ghadrshenas | Unitaid (Strat) | Technical Officer |
| Pamela Nawaggi | Unitaid (Strat) | Technical Officer |
| Pierre Gsell | Unitaid (Strat/RES) | Technical Officer |
| Luca Occhini | Unitaid (PD) | Team lead |
| Dessie Tarlton | Unitaid (PD) | Programme Manager |
| Smiljka De Lussigny | Unitaid (PD) | Programme Manager |
| Heather Ingold | Unitaid (PD) | Programme Manager |
| Kate Hencher | Unitaid (PD) | Programme Manager |
| Katherine Blumer | Unitaid (PD) | Programme Manager |
| Jackson Hungu | Unitaid (PD) | Programme Manager |
| Akko Eleveld | Unitaid (PD) | Programme Manager |
| Oana Baban | Unitaid (PD) | Programme Officer |
| Thomas Gradel | Unitaid (PD) | Programme Officer |
| Evaezi Oturimuo | Unitaid (PD) | Programme Support Officer |
| Gauri Khanna | Unitaid (RES) | M&E Manager |
| Tanya Guenther | Unitaid (RES) | M&E Manager |
| Loveena Dookhony | Unitaid (RES) | M&E Manager |
| Ombeni Mwerinde | Unitaid (RES) | M&E Manager |
| Nargiza Mazhidova | Unitaid (RES) | Data Manager |
| Alex Debrun | Unitaid (FIN) | Grant Finance Manager |
| Jemmy Dopas | Unitaid (FIN) | Grant Finance Manager |

| Name | Organisation | Position |
|---|---|---|
| Matthieu Vittot | Unitaid (FIN) | Grant Finance Officer |

*Table C.2: FIND and Unitaid Grantees stakeholder consultations*

| Name | Organisation | Position |
|---|---|---|
| FIND | | |
| Sharon Saacks | FIND | Director of Operations |
| Marta Fernández Suárez | FIND | Senior Director of R&D |
| Emma Hannay | FIND | Chief Access Officer |
| Lauri Koivula | FIND | Grant Manager |
| Kekeletso Kao | FIND | Senior Program Manager |
| Jeremie Piton | FIND | Senior Program Manager |
| Unitaid Grantees | | |
| Marine Vignon | ALIMA | Project Manager |
| Regina Osih | Aurum Institute | Senior Technical Expert |
| Zachary Katz | CHAI | Vice-president, Essential Medicines |
| Audrey Battu | CHAI | Director, Essential Medicines |
| Paolo Maggiore | CHAI | Director, Essential Medicines and Access |
| Sostena Romano | CHAI | Director of Programmes for Global Laboratory |
| Chris Connolly | CHAI | Associate Director Global Labs Team |
| Trevor Peter | CHAI | Head of CHAI Laboratory |
| Owen Demke | CHAI | Senior Programme Manager |
| Nathalie Strub-Wourgraft | DNDi | Director of Negelcted Tropical Diseases (NTDs) and Anticov Lead |
| Frederic Ojardias | DNDi | Director of COVID-19 response |
| Annette Mahon | DNDi | Director, External Relations |
| Nabila Lassout | DNDi | Senior Clinical Project Manager |
| Patricia Caldwell | DNDi | Consortium support |
| Aida Yemane Berhan | Elizabeth Glaser Paediatric Aids Foundation (EGPAF) | Technical Director, Malawi |
| Simiso Mandisa Sokehla | Ezintsha (Wits Rep. Health) | Senior Research Clinician |
| Nkuli Mashabane | Ezintsha (Wits Rep. Health) | Pharmacist |
| Ines Dourado | Fiotec | Physician and Epidemiology Public Professor |
| Tom Fletcher | Liverpool School Tropical Medicine (led by UoL) | Infectious Disease Physician, AGILE |

| Name | Organisation | Position |
|---|---|---|
| Andrew Owen | University of Liverpool | Professor and Director of the Centre of Excellence in Long-acting Therapeutics |
| Jennifer Blaylock | University of Liverpool | Project Manager AGILE |
| Sara Piot | MTV SAF | Managing Director and Deputy Executive Director |
| Mike Ruffo | PATH | Project Director (TIMCI) |
| Julie Rajaratnam | PATH | Project Manager |
| Mira Emmanuel-Fabula | PATH | Project Manager |
| Alex Rothkopf | PATH | TIMCI Consultant |
| Allory Bauer | PATH | Financial Officer |
| Karine Hatzold | PSI | STAR Project Director |
| Aayush Solanki | PSI | Senior Market Advisor |
| Maria Arriaga | University of New South Wales | Senior Clinical Project Coordinator |
| Emmanuelle Papot | University of New South Wales | Senior Research Fellow in Infectious Disease |
| Ellen Weggen | WEMOS | Director |
| Mariella Bemelmaus | WEMOS | Senior Global Health Advocate |

*Table C.3: Global stakeholder consultations*

| Name | Organisation | Position |
|---|---|---|
| Brook Baker | ACT-A Therapeutic Pillar/North-eastern University | ACT-A Civil Society Representative/ Professor of Law |
| Fifa Rhaman | ACT-A Facilitation Council and Principal's Group/ Leeds University/ Health Poverty Action | ACT-A Civil Society Representative |
| Margo Warren | Access To Medicine Foundation | Head of Policy |
| Yenew Kebede Tebeje | Africa CDC | Head of Division for Laboratory Systems |
| Greg Widmyer | Bill and Melinda Gates Foundation (BMGF) | Director, Health Products, Programs, and Market (Unitaid Board Member) |
| Douglas Call | Bill and Melinda Gates Foundation (BMGF) | Senior Programme Officer, Oxygen |
| James Platt | Bill and Melinda Gates Foundation (BMGF) | Senior Programme Officer |
| Leith Greenslade | Every Breath Counts Coalition (EBC) | Coordinator |
| Harley Feldbaum | The Global Fund | Head of Strategy and Policy |

| Name | Organisation | Position |
|---|---|---|
| Azizkhon Jafarov | The Global Fund | Manager, Global Sourcing Health Technologies |
| Cathal Meere | The Global Fund | Manager, Pharmaceutical Sourcing |
| David Lawrence | The Global Fund | Manger, Oxygen |
| Katy Kydd Wright | The Global Fund Advocacy Network | Director |
| Piero Olliaro | The International Severe Acute Respiratory and Emerging Infection Consortium (ISARIC) | Member of WHO COVID-19 Ethics Review Committee/ Professor of Poverty Related Infectious Diseases |
| Carlos Chaccour | ISGlobal | Lead, BOHEMIA Grant |
| Regina Rabinovich | ISGlobal | Director of the Malaria Elimination Programme |
| Ellen 'T Hoen | Medicines Law and Policy | Lawyer and Public Health Activist |
| Esteban Barone | Medicine Patent Pool (MPP) | Policy Lead |
| Karine Belondrade | Medicine Patent Pool (MPP) | Communication Lead |
| Neha Agarwal | PATH | Senior Commercialization Officer for Diagnostics |
| Judit Rius San Juan | UNDP | Policy Specialist on Health Technologies, Innovation & Access |
| Luwei Pearson | UNICEF (Oxygen) | Associate Director Maternal Newborn and Child Health |
| Kristoffer Grandup-Marino | UNICEF (Oxygen) | Strategy Lead, Supply and Procurement Division |
| Akthem Fournati | UNICEF Supply Division | Director |
| Marcy Olivier | University of Bordeaux | International Trial Manager and Coordinator |
| Nikki Tyler | USAID | Lead, Market Access |
| Edward Whiting | Wellcome Trust | Director of Strategy |
| Nick Cammack | Wellcome Trust | Therapeutics Lead |
| Jillian Sacks | WHO | Technical Officer |
| Janet Diaz | WHO | Lead, Clinical Management of COVID-19 |

*Table C.4: Country stakeholder consultations*

| Name | Organisation | Position |
|---|---|---|
| **Cameroon** | | |
| Dr Hassan Ben Bachir | Cameroon Ministry of Health | Director of Cooperation at Ministry of Health/ President of the Oxygen Task Force |
| Thaddee Onana | Cameroon Ministry of Health | Logistics and Supply Chain Manager |
| Jeanne Frechede | ALIMA | Grants Manager |
| Yauba Saidu | CHAI | Acting Country Director |
| Charles Atem | CHAI | Diagnostics Programme Manager |
| Leonie Simo | Elizabeth Glaser Pediatric AIDS Foundation | Country Implementation Manager |
| **Ecuador and Guatemala** | | |
| Luis Perez | CHAI | Regional Director Latin America and the Caribbean |
| Jose Cordova Mendoza | CHAI | Country Associate Guatemala |
| Rodrigo Valencia | CHAI | Country Associate Ecuador |
| **Ghana** | | |
| Leslie Emegbuoyne | CHAI | Country Director |
| Enyonam Majorie Nudo | CHAI | Program Manager |
| **India** | | |
| Shashwat Shivam | CHAI | Program Manager, COVID-19 Response |
| Namita Bansal | CHAI | Senior Manager, Oxygen |
| Abhishek Tupe | CHAI | Technical Support |
| Dr Nimmy Dominic | PATH | Senior Project Officer, Unitaid COVID-19 Testing and Treatment Lead |
| Praveen Kandasamy | PATH | Senior Project Officer, Laboratories & Testing |
| **Kenya** | | |
| Rosemary Kihoto | CHAI | Deputy Country Director/Oxygen Lead |
| Judith Lusike | CHAI | Programme Director for Infectious Disease Program |
| Calvine Enock Lwaka | Elizabeth Glaser Pediatric AIDS Foundation | Programme Manager Catalytic Covid Project |
| Andolo Miheso | PATH | TIMCI Country Lead |
| Janet Shauri | PATH | TIMCI Senior Programme Officer |
| **Senegal** | | |

| Name | Organisation | Position |
|---|---|---|
| Dr Abdoulaye Bousso | Ministère de la Santé et de l'Action Sociale (Ministry of Health) | Former Director of the Operational Emergency Centre |
| Professeur Amadou Moctar Dieye | Ministère de la Santé et de l'Action Sociale/ Direction Générale de la Santé Publique (Ministry of Health) | Director of the Laboratory Directory |
| Nicolas Mouly | ALIMA | Head of Emergency Response |
| Charlotte Lejeune | CHAI | Country Director |
| Sophie Perier | CHAI | Regional Manager |
| Maymouna Ba | PATH | TIMCI Country Lead |
| Ndeye Astou Badiane | PATH | ADP and Oxygen Projects Coordinator |
| **Zambia** | | |
| Hilda Shakawelele | CHAI | Country Director |
| Aaron Banda | CHAI | Program Manager, Oxygen |
| Namwaka Mulenga | CHAI | Program Manager, Laboratory |
| **Zimbabwe** | | |
| Alexio Mangwiro | CHAI | Country Director |
| Tatenda Maparo | CHAI | Program Manager |

*Table C5: Manufacturer consultations*

| Name | Organisation | Position |
|---|---|---|
| Jean Mark De Royere | Air Liquide | Senior VP, Social Challenges/ Member of Executive Committee |
| Rigolot Xavier | Air Liquide | Development Aid Director/ Head of the Access to Oxygen Program |
| Brendan O'Farrell | DCN | President |
| Cheikh Tidiane Diagne | DIATROPIX | Head of Operations |
| Neil Beup | Linde Group | Head of Global Affairs |
| Nilesh Mehta | Premier Medical Corporation (PMC) | President |
| Prashant Sisodia | Viatris | Vice President, Commercial Operations ARVs & Infectious Disease |
| Juliana Pereira | WAMA | Manager |
| Leon Lin | Wondfo | General Manager |

# APPENDIX D - INTERVIEW GUIDES

## D.1 - Grantee Consultations

1. What is the rationale/ strategic relevance of Unitaid's investment vis-à-vis the needs and gaps of the pandemic and in relation to the landscape of potential/ available technologies?
2. To what extent has the investment adapted to ensure its continued relevance given the dynamics of the pandemic (waves, roll-out of vaccines, emergence of variants, etc)?
3. In what ways does the investment improve equitable access of COVID-19 tools for LMICs? To what extent does the investment adequately consider the needs of vulnerable and underserved populations?
4. To what extent does the investment align and further the ACT-A objectives and priorities?
5. What in your view does Unitaid's investment uniquely offer under ACT-A in relation to the role and work of other partners? To what extent is Unitaid working with partners to ensure the investment is well coordinated, builds upon and is scaled up by other relevant partners?
6. What has worked well and less well with regards to the implementation of the investment? Issues for consideration include: (i) speed of response; (ii) timeframe from conceptualisation to start of work; (iii) timelines for implementation; (iv) communication and grantee engagement; (v) challenges/ weaknesses in implementation of planned activities; (vi) M&E processes including reporting; and, (viii) other relevant key issues.
7. What have been the main achievements of the investment to date with regards to (i) R&D and product assessment; (ii) market shaping and manufacturing; (iii) procurement; and (iv) demand generation and in-country delivery? What is the significance/ implications of these achievements?
8. Have the interventions under the investment been well positioned as to ensure their continuation and scale-up (especially in the immediate term given the emergency) following the end of the investment – both at the global level and in countries?
9. To what extent is the investment positioned for impact? Could you also give any examples of positive and/ or negative consequences from the investment that go beyond the direct focus of the investment?
10. Overall, what have been the main lessons learnt from the design and implementation of the investment? What recommendations would you suggest for Unitaid for its future support to the COVID-19 response and for any future pandemic and / or emergency situations?

## D.2 - FIND Consultations

1. What was the rationale/ strategic relevance of the FIND-Unitaid Partnership?
2. What in your view does Unitaid's investment uniquely offer in relation to the role and work of other partners in the COVID-19 response?
3. With regards to the FIND-Unitaid Partnership model:
    a. To what extent was this: (i) effective in terms of structure/ set-up (including adequate resourcing, capacity and appropriate skill sets) and (ii) efficient in terms of processes, including risk management?
    b. What what has worked well and less well, and any lessons thereof?
4. What has worked well and less well with regards to the implementation of the investments?

   c. Issues for consideration include: (i) timelines, including timeframe from conceptualisation to start of work; (ii) communication and partner engagement, including with other key diagnostic actors; (iii) challenges/ weaknesses in implementation; and (iv) other relevant key issues.

5. What, in your view, have been the main achievements of the investment? What is the significance/ implications of these achievements, particularly in terms of supporting equitable access of COVID-19 diagnostics?
6. To what extent have the investments been well positioned as to ensure their continuation and scale-up (especially in the immediate term given the emergency) following the end of the investment – both at the global level and in countries?
7. What recommendations would you suggest for Unitaid for its future support to the COVID-19 response and for any future pandemic and / or emergency situations, including through Partnership models/ approaches?

### D.3 - Global Consultations

1. To what extent are Unitaid's investments of global strategic relevance in terms of addressing the key and evolving needs and gaps of the pandemic, and in relation to the landscape of potential/ available technologies?
2. To what extent do Unitaid's investments align and further the ACT-A objectives and priorities? What in your view do the Unitaid investments uniquely offer under ACT-A in relation to the role and work of other partners?
3. Are the investments well positioned in terms of what other global development partners are doing within the ACT-A framework? To what extent is Unitaid working with partners to ensure the investments build on and are taken up/ scaled-up by others?
4. What have been the main achievements of Unitaid's investments? What is the significance of these achievements, especially in terms of supporting equitable access to COVID-19 tools?
5. What recommendations would you suggest for Unitaid for its future support to the COVID-19 response and for any future pandemic and / or emergency situations?

### D.4 - Country Consultations

1. To what extent was Unitaid's investment relevant for the country's COVID-19 response?
2. To what extent was the investment aligned with the country's strategic response plan to COVID-19 and the work of other partners in country on COVID-19?
3. In terms of country level implementation, what worked well and what not so well, with regards to:
   a. speed with which Unitaid (through the grantees) was able to establish and start country level work;
   b. appropriateness of timelines for implementation;
   c. key challenges/ weakness in implementation and how they were addressed (including any needed adaptations to the evolving pandemic);
   d. any other issues.

4. What have been the main achievements of Unitaid's investment in country?
    a. What is the significance of these achievement in terms of supporting the country's response to COVID-19?
    b. Do you think the investment made a difference in promoting equitable access to COVID-19 tools for LMICs?
5. To what extent have the interventions under the investment been well positioned to ensure their continuation and scale-up in country following the end of the investment?
6. What recommendations would you suggest for Unitaid for its future support to the COVID-19 response in country and for any future pandemic and / or emergency situations?

### D.5 - Manufacturers Consultations, Diagnostics

1. What, in your view, was the strategic relevance of the FIND-Unitaid investments vis-à-vis the needs and gaps of the pandemic and in relations to the landscape of potential/ available diagnostic technologies?
2. What has worked well and less well with regards to the implementation of the investment?
3. What have been the main achievements of the investment to date?
    a. To what extent has the investment contributed towards (or is showing strong promise to contribute towards) the three main intended outputs of: (i) increased volumes and price reductions, (ii) expanded and diversified manufacturing capacity, and (iii) Ag RDT product optimization?
    b. What is the significance of these achievements, especially in terms of contributing to more equitable access to Ag RDTs in LMICs?
4. To what extent has the investment been well positioned to ensure its continuation and scale-up?
5. What have been the main lessons learned from the investment? What are your recommendations for Unitaid for its future support to the COVID-19 response and for any future pandemic/ emergency situation?
6. Are there any lessons to be learned that can strengthen the role of diagnostics?

### D.6 - Manufacturers Consultations, Oxygen

1. What, in your view, was the strategic relevance of Unitaid's efforts and investments in medical oxygen vis-à-vis the needs and gaps of the pandemic and in relation to the landscape of potential/ available technologies?
2. What have been the main achievements of Unitaid's efforts and investments in medical oxygen to date?
    c. What is the significance of these achievements, especially in terms of contributing to more equitable access to medical oxygen in LMICs?
3. What in your view does Unitaid uniquely offer under ACT-A in relation to the role and work of other partners in medical oxygen?
4. What recommendations would you suggest for Unitaid for its future support to the COVID-19 response, particularly with regards to medical oxygen, and for any future pandemic and / or emergency situations?

# APPENDIX E - EVALUATION METHODS AND LIMITATIONS

This is a mixed-methods evaluation encompassing document review, key stakeholder and focus group interviews and quantitative data analysis. Evaluation conclusions, lessons learnt and recommendations will be further discussed and deliberated over workshops with Unitaid Secretariat and key stakeholders. These methods are described in turn below:

## Desk-based document review

The evaluation has included a comprehensive and structured review of relevant documentation. Key sources include the following:

- **Unitaid overarching documents**, including the Unitaid Strategy, Executive Board documents, presentations and Resolutions (March 2020 – present), Unitaid COVID-19 Theories of Change, evaluations, press statements and communications, amongst others.
- **Unitaid COVID-19 investments and portfolio documents:** The review has included project plans/ amendments and other documents developed for each of the investments relevant to the Unitaid COVID-19 response, alongside progress reports, annual reports and other performance review reports. We have also included documents relevant for different investment groupings such as the Unitaid Requests for Proposals (e.g. Test and Treat; Oxygen etc.) and Expressions of Interests (e.g. Driving equitable access to fit-for-purpose antigen-detecting rapid diagnostic tests for COVID-19).
- **ACT-A documents:** The review has included published documents by Unitaid and WHO on behalf of ACT- A in respect of therapeutics, diagnostics, and oxygen, including, the ACT-A strategy, investment cases, strategic reviews and progress reports.
- **Other key stakeholders:** The review has also included select reports and materials from other key stakeholders, including Global Fund, FIND, Wellcome Trust, WHO, and grantees where relevant.
- **Wider literature:** The review has also supplemented the desk-review with select relevant academic and grey literature regarding ACT-A, the COVID-19 response (especially in relation to diagnostics, therapeutics, and oxygen) and the contribution of Unitaid.
- A **bibliography** of all the documents reviewed in the core phase of the evaluation is presented above in Appendix B

## Key stakeholder and focus-group interviews

Semi-structured key informant interviews (KIIs) and focus group discussions (FGDs) have been an important source of information for the evaluation and have provided a range of perspectives and insights. These have been largely conducted by organisations, but in a few instances, certain stakeholders have been combined to form focus group discussions (e.g. Unitaid Secretariat teams) to stimulate joint discussions and assessments. Due to the current restrictions in place due to COVID-19, all interviews have been conducted remotely.

Based on initial discussion with Unitaid, we interviewed the following groups of respondents (see Appendix C for an initial list of stakeholders):

- **Unitaid Secretariat**: Executive Office, Senior Management Team (SMT), Strategy, Programmes Division, Results, and Finance.

- **Grantees from the 27 investments:** FIND, CHAI, PATH, ALIMA, DNDi, WEMOS, MTV SAF, Ezinthsa Wits RHI, University of Liverpool, University of New South Wales, IS Global, WHO/ WHE (Health Emergencies Programme), PIH; EGPAF, PSI, AURUM Institute, FIOTEC.
- **ACT-A partners:** FIND, WHO, Global Fund**,** Wellcome Trust, UNICEF, Bill and Melinda Gates Foundation (BMGF).
- **Other global partners**: USAID, MPP.
- **Community and civil society organizations**: Global Fund Advocacy Network (GFAN), North Eastern University, Leeds University/ Health Poverty Action, Every Breadth Counts Coalition.
- **Access to medicines organizations**: Access to Medicines Foundation, Medicines, Law and Policy, UNDP.
- **Private sector/ manufactures**: PMC (India), Diatropix (Senegal), WAMA (Brazil), DCN (USA), Wondfo (China); Viatris (India), Air Liquide, Linde Group.
- **National level stakeholders**: selected grantees in Cameroon, India, Kenya, Senegal; Representatives of Ministries of Health in Cameroon, India, Kenya, Senegal.
- **Selected independent experts** in diagnostics, therapeutics and oxygen.

Stakeholder interviews have been supported by interview guides which have been targeted to stakeholder groups. The interview guides are provided in Appendix D. Interviews have been conducted utilising good interview practice (e.g., providing relevant background information, respecting anonymity, avoiding use of leading questions etc). We have maintained a complete record of interviews by person, role and organisation to aid an assessment of relevance of the content and to facilitate our analysis.

### Quantitative data analysis

The quantitative data analysis has focused on programmatic data as well as output and outcome level indicators of the investments. In particular, we have analysed the progress of Unitaid's COVID-19 investments against their specific objectives (i.e. based on their defined logframe). As this data is familiar to Unitaid, we have not conducted large analysis but rather used the data to inform stakeholder consultations and support evidence triangulation.

### Workshops

As agreed with Unitaid in the inception phase, and based on the availability of individuals, we intend to hold two workshops remotely, shortly after finalising the Second Draft Report, and ahead of the deadline for the Final Report.

The workshops will include:

- **Workshop 1 - Co-creation of recommendations:** Unitaid, Senior Management Team and selected staff, to develop the evaluation recommendations jointly alongside CEPA in a co-creation workshop to foster utility, buy-in and ownership of the recommendations.
- **Workshop 2 – Presentation of evaluation findings:** Grantees, ACT-A partners and relevant external stakeholders, for CEPA to present the findings of the Second Draft Report and gather feedback and comments. We expect this workshop to include stakeholders with good knowledge of the ACT-A partnership and COVID-19 response (in relation to diagnostics, therapeutics and oxygen) and who will

provide comments to strengthen the findings of the report. We will draw on the Unitaid team to suggest the most appropriate representatives to be part of these discussions.

## Limitations and mitigating measures

There are several potential key limitations of the above-noted evaluation methods that we have been cognisant of during the evaluation. These are presented in Table E.1 alongside our proposed mitigating measures.

*Table E.1: Key limitations and mitigating measures*

| Limitations | Mitigating measures |
|---|---|
| Dynamism of the pandemic and the evolving epidemiology and new variants might impact findings and conclusions made at a point in time. | All findings have been contextualised to the extent feasible. |
| Consultation limitations including: (i) possible respondent bias given as a number of the consultees will be implementers and/ or recipients of funding; (ii) some challenges in securing the most appropriate interviewee given staff turnover, especially at the country level and in light of the demands of responding to COVID-19; (iii) some possible political sensitivities. | (i) Triangulating findings against other evidence; and (ii) initiating contact with prospective consultees as early as possible – where a key informant has been unavailable, we have attempted to identify a replacement interviewee with comparable insight or experience; and (iii) anonymise comments and inform respondents as such. We have also included a couple of independent experts as consultees to provide well-informed perspective that could help balance the assessment of other stakeholders. |
| Limitation on quantitative data analysis include: (i) lack of comprehensive and high-quality COVID-19 data across countries; (ii) evolving dynamic of the pandemic with regard to contexts over time and across countries (e.g., government policies, dominant virus strains and available evidence). | Triangulation of quantitative data with qualitative evidence from the desk-based review and global and national stakeholder consultations.<br>Quantitative analysis and figures have been carefully presented taking into account the evolving context of the pandemic. |
| Continued COVID-19 health emergency in countries where we would be looking to solicit feedback. | For the country's included in the evaluation consultations we have had to understand the COVID-19 situation in country and whether there is a risk that might have an impact on the ability of the team to solicit feedback, in particular due to unavailability of key country stakeholders and country-based grantees. |

# APPENDIX F - SUMMARY OF THE ACT- A PARTNERSHIP OBJECTIVES

This annex presents a summary of the key objectives of the ACT-A Partnership, as they evolved overtime, 2020 - 2022

*Table F.1. ACT-A Partnership key objectives and priorities, including document review references.*

| Document Reference | Key points |
|---|---|
| Access to COVID-19 Tools Accelerator (ACT-A hosted by WHO) (May 2020), COVID-19 Therapeutics Investment Case | • **Therapeutic Objectives:** to achieve equitable and affordable access to safe and effective COVID-19 prophylactics and treatments to reduce COVID-19 deaths and healthcare burden throughout the world. |
| Access to COVID-19 Tools Accelerator (ACT-A hosted by WHO) (May 2020) Accelerator Diagnostics Partnership, Investing in Diagnostics to Manage the Course of The Covid-19 Pandemic | • **Diagnostic Objectives:** 1) to develop new rapid diagnostic tests and to scale up the production of such reliable, affordable tests to a volume sufficient for all countries to access them; 2) strengthen low- and middle-income countries' ability to procure, import, distribute tests and conduct testing, as well as analyse their results and manage the data in a way that assists governments in taking necessary action to limit the pandemic. |
| Access to COVID-19 Tools Accelerator (ACT-A hosted by WHO), Prioritized Strategy & Budget for 2021. | • **Key priorities for the Diagnostics Pillar for 2021:** i) Secure equitable access to new and existing tests; ii) stimulate rapid and effective uptake in countries; iii) Drive development and at-scale availability of affordable, transformative, digitally integrated tests. [Funding requirement: US$ 8.9 Bn]<br>• **Key priorities for the Therapeutics Pillar for 2021:** i) Intensify research efforts to develop the clinical pipeline across all promising asset classes, and broaden the portfolio of effective tools, including combinations of therapeutics; ii) ensure market readiness and access for proven therapeutics, supporting countries in optimizing clinical care; iii) Drive successful uptake and scaled procurement of available therapeutics, including medical oxygen. [Funding requirement: US$ 3.2 Bn] |
| Access to COVID-19 Tools Accelerator (ACT-A hosted by WHO) (October 2021), ACT-Accelerator Strategic Plan & Budget, October 2021 to September 2022 | [Taking into account the recommendations provided through the ACT-Accelerator Strategic Review]<br>• **Diagnostic Priorities:** i) Ensure availability of accurate, affordable diagnostic tools through expanded local manufacturing and support for market entry; ii) Scale procurement of diagnostic tools based on policy and the evolving evidence of their optimal use; iii) Expand capacity for countries to deploy quality-assured diagnostic tools throughout the health system and increase community-based testing with clear link to public health interventions and iv) Support the expansion of genomic sequencing, including strengthening the integration of epidemiological and genomic data for public health action.<br>• **Therapeutic Priorities:** i) Ensure the successful uptake of existing products for up to 6-8 million severe and critical patients, including medical oxygen, corticosteroids (such as dexamethasone) and other drugs in WHO guidelines, as available; ii) Enable access to new COVID-19 therapies for up to 113 million treatment courses for mild and moderate cases, including at-risk procurement for up to 28 million highest risk patients, subject to evidence, WHO recommendations and product availability; iii) Accelerate and intensify research efforts to enrich the clinical pipeline and broaden the portfolio of effective tools, especially for outpatient treatment, including combinations of therapeutics |

# APPENDIX G - STATUS OF THE UNITAID-FIND EOI INVESTMENTS IN AG-RDTS MANUFACTURERS (AS OF DECEMBER 2021)

Table G.1 lists the six companies that received investments through the Unitaid-FIND EOI, their key achievements and the status of the investment (as of December 2021), including ongoing challenges.

*Table G.1: Status of Ag RDTs manufacturers*

| Manufacturers | Objectives of the investment (as per SoW) | Key progress/ achievements | Status |
|---|---|---|---|
| **PMC (India)** | • Infrastructure development.<br>• Procurement of equipment.<br>• High volume manufacturing<br>• Commercialization | • Increased manufacturing capacity<br>• Achieved EUL approval for the Ag RDT | Surplus 40 million tests in warehouse pending procurement |
| **Wondfo (China)** | • Manufacturing.<br>• Technical support | • Increased capacity for both Wondfo and Viatris to support Ag RDT development and market access and regulatory activities | Pending EUL. Was initially rejected due to issue with dossier submission. |
| **Viatris (India)** | • Commercialization<br>• In-country registration<br>• Training support | • Increased capacity for both Wondfo and Viatris to support Ag RDT development and market access and regulatory activities | Pending EUL of Wondfo product to support with in-country approvals and market access |
| **DiaTropix (Senegal)** | • Expansion of regional manufacturing capacity<br>• Expand current business model | • Increased manufacturing capacity<br>• Technology transfer from BioNote (South Korea) | Technology transfer from BioNote ongoing and being sold under their name although just Senegal; Mologic (UK) still developing their test and pending transfer to DiaTropix |
| **DCN Dx (USA)** | • LMIC technology transfer to WAMA<br>• Establish a manufacturing Centre of Excellence<br>• Long term product improvements | • Expansion of centre of excellence; able to accommodate more trainings | Technology transfer to WAMA is pending final optimization and process finalization at DCN |
| **WAMA (Brazil)** | • Expansion of manufacturing capacity<br>• Technology transfer; product validation, registration, production and assembly<br>• Marketing | • Investment used to buy new equipment and increase facility space. | Not technically ready for technology transfer and concerned cost of DCN product will be too expensive for the Brazilian market.<br>Pending readiness for technology transfer from DCN but has since received ANIVSA approval for another test manufactured in-house from raw materials received from S. Korea |

# APPENDIX H - FINDINGS FROM FOUR COUNTRIES ON THE UNITAID OXYGEN INVESTMENTS

Table H.1 lists the experiences of four countries (Cameroon, Kenya, India and Senegal) with Unitaid supported oxygen investments against five areas of progress.

*Table H.1: Country experiences with Unitaid supported oxygen investments*

| Area of progress | Cameroon | Kenya | India | Senegal |
|---|---|---|---|---|
| **Technical assistance on oxygen planning and delivery** | • CHAI supported the MOH with the development of the National Strategic Plan for the provision of Medical Oxygen in Cameroon 2021-2025, which provides the foundation for the country's respiratory care work.<br>• CHAI supported the MOH with the development of norms and standards for oxygen equipment, which provides specifications on type of equipment that should be acquired and avoids the country buying suboptimal equipment. | • CHAI supported the updating of the case management guidelines, with oxygen being included as a key component.<br>• CHAI supported the dissemination of the updated case management guidelines to move from online webinars to face to face training at facility level, providing direct support to facilities to better understand and support the clinicians address the challenges they face. | • CHAI worked closely with the National and State governments in India and supported the development of their strategic plans, including ensuring a PSA plant and to Oxygen Management guidelines were in place.<br>• CHAI validated that oxygen installations had been set up correctly.<br>• CHAI conducted forecasting exercises using demand estimation assessments to identify likely oxygen demand and future requirements. | • PATH conducted a facility assessment of respiratory equipment at COVID-19 treatment sites to assess and availability of oxygen and support quantification and forecasting. It was conducted using the WHO facility assessment tool so very exhaustive to capture all equipment and material available at facilities. |
| **Training of health care workers on oxygen management** | • CHAI is supporting the training of health care workers on diagnosis and management of patients with hypoxemia through the use of medical oxygen (30 HCW trained and a further 500 planned).<br>• ALIMA trained 34 HCW on the clinical management of hypoxemia. | • PATH trained HCW on use of pulse oximeters | | • ALIMA also trained health care workers on IPC, triage, and use of pulse oximeters.<br>• PATH trained 25 paediatricians on the management of COVID-19 in paediatric patients.<br>• PATH conducted a training session jointly funded by Unitaid, MOH and oxygen suppliers to update the HCW on accurate use of medical equipment and their maintenance. |

| Area of progress | Cameroon | Kenya | India | Senegal |
|---|---|---|---|---|
| **Training of biomedical engineers** | • MOH and CHAI have planned training of biomedical technicians to support oxygen repairs, including working with the MOH to produce training modules for biomedical engineers.<br>• ALIMA developed a checklist tool for the maintenance of oxygen equipment installed in one district hospital and has trained 12 biomedical staff. | • PATH trained biomedical engineers in how to service and maintain the machines, in additional health workers who use the equipment in their day-to-day work were trained in routine care, in total 82 health workers including biomedical engineers had been trained. | | |
| **Procurement** | • CHAI supporting the development of the procurement plan based on the Strategic Plan and needs assessments conducted in-country. | • PATH Output 6 donated pulse oximeters (89 to 65 health facilities) at a time when COVID-19 was peaking which enabled health workers to identify and care for those with COVID-19. | | • PATH Output 6 donated 90 pulse oximeters and given the limited availability of testing, there was a reliance on these to identify and manage cases.<br>• PATH Output 7 supported the procurement of various oxygen respiratory care equipment, but this has been significantly delayed due to Unitaid's requirement to go through WHO/WHE procurement. |
| **Repairs** | | • PATH is supporting the repairs to respiratory equipment across 6 counties, using local contractors to provide spare parts and servicing. | | |