This annual report is based on the evaluation of Project Last Mile (PLM) by the Yale Global Health Leadership Initiative (GHLI), with financial support from the United States Agency for International Development (USAID) and The Coca-Cola Company (TCCC). For more information, please contact Erika Linnander at erika.linnander@yale.edu.

Report design by Sina Reinhard.

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<td>ABYM</td>
<td>Adolescent Boys and Young Men</td>
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<td>AGYW</td>
<td>Adolescent Girls and Young Women</td>
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<td>ARC</td>
<td>Africa Resource Centre</td>
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<td>BMGF</td>
<td>The Bill and Melinda Gates Foundation</td>
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<td>CCBA</td>
<td>Coca-Cola Beverages Africa</td>
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<td>CCE</td>
<td>Cold Chain Equipment</td>
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<td>CCMDD</td>
<td>Central Chronic Medicines Dispensing and Distribution</td>
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<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<td>CHAI</td>
<td>Clinton Health Access Initiative</td>
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<td>CMAM</td>
<td>Central de Medicamentos e Artigos Médicos</td>
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<td>CMIS</td>
<td>Client Management Information System</td>
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<td>CMS</td>
<td>Central Medical Stores</td>
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<td>DSD</td>
<td>Differentiated Service Delivery</td>
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<td>ESC</td>
<td>Emergency Supply Chain</td>
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<td>GETF</td>
<td>Global Environment and Technology Foundation</td>
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<td>GHFL</td>
<td>Global Health Leadership Initiative</td>
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<td>GHSC-PSM</td>
<td>Global Health Supply Chain Program—Procurement Supply Management (Chemonics)</td>
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<td>GHSA</td>
<td>Global Health Security Agenda</td>
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<td>Global Fund</td>
<td>The Global Fund to Fight AIDS, Tuberculosis, and Malaria</td>
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<td>HCT</td>
<td>HIV Counseling and Testing</td>
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<td>LGA</td>
<td>Local Government Area</td>
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<td>LMDM</td>
<td>Last Mile Delivery Model</td>
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<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>MAG</td>
<td>Marketing Advisory Group</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>MOHS</td>
<td>Ministry of Health and Sanitation</td>
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<td>NBC</td>
<td>Nigerian Bottling Company</td>
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<td>NDoH</td>
<td>National Department of Health</td>
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<td>NERCHA</td>
<td>National Emergency Response Council on HIV and AIDS</td>
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<td>NMSA</td>
<td>National Medical Supplies Agency</td>
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<td>NPHCDA</td>
<td>National Primary Healthcare Development Agency</td>
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<td>NPHIL</td>
<td>National Public Health Institute of Liberia</td>
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<td>PELF</td>
<td>Strategic Plan for Pharmaceutical Logistics</td>
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<td>PEPFAR</td>
<td>The United States President’s Emergency Plan for AIDS Relief</td>
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<td>PHCB</td>
<td>Lagos State Primary Health Care Board</td>
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<td>PHU</td>
<td>Public Health Units</td>
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<td>PLM</td>
<td>Project Last Mile</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<td>SRH</td>
<td>Sexual and Reproductive Health</td>
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<td>TCCC</td>
<td>The Coca-Cola Company</td>
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<td>TWG</td>
<td>Technical Working Group</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>VAN</td>
<td>Visibility and Analytics Network</td>
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<td>ZMET</td>
<td>Zaltman Metaphor Elicitation Technique</td>
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In 2009, The Coca-Cola Company (TCCC) set out to create a new model of corporate social engagement. Rather than writing a check, they tapped into their vast network, leveraging skills and talent from corporate offices, local bottlers and distributors, and agencies of record around the world for an innovation in partnership. Coca-Cola’s route-to-market capacity and reach are exceptional, but could they be leveraged to improve global health?

After proof of concept work in Tanzania and Ghana from 2011-2013, Project Last Mile (PLM) launched, bringing together the Coca-Cola system, leading development organizations, and governments across Africa. This year the partnership reached its initial goal, strengthening health systems across ten target countries. This year also featured renewed funding commitments by the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund), United States Agency for International Development (USAID), the Bill and Melinda Gates Foundation (BMGF), and TCCC and its Foundation. In the upcoming strategic period (the Next Mile, 2020-2025) PLM will deepen engagement in the first ten countries, and commit to launching five new programs.

In 2019, PLM supported last mile supply chain transformation efforts in Liberia, Mozambique, and Sierra Leone, including an emergency supply chain playbook in Liberia that is especially timely as the world adapts to COVID-19. In Nigeria, PLM demonstrated an innovative approach to proactive maintenance for cold chain equipment, promoting availability of life-saving vaccines.

In South Africa, PLM continued to support expansion of efforts to ensure that millions of patients with chronic diseases can readily access their medications, and is supporting a similar model in Uganda. In eSwatini, PLM used Coca-Cola’s marketing expertise to empower young women and girls to demand HIV services. Early successes of this strategic marketing work is informing similar efforts in Lesotho and South Africa.

Despite these successes, it is incumbent upon all of us to engage in reflection and critical dialogue about the potential risks and benefits associated with private sector engagement in global health. As we collectively respond to COVID-19, the question of how we partner effectively across sectors to ensure health is critical. We hope that robust evaluation of efforts like PLM can contribute to intentional, informed pursuit of that goal.

The results captured in this report are based on the experiences of PLM stakeholders across Africa, from the highest levels of government to the frontlines of service delivery. We are humbled by their dedication to health for all, their courage to innovate, and their candor in sharing their stories with our team. We hope this report inspires us all to think differently about partnerships in global health for sustainable impact.

ERIKA LINANDER, MPH, MBA
DIRECTOR, GHLI
Principal Investigator, Project Last Mile Evaluation
OVERVIEW

In Africa, a Coca-Cola product is available almost everywhere on the continent, yet nearly 50% of people lack access to life-saving medicines.

PLM is closing this gap by leveraging the expertise and extensive reach of the Coca-Cola system with governments across Africa to improve medical supply chains and health systems.

The project brings together partners from across sectors, including USAID, the Bill & Melinda Gates Foundation, the Global Fund, The Coca-Cola Company and its Foundation, to address country-specific health priorities throughout Africa. PLM is administered by the Global Environment and Technology Foundation (GETF) and evaluated by the Yale Global Health Leadership Initiative (GHLI).

PLM shares the supply chain management, logistics, and strategic marketing expertise of the Coca-Cola system to strengthen health systems across Africa. PLM works directly with Ministries of Health, development partners and other key stakeholders to identify opportunities for impact that align with local priorities. In this partnership, PLM pursues the following objectives:

- **Improve the availability of life-saving medicines**, including vaccines, through strengthening the efficiency of supply chain and logistics
- **Improve the uptake of essential health services** by using strategic marketing to create demand for health services
- **Inspire and inform broader private sector involvement** for global good, by establishing a successful model for partnership

Since the partnership’s inception, GHLI has served as PLM’s monitoring and evaluation (M&E) partner. We use mixed methods to measure program investment (inputs), progress toward deliverables (outputs), outcomes and impact over time. Deep dives are held in-country to contextualize metrics and capture PLM’s impact beyond the numbers. The results of these deep dives are captured as “spotlights on impact” throughout this report.
WHERE PLM WORKS

By the end of 2019, PLM had achieved its target, reaching ten countries in Africa. This year, PLM continued implementation in the Kingdom of eSwatini, Liberia, Mozambique, Nigeria, Sierra Leone, South Africa, and Tanzania, and launched projects in Lesotho and Uganda. Country-specific scopes, ranging from cold chain maintenance to demand creation activities, have led to a diverse portfolio of work emerging from PLM’s deep set of skills and expansive network. Updates on each active country are included in the following sections.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Scope Description</th>
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<tbody>
<tr>
<td>Ghana</td>
<td>2011-2013</td>
<td>Created a blueprint for improved uptime of cold chain equipment used for vaccines and introduced the use of market research and segmentation to improve uptake and adherence for immunizations</td>
</tr>
<tr>
<td>Kingdom of eSwatini</td>
<td>2016-present</td>
<td>Leveraging and adapting The Coca-Cola Company’s best practices in strategic marketing to strengthen demand for health services for HIV prevention among youth</td>
</tr>
<tr>
<td>Lesotho</td>
<td>2019-present</td>
<td>Leveraging and adapting The Coca-Cola Company’s best practices in strategic marketing to strengthen demand for health services for HIV prevention, especially focused on young women</td>
</tr>
<tr>
<td>Liberia</td>
<td>2016-present</td>
<td>Adapting The Coca-Cola Company’s best practices in distribution network design, optimization, and organizational development to help build a last mile medical supply chain for the Central Medical Stores (CMS) and customizing an emergency supply chain playbook for the Ministry of Health</td>
</tr>
<tr>
<td>Mozambique</td>
<td>(2016-present)</td>
<td>Applying The Coca-Cola Company’s best practices in route-to-market and logistics to improve distribution of medicines and health products</td>
</tr>
<tr>
<td>Nigeria</td>
<td>(2016-present)</td>
<td>Tapping into the Coca-Cola ecosystem to help improve uptime and management of vaccine cold chain equipment and save lives of children in Nigeria</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>(2017-present)</td>
<td>Leveraging and adapting The Coca-Cola Company’s best practices in distribution and organizational development to support medical supply chain strengthening</td>
</tr>
<tr>
<td>South Africa</td>
<td>(2016-present)</td>
<td>Applying The Coca-Cola Company’s route-to-market expertise to help revolutionize distribution of essential medicines for three million people living with chronic disease, and strengthening demand for health services and retention in care.</td>
</tr>
<tr>
<td>Tanzania</td>
<td>(2010-present)</td>
<td>Building on ten years of partnership to further strengthen distribution and management of medical supply chains throughout Tanzania</td>
</tr>
<tr>
<td>Uganda</td>
<td>(2019-present)</td>
<td>Applying The Coca-Cola Company’s route-to-market expertise to initiate differentiated access to medicines for 1.4M people living with HIV, in partnership with Africa Resource Centre (ARC)</td>
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</table>
Early engagement with partners in each country is a trademark of PLM’s approach. PLM collaborates with governments and partner organizations to build relationships, assess and align fit between national priorities and Coca-Cola core competencies, and facilitate sharing of time and expertise for targeted solutions. This investment in early engagement is critical to success in later stages. In every country, the PLM approach progresses through three stages:

1. ENGAGE AND ALIGN

PLM begins by engaging with partners to scope potential solutions that sync with local health priorities and meet the diverse needs of country stakeholders.

Early alignment on how Coca-Cola expertise and tools can be applied to strengthen health systems is key to success. Building trust, setting expectations, and determining resources from the onset bolsters PLM’s impact.

2. DELIVER

PLM enlists industry experts from the Coca-Cola system to adapt best practices, deliver context-driven solutions, and build capability within the Ministry of Health and public health agencies.

Activities are guided by inclusive governance structures that are country-led and embedded within local agencies to influence ways of working and improve system performance.

3. TRANSITION, EXIT & SUSTAIN

PLM develops capacity within the Ministry of Health, and sustainability plans are incorporated into project scope.

Relationships between PLM, Ministries of Health, and key stakeholders evolve into trusted partnerships with mutual commitment to sustained support, with enduring influence on health system processes and performance in-country.
IMPROVING AVAILABILITY OF LIFE-SAVING MEDICINES
The call to achieve universal health coverage and access to essential medicines by 2030 as part of the UN’s Sustainable Development Goals (SDGs) will be out-of-reach without concerted effort from multiple sectors. Despite improvements and significant investment from global partners, critical supply chain gaps persist that undermine availability of life-saving medicines for all.

Improving access to essential medicines is a priority for sub-Saharan Africa. In 2019, a study of eight African nations found that median availability of essential medicines for women was 33%, and for children was 50% and even less in primary care facilities where they are likely to access care. In South Africa, one out of five facilities reported recent stock-outs of TB and/or HIV drugs. Supply chain inefficiencies and stock-outs can cost lives, waste precious resources, and leave people without critical medicines to treat disease and safeguard their health.

The global development community has increasingly invested in strengthening health systems, including supply chain management and logistics, in low and middle-income countries (LMICs). The private sector has great potential to improve the efficiency of supply chains and expand availability of medicines. With access to innovation, specialized expertise, and logistic tools, the private sector can transform the delivery of medicines and critical services in LMICs.

TCCC and the development community have long recognized the company’s potential to generate social impact and PLM extends that mission. In addition to financial investment, Coca-Cola’s efforts emphasize the value of sharing the core capabilities of its team and vast network to sustainably transform access to essential medicines and health services throughout Africa.

Coca-Cola operates one of the world’s most extensive supply chains across more than 200 countries and territories. Along with unparalleled reach, Coca-Cola has best-in-class consumer insight tools, global infrastructure, institutional knowledge of African markets, and an extensive talent network including local bottlers, suppliers, and agencies of record. PLM leverages that expertise to improve availability of life-saving medicines and access to services, through supply chain management and proven route-to-market tools that enable goods and services to reach the last mile.

In the following sections, we will describe how PLM is transforming supply chain management in Mozambique, Liberia and Sierra Leone; how PLM is addressing cold chain maintenance to protect vaccines in Nigeria; and how PLM has supported differentiated service delivery in South Africa, reaching 3M patients with critical medicines.

Supply chain solutions are tailored to context, drawing on Coca-Cola expertise in four areas:

**Supply Chain Design & Management:** Sharing Coca-Cola’s planning and costing tools to design and improve delivery models that are feasible, efficient and cost-effective, to reduce stock-outs and strengthen forecasting for medical commodities to the last mile including technical support for distribution models, warehousing procedures, and network optimization.

**Cold Chain Equipment Maintenance:** Leveraging Coca-Cola’s best practices in outsourced management and capacity building to improve cold chain equipment maintenance and uptime, and keep vaccines and other thermolabile commodities safe and viable at points of service.

**Differentiated Service Delivery (DSD):** Applying TCCC’s best practices in route-to-market, business planning and franchise management to ensure and expand access to life-saving medicines for patients, and alleviate the burden on resource-constrained health systems.

**Innovations in Route-to-Market:** Sharing and applying accumulated expertise in delivering product to target markets in innovative and strategic ways, to improve delivery and availability of life-saving medicines and commodities.

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MOZAMBIQUE

Since 2016, PLM has partnered with the Central de Medicamentos e Artigos Médicos (CMAM) and the Global Fund to support implementation of Mozambique’s Strategic Plan for Pharmaceutical Logistics (PELF), and improve delivery of medicines to health facilities nationally. The local bottler, Coca-Cola Beverages Africa (CCBA), works alongside CMAM and local partners [Frontline, PSM, and Village Reach] to share best practices and tools for optimal strategies for last mile distribution. In 2019, PLM continued Phase II to support CMAM in the following areas:

(1) Routing Optimization: Review the existing network design and optimize distribution for all provinces, including routes for both the current district storage locations and planned intermediary warehouses for cost comparisons.

(2) Outsourced Distribution: Identify and assess potential third-party suppliers for outsourced distribution from intermediary warehouses, and build CMAM capability for end-to-end contract and supplier performance management.

(3) Logistics Capability Development: Assess the competencies within CMAM and local partners to conduct route optimization, provide hands-on training, and build sustainable capacity for future routing optimization activities.

(4) Visibility and Analytics Network (VAN) Implementation: Align and integrate a flagship visibility and analytics network (VIGIAM in Portuguese) for CMAM, which will support CMAM operations as an autonomous entity.

PLM completed route optimization activities in 9 provinces, rendering a blueprint for CMAM’s redesigned distribution network.

PROGRESS TO DATE

Route optimization improves medicine delivery to achieve nationwide coverage
In 2019, PLM completed route optimization for 9 out of 11 provinces, with the aim of achieving national coverage. Cost analysis confirmed that optimized routes would cost $1.00/km vs. $1.45/km for current distribution models, with significant efficiencies gained in fleet management and network optimization.

End-to-end outsourced distribution exercises support Last Mile Supply Chain activities
PLM worked with Village Reach to support outsourced distribution to the last mile as part of a consortium to facilitate activities in four provinces and delivered regional trainings to share best practices with CMAM. PLM is building CMAM’s capacity to manage a third-party logistics supplier through the test of an outsourced distribution model for their inaugural Intermediary Warehouse in Vilankulo.

Capacity building ensures sustainable supply chain management for the future
Efforts to ensure CMAM’s future capacity to conduct routing optimization activities continue with guidance from CCBA and support from Frontline. Practical trainings and field activities have been conducted with trainees for experiential learning and to build durable capability within CMAM.

IMPACT SPOTLIGHT
The Yale team conducted a deep dive in April 2019, with the following observations:

→ PLM’s effective leadership, project management, and active governance structure continued to support partnership success in Mozambique.

→ PLM achieved its target deliverables which were considered highly actionable, contributing to early signals of a shift toward a culture of strategic data use within CMAM.

→ PLM developed capabilities that became embedded in CMAM’s operations, which stakeholders described as making its PELF “come alive.”
“[PLM] opens our mind as a company to understand that, under our corporate responsibility, we can do more. That partnership with PLM gave us also more visibility in the communities. That relationship I hope [will] continue for years, because we leave a legacy with Project Last Mile. Their dedication, their attention to save lives, that is extraordinary.”

- Private Sector Partner, Mozambique

“This is the kind of partnership that we can keep. It’s not the kind of project that works while they’re here, but when they leave, nothing works anymore. This is because they are passing on their skills to us. They are training people here and implementing. There is a feeling of ownership.”

- Public Sector Partner, Mozambique
REIMAGINING DELIVERY TO THE LAST MILE: LIBERIA AND SIERRA LEONE

In Liberia, PLM has supported the Ministry of Health (MOH) and the Central Medical Stores (CMS) to redesign supply chain systems to the last mile since 2017. As part of the supply chain redesign, PLM optimized the distribution network, and implemented a last mile delivery model (LMDM) based on real-time forecasting, enhanced data collection, and visibility. This work was supported by USAID. In 2019, PLM successfully completed the pilot of the redesigned LMDM in Margibi county, reaching 51 health facilities on a 4-week rotation (see figure at right) over a 12-week period. There was an increase in the inventory on hand at facilities from 33.6 days at baseline to 63.4 days at end-line for commodities in stock.

In Sierra Leone, PLM partnered with the Ministry of Health and Sanitation (MOHS) and the newly established National Medical Supplies Agency (NMSA) to redesign the LMDM for effective delivery of medical commodities, with support from USAID. In 2019, PLM completed its pilot of a new LMDM adapted from a PreSell distribution model used by the Coca-Cola system, which ensures a wide range of commodities can be delivered to facilities in remote, hard-to-reach areas with existing resources. The pilot of the supply chain redesign ran over a 14-week period, reaching 23 Public Health Units (PHUs) around Makeni Town, Bombali District and completed June 2019. The pilot was modeled after the successful LMDM in Liberia noted above.

PLM piloted last mile delivery models adapted from the Coca-Cola system to restore supply chain capacity in the public sector.

IMPACT SPOTLIGHT
The Yale team conducted a deep dive in Liberia in February 2019, and the promising results of both LMDMs were presented at the Health & Humanitarian Logistics Conference in July 2019. The LMDM pilots were credited with

1. improved visibility and use of data;
2. improved stock management practices at the facility and county level;
3. shared accountability for stock between health facilities and county depot; and
4. improved service expectations, communication, and trust between the county and facility.

Anticipated improvements in out-of-stock rates did not materialize since county medical stores did not have sufficient stock to replenish orders in full. Both models signal promise for improved delivery to the last mile.
In 2019, PLM worked with the National Public Health Institute of Liberia (NPHIL), MOH and implementing partner Chemonics to customize the Emergency Supply Chain (ESC) playbook for Liberia. This partnership was supported by USAID, in response to the objectives of the Global Health Security Agenda (GHSA) to enable a coordinated, secure supply chain for emergency medical commodities and prepare Liberia for the next public health crisis. The pillars of this playbook are noted below.

The Emergency Supply Chain (ESC) playbook was delivered to partners in November 2019, a timely output as efforts accelerate to address the threat of COVID-19 across the globe.

PROGRESS TO DATE

PLM assembled an ESC Core Team, based on a One Health approach. PLM conducted an in-depth analysis to identify gaps in the emergency response and enlist key stakeholders in the ESC Core Team. The Core Team was comprised of several national agencies tasked with crafting the ESC playbook and customizing the national emergency response.

Simulation exercises provided a pressure test of Liberia’s current emergency response to inform the ESC playbook. PLM conducted a simulation which included three outbreak scenarios, to ensure national agencies are able to coordinate efforts in an emergency. Participating stakeholders valued these simulations which demonstrated how they would lead agencies in response.

The ESC Playbook was customized and tailored to the Liberian context, with a private sector lens. PLM worked with the ESC Core Team to prioritize medical commodities needed for likely disease threats or ‘triggers’ based on national and international guidelines, quantified them for procurement, and proposed a budget for all necessary commodities. Recommendations included integration of ESC into the routine supply chain. PLM assessed all storage facilities onsite and made recommendations for future stockpiling, logistics and transport.
“We committed ourselves to doing that [ESC Playbook] because if I would die today, I want to leave a legacy where every home, every town, village in Liberia will be able to receive medical supplies just in time.”

- Public Sector Partner, Liberia
In 2019, PLM partnered with the National Primary Healthcare Development Agency (NPHCDA), the Lagos State Primary Health Care Board (PHCB), the Clinton Health Access Initiative (CHAI), and the Nigerian Bottling Company (NBC) to improve availability of vaccines by strengthening public sector refrigeration, or “cold chain” capacity. Maintaining cold chain equipment (CCE) helps reduce vaccine wastage due to malfunctioning cold storage at health facilities, and enables life-saving vaccines to be available at point of care.

NBC ensures 24- to 48-hour repair on all 77,000 of their refrigeration units in Nigeria, with 99.5% uptime through its dedicated cold chain service provider, Frigoglass. Leveraging this expertise, PLM contracted Frigoglass to conduct repairs and preventative maintenance for 362 CCE in 15 local government areas (LGAs) in Lagos State.

PLM completed its outsourced pilot to repair and maintain 360+ refrigeration units in Lagos, achieving 99% coverage.

PROGRESS TO DATE

PLM completes pilot repair and maintenance contract in Lagos state, proving that outsourced cold chain maintenance is feasible and effective. At baseline, over a third of CCE units in Lagos were non-functional. Frigoglass was able to return 134 units to service, and provide preventative maintenance to 359 out of 362 units (99%).

The pilot offers critical intelligence to inform future CCE investment. This pilot provided valuable information about failure rates of different brands and repair costs to inform future procurement. Cost data confirmed the model may be a cost efficient solution for maintenance of current inventory, with annual estimates of $24,056 to maintain 500 existing CCE without warranty, and $4,520 to maintain 500 new CCE with warranty, far below the cost of replacement equipment.

IMPACT SPOTLIGHT

The Yale team conducted a deep dive in October 2019, the results of which were presented at the Global Health and Innovation Conference in April 2020. Observations included:

- Front line workers described tangible improvements in vaccine availability as a result of having functional CCE through the pilot, and relied on the service provided by Frigoglass.

- Public sector partners valued the ‘on-the-job’ training provided by Frigoglass technicians, and sought continued opportunities for professional development with the service provider.

- Public and private sector partners described early shifts towards a “maintenance mindset” in the public sector, a recognition of the importance of maintaining public sector assets for the benefit of all.

- Lack of clear funding and ownership threatens the sustainability of the outsourced maintenance model beyond the pilot period.
“The success is that equipment were fixed and functional, so that translates to more vaccines being stored at facility, which translates to more children getting immunized. That is the success of the pilot.”
- Public Sector Partner, Nigeria

“It's a question of having the mindset about maintenance, having a sense of ownership. Understanding that though this is a public asset, it serves me as an individual because it serves my family, it serves my community... It's about having the same mindset when it comes to public assets. And for me, that will be the greatest shift if we're able to make that happen.”
- Private Sector Partner, Nigeria
Since 2016, PLM has partnered with the National Department of Health (NDoH) to provide strategic support to their Central Chronic Medicines Dispensing and Distribution (CCMDD) initiative. Intended to improve access to chronic medications and decongest facilities, CCMDD dispenses medicines through fast lanes at participating clinics, adherence clubs, and external pick-up points (PuPs) in convenient community-based locations. PLM serves as a national strategic partner to CCMDD with support from USAID.

PLM has provided critical support to the national roll-out of CCMDD: a differentiated service delivery model that has revolutionized treatment access for 3 million people living with chronic disease.

PROGRESS TO DATE

PLM’s geospatial analysis key to CCMDD expansion in 2019
PLM continued to apply geo-mapping to strategically place PuPs, develop targets for CCMDD expansion, and propose innovations for areas with limited retail footprints. PLM applies geo-mapping for targeted expansion of CCMDD in all 46 participating health districts (out of 52 nationally). In 2019, PLM initiated work with the Western Cape Department of Health to establish a blueprint for PuPs in Cape Metro.

Supporting innovations that bring medicines within arms reach
PLM supported an innovation pipeline from the private sector to expand access to CCMDD. Two such innovations brought to scale in 2019 included expansion of container solutions via Cipla Foundation, and initiation of Smart Lockers through Right to Care. By the end of 2019, 13 Cipla Containers and 19 Smart Lockers were approved as PuPs.

PLM’s strategic support credited with accelerated growth in pick-up points
PLM continued to support expansion of the CCMDD program, with over 2000 PuPs established to date (nearly double from last year). In 2019, PLM facilitated NDoH’s transition to a new ARV combination to be made available through CCMDD (Dolutegravir or TLD) and standardized data requirements for the scale-up of SyNCH, an end-to-end digital platform to automate CCMDD prescriptions at facility level.

2037
Pick-up Points approved by NDoH

3.1M
Patients enrolled into CCMDD

~95%
Health Facilities registered with CCMDD
IMPACT SPOTLIGHT

In 2019, Yale conducted a robust evaluation of CCMDD expansion since the partnership began in 2016. As shown in Figure 1, CCMDD was operating in 16 out of 46 districts at the project’s start and reached all districts by January 2018 (100% of districts from eight participating provinces). From March 2016 through October 2019, the number of health facilities offering CCMDD increased from 972 to 3436, reaching 94.6% of facilities in participating districts, and the number of external pick-up points increased 12-fold from 164 to 2037 since PLM’s involvement.

The Yale team conducted a deep dive in November 2019 in South Africa, and noted the following:

→ PLM provided key technical inputs based on geospatial analysis, resulting in concrete plans to drive CCMDD expansion at district level.

→ PLM was credited with accelerated growth in external pick-up points, with innovations being strategically placed in priority areas that lack brick-and-mortar solutions. PLM is also supporting Medicine in Motion, a bicycle courier service to reach homebound patients with chronic medications.

→ PLM retained its position as ‘the glue’ between multiple stakeholders, differentiated as responsive, strategic, and trusted by the public sector, private sector, and donors alike.

→ Stakeholders noted the resolution of key operational issues highlighted earlier in the partnership, including streamlined payment processes and approvals for PuPs.

→ PLM influenced a shift toward proactive use of geo-mapping data for decision-making, which has high potential for application beyond CCMDD that can be fit-for-purpose in other NDoH initiatives.
As of October 2019, CCMDD had reached a total of 2,993,044 registered and 2,069,039 active patients. All three types of CCMDD collection points (clinic-based fast lanes, outreach and adherence clubs, and external PuPs) experienced significant increases in patient volume over time. By October 2019, 734,005 patients (35%) were collecting from external PuPs, ensuring convenient access to medications for patients with chronic disease.

Nearly one out of four (24%) patients were collecting medications for non-communicable diseases, emphasizing the value of the CCMDD program in reaching patients with chronic disease beyond HIV.
“We have to work well together because it is CCMDD. All of us have to gel together...Health care for all. That’s the aim. That’s the bottom line.”

- Public Sector Partner, South Africa

“Project Last Mile is the glue between public and private sector. And because there's such a big difference in the way we do things if it wasn't for Project Last Mile being the middle man here, it would have been very tough to get to where we are today... I think it’s just become a big family that works well. And it’s getting better every year.”

- Private Sector Partner, South Africa
IMPROVING DEMAND FOR HEALTH SERVICES
Development partners have made significant strides in strengthening health systems and standardizing quality of care to improve patient experience and increase uptake of health services in the public sector. Nonetheless, it remains difficult to engage hard to reach populations for health services, including youth.

Every week, approximately 6,000 adolescent girls and young women (AGYW) between the ages of 15-25 years old are infected with HIV. In sub-Saharan Africa, four in five new infections are among adolescents <20 years old. AGYW are twice as likely to be living with HIV compared to their male peers, and have poorer sexual and reproductive health (SRH) outcomes. Despite their high risk, AGYW continue to have lower HIV testing and treatment rates, and are consistently missed by large-scale HIV prevention efforts in sub-Saharan Africa, hindered by fragmented services, poor outreach, and limited demand.1-4

In response to this gap, PLM sought to understand whether the same strategic marketing principles used to attract youth to global brands could be applied to create demand for health services. Strategic marketing is an important tool for health communication campaigns, with potential to generate messaging that resonates with youth. Strategic marketing employs private sector marketing principles and processes to segment the population, and develop and deploy targeted messaging to those population subsets to improve demand for health services. In particular, strategic marketing helps to shift the narrative from risk-framing towards gain-framing with messaging that emphasizes youth empowerment and resilience.5

In the following sections, we will describe how PLM is applying strategic marketing principles across settings to reach adolescents and youth in eSwatini and Lesotho. We will also show how health communications are being adapted to promote uptake into CCMDD and retain men living with HIV in care in South Africa.

In 2018, eSwatini reported the highest prevalence of HIV of any country in the world, with 27.3% of adults living with HIV. Adolescent girls and young women are most at risk, where new HIV infections in young women quadruple those in young men (aged 15-24 years). Since 2017, PLM has partnered with the MOH and National Emergency Response Council on HIV and AIDS (NERCHA) to apply Coca-Cola’s marketing expertise to generate demand for HIV prevention services among young women and to build national capacity for ongoing health communications.

In 2019, the Coca-Cola Foundation supported a two-year extension of this work to scale Girl Champ nationally and begin strategic marketing with a new segment of the emaSwati population, adolescent boys and young men (ABYM).

In 2019, Girl Champ was endorsed by the Ministry of Health as a cohesive brand for all activities targeting young women and girls, and PLM focuses on a new target—adolescent boys.

PROGRESS TO DATE

Sustaining Girl Champ in eSwatini — harnessing the momentum of a movement

In 2019, PLM developed a Brand-in-a-Box toolkit to cascade the successful Girl Champ strategy and encourage national adoption of the brand for health communications targeting AGYW. PLM also aimed to embed private sector approaches within eSwatini’s existing health structures to sustain the effort. PLM delivered a 2-day workshop for 25 members of the Sexual and Reproductive Health (SRH) Technical Working Group (TWG) within the MOH. Through this workshop, PLM transferred strategic marketing knowledge from the Coca-Cola system to partners for broad application in demand creation efforts.

What about the boys? PLM reaches out to young men in eSwatini

PLM also sought to apply strategic marketing expertise to a new population segment—ABYM 14-24 years of age. Olson Zaltman, which conducted market research for Girl Champ, completed market research for ABYM. The PLM team, in partnership with Minanawe, a South African market research agency referred by TCCC, is working to develop A Day in the Life storyline, which will further inform how to empower ABYM to protect themselves from HIV and other STIs.

1722 GIRLS REACHED

6% INCREASE in proportion of HIV testing visits that were AGYW after Girl Champ activation

25 STAFF Trained BY PLM in strategic marketing

73.4% NEWLY REGISTERED for services
“The girls felt like they have an identity. They own something. Because when they come, you’ll even hear them outside - “I’m a Girl Champ” - when they come to the clinic, they come wearing their t-shirts. There is an identity for them.”
- Public Sector Partner, eSwatini

“The main thing that all of them said was, ‘Thank you for thinking of us as girls and for putting our needs first, and separating us from the boys - because we are different.’
- Private Sector Partner, eSwatini
In April 2019, PLM formalized its partnership with Pact and the Ministry of Health in Lesotho to develop an operational roadmap for a strategic marketing process to target AGYW for health services, leveraging PLM’s extensive experience and insights from the strategic marketing process in eSwatini. PLM applied its extensive strategic marketing expertise to lay the foundation for how to design, build and execute an effective health communication strategy for AGYW.

During an in-depth market analysis led by PLM, AGYW in Lesotho were found to face similar barriers to preventing HIV and accessing youth-friendly health services as in other sub-Saharan African settings, with significantly higher HIV incidence rates than male peers. A multitude of factors were identified that contribute to their vulnerability including limited opportunity; gender inequity; poverty; and lack of education, resources and skills. Such vulnerability fuels inter-generational and transactional sex, teen pregnancy, and elevated risk for HIV and STIs. Lack of access to clinics, inadequate life skills education, and limited parental and social support for discussing sensitive issues serve as further barriers for AGYW to safeguard their health.

PLM recommended a pathway to resilience for AGYW seeking health services via 1) Targeted and segmented approach to engage younger cohorts of girls and women [10-14, 15-19, and 20-24 year-olds]; 2) Communication and dialogue to provide appropriate information and messages within safe spaces; and 3) Improved access to services by providing youth-friendly clinics, with training for staff and healthcare workers.

In 2019, with the support of USAID and PEPFAR, PLM assembled a Marketing Advisory Group (MAG) with leadership and representatives from USAID, PLM, and key stakeholders, to drive a strategic marketing process in South Africa to reach men with health services. After detailed consultations with the MAG, two campaigns emerged – one to drive health seeking behavior for men living with HIV (MINA), and a second to promote uptake of CCMDD and market the service with a public-facing brand (Dablap Meds, which is a colloquial term for short-cut). The identities for both campaigns are shown at left.

PLM has successfully spearheaded strategic marketing activities to address a critical gap in the HIV response. These creative strategies were developed by FCB Africa; Olson Zaltman [previous market research partner for eSwatini] also assessed the resultant Men’s Campaign for acceptability with its target audience. In 2020, PLM will implement the communications strategy from the resulting campaigns nationally, and develop media and creative material for both. The campaigns are now under review for approval by the NDoH.
INSPIRING PRIVATE SECTOR INVOLVEMENT
INSPIRING PRIVATE SECTOR INVOLVEMENT

Project Last Mile is committed to inspiring private sector involvement by demonstrating how corporations can partner differently to leverage resources, strategic expertise and service networks to align for global good.

In 2019, notable milestones in private sector engagement included:

(1) **Leveraging world class talent:** PLM continued to collaborate with FCB Africa and Olson Zaltman, two agencies of record with Coca-Cola, to shape strategic marketing campaigns in eSwatini, Lesotho, and South Africa. PLM also took advantage of the extensive reach of the Coca-Cola service network by retaining Frigoglass – the Nigerian Bottling Company’s sole source provider of cold chain maintenance – to prove that outsourced maintenance of vaccine cold chain equipment is feasible, effective and cost-efficient. A total of nearly 420 hours of in-kind contributions have been recorded and engagement continues with local bottlers and corporate offices for further participation.

(2) **Building bridges between sectors:** PLM worked in Lesotho to develop an analysis on how private sector engagement could be leveraged to improve health service delivery (funded by USAID), and inspired the formation of the Africa Resource Centre (ARC), which supports supply chain transformation initiatives in Africa through an extensive network of private sector, academic and implementing partners.

(3) **Catalyzing innovation:** PLM continued to identify and engage innovative start-ups to impact hard-to-reach populations, working with Cipla Foundation to scale their container solution pick-up points, and with RightePharmacy and Technovera to introduce Smart Locker technology in South Africa.

(4) **Disseminating lessons learned:** Yale works in partnership with the PLM team to disseminate results from the partnership in practitioner and academic forums, ensuring both scientific rigor and reach across diverse sectors. Yale delivers quarterly global M&E reports and in-depth technical reports following each country-specific deep dive. We have also worked collaboratively with PLM and partners to generate a robust online teaching case, peer-reviewed manuscripts, and abstracts for presentation at diverse scientific meetings. A compendium of academic outputs is included with this report, with a bibliography that follows.

| 417.5 IN KIND HOURS DONATED | 2.25 PARTNER:CORE FUNDING RATIO FOR EVERY $1 INVESTED | $17.9M TOTAL PARTNER INVESTMENT |
WHAT WE LEARNED

Yale evaluates PLM using a mixed methods approach that integrates quantitative and qualitative data to evaluate impact and identify lessons learned over time. We track process and outcomes data from PLM and partners, and collect qualitative data from in-depth interviews with key stakeholders on the ground, looking across country settings and workstreams to distill the critical success factors for effective partnership.

In 2019, GHLI augmented global monitoring and evaluation efforts with six deep-dives (one each in eSwatini, Mozambique, Nigeria, South Africa and two in Liberia), as well as focal surveys with the PLM Core Team, Country Leads and Steering Committee. Some key highlights from the deep dives are below:

**Translation is essential**: Private sector approaches alone are insufficient to drive progress toward global health goals. PLM’s ability to bridge the public and private sectors remains a key differentiator, and having local talent to span the boundaries is essential. PLM is changing the way the public sector interacts with the private sector by co-creating a picture of success, fostering adaptation and customization of private sector models, and investing in intersectoral coordination and governance structures for trust and accountability.

**Deep engagement yields results**: The current strategic period for PLM emphasized reach, and the partnership delivered in 10 countries. In markets where PLM has enjoyed long-term engagement, their trusted position has opened the door to innovation, investment, and impact. In South Africa and Mozambique, which are longstanding partnerships, PLM has experienced a shift from technical assistance to strategic adviser and trusted ‘go-to’ partner shaping supply chain management and differentiated service delivery in these markets. PLM has sparked subsequent, synergistic innovation in the flagship Visibility & Analytics Network in Mozambique and strategic marketing efforts in South Africa.

**Business culture can be cultivated**: During our evaluation of PLM, we have been able to detect signals of meaningful shifts in business culture within public sector agencies associated with PLM efforts. Stakeholders in settings with longstanding partnerships with PLM increasingly describe client- and community-focused thinking as well as more strategic, data-driven decision-making, both hallmarks of Coca-Cola’s business culture. Ten years ago, the partnership set out to translate concrete private sector tools and practices into the public sector. It appears to be shaping ways of doing business in much more profound and (hopefully) sustained ways.

In 2019, PLM achieved its goal of sharing Coca-Cola’s core business expertise with the public sector in 10 African countries for durable impact on health system performance. PLM implemented projects in the Kingdom of eSwatini, Liberia, Mozambique, Nigeria, Sierra Leone, South Africa, Tanzania, and Uganda and work continues to expand and deepen in these settings. Local stakeholders consistently describe the value of PLM’s technical expertise, innovation, and leadership in strengthening health systems.
THE NEXT MILE
In September 2019, TCCC and its Foundation, BMGF, the Global Fund, and USAID announced their continued partnership with PLM for the next 5 years. This announcement occurred at the World Economic Forum on Africa in Cape Town, South Africa and was featured during the Global Fund replenishment event in Lyon, France in November 2019.

In this 2020-2025 strategic period, called “the Next Mile,” PLM will strengthen investment in current countries and commit to at least 5 new programs. Partners have committed an additional $20M in financial and in-kind support. PLM will engage and align with new markets, while enriching relationships in existing markets, for durable capacity and long-term impact. As the world continues to adapt to new realities resulting from COVID-19, leveraging these relationships will be more critical than ever.

In the Next Mile, Yale will continue to serve as the academic partner for PLM, working closely with the PLM Steering Committee, Core Team and in-country partners to develop targeted and relevant operational research efforts, amplifying best practice from the front lines and generating evidence on partnership development, impact and sustainability. In the past year, PLM has consolidated its value across settings and service lines, catalyzed innovation and fresh approaches to demand creation and differentiated access to care, cultivated a culture of strategic data use for performance management, and demonstrated the impact of partnership on global health. We look forward to capturing the expanded impact of this partnership in the Next Mile.

“PLM is really about just helping organizations that are working in the public health space do things better and think things differently using the lessons that they've learnt in the Coca-Cola space. And so just being available, being responsive and being capable helps people recognize the value that [they’re] bringing... just that consistency in PLM being who they are, good at what they do, very responsive and focused on the right goal.”

Donor, PLM in South Africa
Manuscripts


Peer-Reviewed Abstracts and Invited Presentations


Ayedun AA, Christie S, Lensley R, Shekhar R, LaMonaca K, Cherlin E, Linnander EL. “If it’s not cold, it’s not sold:” Leveraging a private sector service network to improve cold chain uptime and vaccine availability in Lagos, Nigeria. Poster to be presented at Global Health and Innovation Conference (Unite for Sight 2020) in April 2020, New Haven, CT USA.*


* indicates 17 peer-reviewed abstracts accepted for presentation; the other abstracts are invited presentations.

Teaching Case and Invited Lectures


Global NCDs, Department of Chronic Disease Epidemiology, Yale School of Public Health. (2019-2020) Leveraging private sector expertise to strengthen public health systems in Southern Africa: Project Last Mile. Course led by Professor Nicola Hawley, and content co-facilitated by Dr. Jeremy Schwartz and Sarah Christie on 3/6/2019 and 4/1/2020.
