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Evaluating the Need for a New Pharmaceutical Company in Africa Based on the Civica Rx Model

Abstract

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What is the Message? Like many global markets, countries across Africa face challenges in access to essential medicines, most of which are non-patented generic products. A proposed new company, NewPharmaCo Africa (NPC Africa), deploys a CivicaRx-based organizational model to provide access to high-quality pharmaceuticals produced locally in Africa, contribute to the diversification of global pharmaceutical supply chains, and reduce Africa's dependence on foreign suppliers.

What is the Evidence? Testing the NPC concept through in-depth interviews with experts possessing specialized knowledge in diverse fields, including pharmaceutical manufacturing, demand aggregation, supply chain management, procurement, and regulatory affairs. A concurrent thematic analysis extracts the central themes from each interview, forming the foundation for the recommendations presented in the paper.

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Introduction

Africa faces numerous challenges in meeting its healthcare needs, fueled by limited access to affordable, high-quality medicines. Many African countries rely heavily on imported pharmaceuticals, with up to 70%-90% of the drugs consumed on the continent being imported. Four countries in Africa must be aggregated to find more than 50 manufacturers while 22 have no local production. Furthermore, the currently established systems used to track the quality of drugs are inadequate and insufficient, resulting in unacceptable levels of counterfeits and low-quality drugs. This reliance on imports leaves the African healthcare system vulnerable to supply chain disruptions, price fluctuations, and limited access to essential medicines, which can have serious implications for public health outcomes. These vulnerabilities were exacerbated during the COVID-19 pandemic.

The pandemic also highlighted the vulnerability of pharmaceutical supply chains globally, as the United States and Europe were among the regions that faced significant challenges in maintaining their pharmaceutical supply chains during the pandemic. The pandemic highlighted the dependence of the United States on foreign-made pharmaceuticals, particularly from China and India, which supply over 80% of the active pharmaceutical ingredients used in US drugs. Countries in Europe faced similar issues, struggling to secure essential medicines and supplies. In response, both the US and Europe have taken steps to diversify and strengthen their pharmaceutical supply chains.

One of the most innovative responses to the economics of the generic drug market in the US was the establishment of CivicaRx, a not-for-profit drug company designed to provide high-quality products for US hospitals. CivicaRx is an organizational solution to address product cost, product quality and supply chain quality. CivicaRx accomplishes this model by pooling purchasing across member organizations and focusing on long-term supply contracts to address product and supply-chain quality. By moving from spot-pricing for products to a more stable procurement model, the CivicaRx solution has now been tested and proven to achieve its initial goals.

Based on this successful implementation of a new economic model in the generic drug market, we were interested in the question of whether this successful model can be implemented at a continent-level in Africa to address price, product quality and supply-chain quality challenges. We examine the creation of NewPharmaCo Africa (NPC Africa). NPC Africa will be a non-profit entity focused on driving access to affordable, quality medicines that are manufactured in Africa, both for consumption on the continent and for export beyond. Learning from the experience of in the USA, while leveraging the existing capacities of local enterprises and supported by the strategic ambitions of national governments and international donors, NPC Africa will, through investments, partnerships, and licensing agreements, disrupt the status quo and respond to market dynamics across the pharmaceutical value chain. NPC Africa will initially work with local manufacturers to scale their output, before moving up the value chain and developing manufacturing capability. As a public benefit organization, NPC Africa will engage and serve both public and private health sectors across Africa.

In this study, we evaluated the need and commercial and operational feasibility of starting NPC Africa. We also outlined further research and work that is needed to fully flesh out our hypothesis.

Overview of NewPharmaCo Africa to Drive Access to Affordable, Quality Medicines

NPC Africa will engage and serve both public and private health sectors across Africa. The Africa Union (AU) and Africa CDC have called for a 'New Health Order', defined by five pillars. Pillar 2 is "Expanded Manufacturing of Vaccines, Diagnostics, and Therapeutics to democratize access to life-saving medicines" for which the AU has set a target to buy 60% of vaccine requirements from regional producers by 2040. Concurrently, the United States government (through PEPFAR) committed to buying antiretroviral (ARV) drugs in Africa, which is vital for sustaining the HIV/AIDS pandemic response.

A vibrant African pharmaceutical industry would have several benefits, including: Driving local socio-economic growth, providing a robust and resilient supply of medicines for African markets, diversifying Active Pharmaceutical Ingredient (API) sourcing and generic medicine supply for the US and European markets, and providing local licensing partners in emerging markets for innovator US and European pharmaceutical companies.

The poor economics of Africa importing more than three-quarters of its essential medicines, as well as the failures in the supply-chain of personal protective equipment (PPE), diagnostic tests, and vaccines during the COVID-19 pandemic, have combined to focus political support on the need for a more robust African pharmaceutical industry. NPC Africa will secure and invest private capital to establish a socially aligned manufacturer of ARVs and other medicines, compliant with global quality standards, and with the capacity to serve Africa.

NPC Africa will implement its plan in five phases:

- Phase 1: Aggregate Demand
    - NPC Africa's investment and return thesis is predicated on the ability to secure long-term off-take agreements of significant volume from donors and governments and the provision of preferential investment and supply arrangements. These can be provided by:
    - Local country governments, either individually, through regional economic coalitions or through the African Union
    - Major donors such as the US government, the Global Fund, UNICEF, and GAVI
    - The procurement agencies of the governments of Europe
    - Harmonization of regulatory structures across participating countries will reduce barriers to market entry and enhance oversight of product quality.
- Phase 2: Quality and Capacity
    - NPC Africa will inject capital into existing regional African manufacturers to grow their capacity, extend their operations to include API production. To grow export opportunities and ensure product quality, NPC will work to achieve US Food and Drug Administration (FDA) certification.
    - Invested companies will already be commercially viable, with local market presence. Production quality will be assessed through the presence of contract manufacturing organization (CMO) partnerships with global pharmaceutical manufacturers.
    - Secure Product Portfolio Scale Voluntary licenses for medicines will be secured from leading US and European pharmaceutical companies through potential partnerships with organizations such as the Voluntary Licensing & Access to Medicines (VLAM) initiative and the Medicines Patent Pool.

- Phase 3:
    - NPC Africa will acquire the African rights of a significant pharmaceutical company that is already active on the continent.
    - Two potential targets for consideration could be the “end-of-life” products of GlaxoSmithKline (GSK) and the range of Sandoz.
- Phase 4: Localize and Expand
    - Assign CMO contracts to produce the acquired licenses described in Phase 2 will be transferred to the local production capacity of the investee companies described in Phase 1.
    - NPC Africa will secure voluntary licenses with leading US and European pharmaceutical companies to manufacture and distribute innovative medicines to African patients under license from the originators.

Estimated Capital Requirement and Likely Sources of Implementation Financing

The total estimated capital raise of $800m over 3 years splits as $650 investment and $150m working capital and deploys as $250m on the investments, quality upgrades, and capacity expansion described in step (1); $300m in the catalog/license acquisitions described in step (3); and $100m for the capacity and quality expansions anticipated in (4).

Likely sources of financing include: Development finance institutions (DFIs) such as the US International, Development Finance Corporation (DFC), the World Bank/International Finance and Corporation (IFC), private capital including foundations, impact investors, and pharmaceutical company investment funds. Innovative alternatives may be possible in the execution of Phase 3, such as where the sellers might be encouraged to provide vendor financing.

NPC Africa is expected to have a number of developmental impacts including: Creating sustainable jobs, building robust African health systems, attracting strong capital investment, and promoting localized manufacturing. developing licensing partnerships, growing south-south trade, driving local innovation/R&D, and significantly reducing environmental impacts associated with legacy manufacturing processes and long-distance supply chains.

NPC Africa is also expected to have a positive impact on US and European exports. The organization will partner with US and European businesses to source equipment, skills, quality, and IT systems. NPC Africa will also provide API security and manufacturing capacity for US and European markets and manufacturers.

Interview Methodology

To thoroughly explore our proposal for the NPC, we conducted an extensive evaluation of diverse stakeholders to gain their unique perspectives. The data collection process involved a qualitative approach similar to the Delphi method. Semi-structured interviews were conducted with a panel of stakeholders directly relevant to our research question. Purposive sampling was employed to select individuals with specialized knowledge in areas such as pharmaceutical manufacturing, demand aggregation, supply chain management, procurement, and regulatory affairs.

All interviewed experts received a 2-page document outlining the NPC proposal prior to the interview. Recruitment of study participants ceased when data saturation was achieved, and no new themes emerged.

Verbal consent was obtained from all participants before the interviews. Interview guides were developed with pre-agreed topics to assist the interviewers. The majority of the interviews were conducted virtually, and consent for audio recordings was obtained beforehand. The interviews generally lasted between 45 minutes to 1 hour. Parallel notetaking was employed during the interviews, and retrospective reviews were conducted to complement the live notes. Concurrent thematic analysis was conducted to identify essential themes from each interview, which helped identify new topics for subsequent interviews. In total, we conducted interviews with 15 individuals.

Results

After going through existing literature and conducting our interviews, we laid out the current issues with the NPC business concept into five buckets: demand aggregation, supply of medicines, product portfolio, government involvement, and fundraising/business model. We lay out our findings for each topic below.

Demand Aggregation

Demand aggregation refers to the consolidation of purchase requests from multiple buyers into a single unified requirement, harnessing the collective buying power of various stakeholders. The significance of demand aggregation was underscored by the CIVICA model.

A participant emphasized, *"Gaining the commitment of systems and purchasers is of utmost importance. Civica managed to secure volume commitments of 40-50% from their member hospitals. This gave them substantial and stable purchasing power, ultimately leveraging their negotiations with producers."*

Another key benefit of demand aggregation is the positive impact that it has on manufacturers. One interview candidate remarked that *"We need advanced market agreements and long-term offtake agreements. This provides both suppliers and buyers with stability and gives manufacturers the certainty needed to invest in their operations."*

Despite the widely recognized advantages of demand aggregation, challenges primarily stem from engaging all stakeholders, particularly the government. Currently, governments face difficulties in accurately forecasting demand and lack sufficient data collection. To ensure effective national-level demand aggregation, governments must improve their data collection, analysis, and forecasting capabilities.

An interview candidate noted, *"Governments need to place accurate orders based on demand aggregation and procurement patterns. Coordinated efforts are required from governments and organizations to forecast demand accurately. Governments need reliable data to formulate these forecasts."*

The issue of data scarcity was further highlighted by another candidate who mentioned, "*Data on demand for different products is practically non-existent, leaving procurement officers to rely on educated guesses when making purchases."*

Another candidate emphasized the need for coordinated efforts between governments and organizations to accurately forecast demand. Additionally, the lack of regulatory cohesion and varying levels of sophistication among different government stakeholders pose obstacles to

demand aggregation.

An interviewee shared, *"We encountered difficulties in aggregating demand because some states lacked a dedicated medicines agency or a procurement team. Consequently, individual hospitals and clinics had to handle their own procurement."*

Nevertheless, there are notable instances where demand aggregation has been successful on the continent, such as during the COVID-19 pandemic.

An interviewee stated, *"The African Medical Supplies Platform (AMSP) was established during the pandemic, enabling pooled procurement across the continent. This approach enhanced negotiating power when securing purchase agreements with both foreign and domestic suppliers."* The AMSP is an encouraging example that confirms that demand aggregation is a possibility on the continent and highlights the potential benefits that can come from aggregation.

When considering demand from the continent vs. demand from outside the continent, our interviewees agreed that demand needs to come from various sources and NPC cannot solely rely on global health organizations.

"In order for this to work, there needs to be a demand market outside of global health. NPC should be chasing business on the continent. NPC can think of ways to work with both private and commercial channels [such as pharmacies] and the public sector on the continent to procure demand. NPC can also utilize the growing health tech sector."

It's clear that NPC's greatest value will come from its ability to *"aggregate the commercial piece (how it marks up drugs, distribution, and how it secures procurement deals)"*, therefore, having a robust demand aggregation strategy that addresses the concerns mentioned above is key. An important part of this will be aggregating demand from both the public and private sectors on the continent, as well as working with global health organizations.

Supply of Medicines

Currently, Africa's reliance on pharmaceutical drugs from the East, particularly India, and China,

is a prevailing issue. PEPFAR has engaged with existing suppliers from India and China for antiretroviral drugs (ARVs), potentially adding to the issue. It is primarily due to the efforts of PEPFAR that existing Indian generic players have shown interest in expanding their presence in Africa. The scale of demand for ARVs is crucial in making the business case work, and the major Indian players in the industry have expressed their willingness to set up facilities in the region through joint ventures to meet potential demand.

In the past, hospitals in Africa purchased drugs from open markets, leading to challenges in managing supply chains and significant expiry of drugs. Recognizing the need for transformation, efforts have been made to aggregate demand and bring together all stakeholders to address these issues. However, the demand from individual countries is often too small to negotiate directly with manufacturers, creating obstacles in diversifying the drug supply chain.

Many acknowledged that Indian companies would not look favorably towards Africa increasing its local manufacturing. However, from a political perspective, Indian governments understand the necessity for Africa to shift from relying solely on drug imports to developing manufacturing capabilities. The COVID-19 pandemic has underscored the importance of building baseline infrastructure and the ability to pivot from import dependence. To foster local manufacturing, countries need to invest in infrastructure development. Overall, the need for Africa to develop its own manufacturing capabilities to reduce dependence on imports and improve supply chain management was highlighted.

When thinking about drug production, many of our interviewees suggested that NPC collaborate with existing manufacturers (rather than building up their own capabilities) for a variety of reasons.

First, there is currently an over-saturation of manufacturing capacity following the pandemic. It is important to start by outsourcing to manufacturers already equipped to meet stringent quality requirements. This approach can help avoid issues related to scalability and ensure the sustainability of the supply chain.

Second, creating in-house manufacturing capabilities is extremely expensive and time-consuming. It could take up to 5 years and hundreds of millions of dollars if NPC wants to create

its own drugs. This is why Civica worked with manufacturers that already had FDA approval and excess capacity. Civica appealed to manufacturers by providing them with a 24-month rolling forecast, ensuring steady demand, and not returning anything.

Third, NPC can help foster local industry by working with existing manufacturers. In the past, local manufacturers faced challenges where they invested in obtaining qualifications, such as WHO certification, but didn't receive orders. This led to financial setbacks and made local manufacturers wary of international organizations. NPC can help bridge the gap and ensure local manufacturers will receive a steady supply of orders and make sure they have up-to-date qualifications.

Finally, by outsourcing manufacturing, NPC can avoid worrying about manufacturing and provide value on the commercialization piece, as mentioned above in the demand section.

We spoke to local manufacturers, who expressed their willingness to collaborate with NPC.

"We would willingly collaborate with NPC and welcome them with open arms if it helps the local manufacturing industry. If local manufacturers had access to guaranteed volumes, new technology, tech transfers, and linkages to big pharmaceutical companies, we could work with NPC on manufacturing their products. This could be a win/win if NPC is not seen as the competition. If NPC can guarantee volumes for a set amount of time, local manufacturers will commit to the price and quality."

Local manufacturers, like the one quoted above, see a potential partnership with NPC as a huge win for the continent. They emphasized the importance of long-term framework agreements (3-5 years) to provide them with certainty in terms of price and volume. In addition to NPC providing investments in local manufacturers, the credibility of a non-profit organization like NPC would allow NPC to work with big pharmaceutical companies to increase access for local African manufacturers. Currently, it's difficult for local African manufacturers to get voluntary licenses from big pharmaceutical companies. NPC could provide value by being the intermediary between multiple local manufacturers and big pharmaceutical companies. NPC's negotiation power could even lead to continent-wide licenses.

While the desire to work with an organization like NPC is strong, local manufacturing in Africa

faces numerous challenges that need to be addressed. Currently, one of the biggest issues for local manufacturers is the lack of a unified buyer to achieve economies of scale for manufacturing. This inability to achieve economies of scale has made it difficult to navigate local regulation and market access issues without some assurances of demand. The market access issues have made very few companies willing to prioritize regional concerns, opting for a country-by-country approach instead. In addition, there is a need for increased investment in local manufacturing. Many machines are outdated, and workers do not know how to operate or maintain many of the machines. Increased funding for education and new technologies is needed to foster local manufacturing.

NPC can address many of the current local manufacturing issues by injecting capital and increasing the capacity and quality of local manufacturers. NPC can also work with multiple local manufacturers and help them gain regional market access as well as provide a link to big pharmaceutical companies.

Product Portfolio

When discussing the product portfolio with our interviewees, everyone agreed that it should be primarily based on demand. While specifics on the sequencing of APIs vs. finished goods varied, all our interviewees underscored the importance of market dynamics. One of our interviewees stated the following:

"The pharmaceutical product portfolio needs to include both APIs and finished goods. Merely focusing on finished goods without considering the inclusion of APIs would not be sufficient. To incentivize investment and business development, it is important to identify the specific products in the African market that can attract manufacturers and players in the value chain. Rather than relying on a single manufacturer to produce everything, it is crucial to encourage collaboration among different players, including API makers and finished goods manufacturers."

Another interviewee noted that in India and China, the sequencing of product development has begun with starting materials, progressing to APIs, and then moving on to finished dosage forms. For the continent, it's essential to critically assess whether Africa should begin with finished forms, taking into account competition with larger companies for high-volume products. As bigger players may find essential medicines less attractive, there could be an opportunity for

niche products that cater to specific demands.

Given these considerations, Civica's approach could be a good playbook for NPC when thinking about product portfolios. Civica analyzed the history of drug shortages and investigated the manufacturing landscape for specific drugs and their active ingredients. Through collaborative efforts and regular meetings with the hospitals, a target list of essential medicines was established. This list was then periodically updated to reflect changing demands and sourcing capabilities. When setting prices, Civica looked at everything on a product-by-product basis, ensuring that Civica was staying competitive with the market while ensuring consistent supply and pricing.

Government Involvement

Government involvement in fostering the growth of the local industry will be crucial to the success of NPC. Current government sentiment varies by country, as mentioned by our interviewees. Countries that are more favorable towards the pharmaceutical industry include Kenya, Uganda, Rwanda, Ethiopia, Botswana, Ghana, and Nigeria. Governments can support pharmaceutical manufacturing though its roles as a regulator, as a buyer and as an enabler of industry through trade incentives and infrastructure investment.

Governments need to provide incentives to local manufacturers to help develop the industry, including measures like accelerated depreciation and export credits. This support is essential to create an enabling environment for local manufacturers and foster industry growth.

Governments also need to enact education programs to foster the local industry.

"A desire to foster industry and build up local capabilities is extremely important. India, China, and Ireland are good examples of this. For example, in Ireland, the government built up the education infrastructure, were extremely friendly to manufacturers, was tax-friendly, and pumped a lot of money into the infrastructure. By investing in education and skill development, governments can ensure a pool of qualified professionals to drive the growth of the pharmaceutical sector."

On the point of local industry, one participant expressed some words of caution.

"While fostering the local pharmaceutical industry is desirable, it may not always align with the objective of increasing access to medicines. No single country can produce everything it needs, and a well-functioning global supply chain is necessary. Maintaining a resilient and connected supply chain is crucial, even if local production is encouraged. Fostering local production should not lead to the loss of economies of scale, as each country preferring local procurement can hamper efficiency and cost-effectiveness."

Thus it is important that NPC is extremely clear in its goals and understanding the tradeoffs between fostering local industry and increasing access.

Our interviewees also highlighted the importance of regulatory considerations – particularly the importance of a robust regulatory environment in both the manufacturing and importing countries.

"Manufacturing countries need to uphold good manufacturing practices (GMPs) and ensure the trust of importing countries. Targeting a few manufacturers and bringing them up to international standards is a key step. Mature regulatory environments for exporting medicines include Tanzania, Ghana, Kenya, Nigeria, and South Africa. Making the regulatory process fiscally viable for local regulators is important, and this can be achieved through fees for dossiers and mutual recognition between countries."

Another participant emphasized the importance of harmonization of regulatory processes for efficient operations. Currently, there are different regulatory requirements for the same product in different countries, causing a lot of inefficiencies. NPC can play a role in creating awareness and advocating for a harmonized approach to regulatory approval across countries. In recent years, regulatory harmonization efforts have gained momentum, with Southern African countries like Zambia, Zimbabwe, Botswana, and Namibia joining forces to address gaps and align their regulatory processes. NPC can use this momentum to further move forward with regulatory harmonization.

Fundraising / Business Model

The sustainability of the business model and the required amount of fundraising to achieve NPC's milestones were the primary concerns. Government grants and early buy-in from

stakeholders were identified as crucial funding sources. Understanding investor appetite for a business model like NPC was also a key consideration.

An interviewee noted, "There is a gap between what investors are seeking and what organizations are willing to commit to." This quote suggests that investors are interested in projects like NPC but haven't found suitable investment opportunities.

Another important aspect discussed during the business model deliberation was the choice between a for-profit and nonprofit model. Our interview candidates expressed contrasting opinions on this matter.

"Some medicines should be considered public goods and distributed under a non-profit model, particularly those included in the World Health Organization (WHO) Emergency Medicines List (EML)," stated one candidate.

Others emphasized the challenges associated with a non-profit organization.

"The sustainability of non-profits is a challenge. They need to demonstrate their ability to sustain the model without relying on grants or donor financing."

The decision to adopt a for-profit or non-profit approach is also influenced by concerns about corruption. One interview candidate highlighted, *"The for-profit model raises concerns about corruption, and transparency becomes the key to address these concerns."*

Quality Control

NPC aims to address the pressing need to enhance the quality of pharmaceutical products across the continent. This recurring theme of striving for higher quality was evident throughout our interviews.

A particularly insightful interviewee emphasized the significance of quality and effective regulation by stating, "Many hospitals are compelled to procure medicines from open markets, making it exceedingly difficult to distinguish between genuine and counterfeit drugs."

Another interview candidate highlighted the importance of adhering to stringent quality tests,

stating, "Civica exclusively collaborates with manufacturers who successfully pass rigorous quality assessments."

Given the porous borders in the region, it becomes imperative to establish regional quality standards. As one candidate emphasized, *"Neighboring countries must collaborate in developing and upholding quality standards; otherwise, shortcomings in one country's regulatory framework could compromise the standards for all neighboring nations."*

Furthermore, maintaining high-quality standards was stressed by another interviewee who remarked, *"Emphasizing quality is crucial as our ultimate objective is to attain WHO prequalification and FDA certification to facilitate the exportation of pharmaceutical products."*

By integrating these valuable insights, it becomes evident that NPC recognizes the pivotal role played by quality enhancement in the pharmaceutical sector across the continent.

Conclusion

Based on our findings above, we believe that NPC can create value and accomplish the goals outlined for the organization. Many of our participants agreed on the need for increased local production and were enthusiastic about our hypothesis. However, they emphasized the current issues of fragmentation and a lack of communication and prioritization. NPC can kick off conversations on both the supply and demand side to increase awareness and coordination.

Further development of the NPC concept should take the following next steps:

Demand Aggregation

- NPC can add value by working with an initial small set of countries and collaborating with the healthcare industry to collect data and aggregate demand.
- Post-pandemic efforts to aggregate demand such as the Africa Medical Supply Program have proven that demand aggregation is possible on the continent and serve as a working model that others can follow.
- NPC's biggest value-add can be the commercialization piece of the supply chain and collaborating with the public and private sectors of the region as well as global health

organizations.
- We were unable to interview anyone from a big pharmaceutical company to inquire about their methods of sourcing. However, we believe this should be a secondary concern after procuring demand on the continent.

Supply

- NPC can work with existing manufacturers on the continent and provide capital to increase their capabilities and technology.
- NPC can add value by being a liaison between local manufacturers and big pharmaceutical companies, providing guaranteed contracts, and working with governments to increase market access.

Product Portfolio

- Product portfolio should be based on demand and manufacturing capabilities and should include APIs as well as finished goods.
- Civica's model can be a playbook for NPC → NPC can gather potential buyers and go through a list of medicines with them to understand prioritization.

Government Involvement

- The short-term and long-term goals of NPC are extremely important – increasing and maximizing market access may come at odds with fostering the local manufacturing industry.
- Government involvement is important in order to foster the local industry, provide incentives for both purchasers and increase manufacturers, increase the efficiency of regulation practices, and shift procurement models from short-term tenders to long-term framework agreements.
- NPC can provide value by increasing awareness and advocating for a more harmonized regulatory environment.

Financial Model

- Identifying appropriate sustainable funding sources will be critical to assuring the

commercial feasibility of NPC.
- Relying on government grants, similar to Civica, is more difficult on the continent given the restricted limited supply of capital.
- The issue of nonprofit vs for-profit should be further explored. This business model is difficult and would not provide the returns that many VC / PE firms require.
- We were unable to interview sustainable investing firms. This could be another important source of funding.

Quality

- Neighboring countries need to agree on regional quality standards and enforcement practices to limit the practice of undercutting which individual efforts by individual countries futile.
- NPC needs to take the question of quality out of the conversation – global organizations will only purchase from NPC if they completely trust the quality of the product.

NPC Business Development

In order to foster local industry and increase access to drugs on the continent, there are multiple moving parts and organizations that need to come together to create NPC. NPC's value add will come from increasing awareness, streamlining communication and efforts, and being a liaison with Western governments and big pharmaceutical companies. To do this, NPC must employ people who have worked in top pharmaceutical companies and understand the fragmented and complicated landscape. This was crucial for Civica, as long-tenured pharmaceutical employees allowed them to work quickly and get the needed approvals.

Our proposed next steps are the following:

- Recruit top talent with pharmaceutical backgrounds to create different task forces based on the five topics mentioned above.
- Identify a target regional bloc of countries (e.g., ECOWAS) and initiate discussions with key public and private sector stakeholders within a prominent country in the bloc to test the model. This will provide valuable insights and help identify the feasibility of the demand aggregation model at first a national and then regional level.
- Create a small group of countries to test this model out. Based on our interviews, this

could be a regional block of countries, such as starting with the West.
- For demand aggregation in this group of countries, work with the public and private sectors to understand needs.
- NPC needs to start creating awareness of the need for pooled procurement.

Create a target list of local manufacturers on the continent that adhere to strict quality standards. Prioritizing manufacturers within the target regional bloc, begin conversations on how they can best collaborate with NPC. Eventually, NPC can be the liaison between these manufacturers and the buyers.