Mobile Health Clinic with Medical Vending Machine for Rural Communities in Kenya

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Introduction

Access to healthcare in rural Kenya is a problem without one simple solution. Difficulties can arise for those seeking healthcare in these communities, as the rural aspect can bring its own set of challenges. However, our team aimed to help mitigate this issue with our mobile health clinic. We asked ourselves; how can we make healthcare and health information more accessible in rural Kenyan communities? Common barriers to healthcare access in these communities include money, physical distance from healthcare providers, and lack of information regarding healthcare and relevant medications. This can be especially dire for those living with chronic illnesses such as HIV, because without reliable treatment and information regarding the illness, consequences can be fatal. Existing technologies and research addressing this issue exist, however many of them fail to consider the constraints of rural Kenya, or are not as versatile as our solution. One such proposition was the design of a medication management companion system for those living with chronic illnesses in rural Kenya communities (Oduor et al., 2018). However, the researchers and designers failed to consider common constraints in rural Kenyan communities, such as access to a stable internet connection and access to a smartphone or computer. Rather than designing another app, our team decided to design a mobile health clinic. The clinic repurposes a matatu truck into a vehicle capable of delivering healthcare to those without reliable access to it. Rather than having patients travel long distances to the nearest major hospital, the traveling clinic brings these essential healthcare services directly to the communities. The spacious interior of the matatu after the removal of the seating allows for the storage and transportation of various medical supplies, such as medical tools, medications, as well as a bed for the patient to lay on during checkup or procedure. The bed can also be used in case of a medical emergency to transport a patient to the nearest major hospital as a standard

ambulance would. The right side of the vehicle features a window that can be opened to provide service, similar to how food service trucks operate. This window allows members of the community to ask the traveling doctors healthcare questions, as well as receive specialized medications. The left side of the vehicle features an attached vending machine, which features generic medical supplies, such as painkillers, bandages, menstrual products, and sanitary products. Supplies can be purchased from the medical vending machine using either cash, card, or mPesa. The vending machine is helpful for those simply looking to purchase common over-the-counter medications or supplies, and allows those with more timely medical concerns to quickly receive care, and prevents the traveling doctors from becoming overwhelmed. The mobile health clinic also features large and durable wheels, with the ability to traverse over unpaved and uneven rural roads without damaging the truck or the equipment inside. Additionally, all of the transported equipment will be properly secured to prevent any movement or potential damage. The truck also comes equipped with solar panels to ensure ample power to equipment and to the vending machine, in addition to satellite network capabilities to ensure the vending machine's payment systems and any healthcare devices are sending and receiving the most up to date information. Healthcare services will be provided by the mobile health clinic on a weekly schedule basis, with a given day for checkups, another for vaccines, et cetera.

Beyond providing direct medical services, the mobile health clinic also aims to promote long-term health equity by empowering communities with knowledge and consistent access to care. Regular visits allow healthcare providers to build relationships with patients, monitor chronic conditions over time, and encourage preventative healthcare practices rather than emergency-based information, and community engagement, the mobile clinic creates a

sustainable model that addresses both immediate healthcare needs and the underlying barriers that continue to limit healthcare access in rural Kenyan communities.

User Research and Context

In the context of healthcare in rural Kenyan communities, there are several barriers that can make it difficult for members of the community to access healthcare resources. According to research findings from the implementation of a medication management companion in rural Kenya, researchers found that "challenges around healthcare provisioning, such as access to cost effective healthcare delivery and providing clinical services and support for clinical education programs in rural settings also slow the effectiveness of intervention measures" when treating those living with chronic illnesses such as hypertension (Oduor et al., 2018). Our mobile clinic aims to help mitigate this problem by bringing reliable healthcare directly to those living in rural areas. In an additional study conducted on HIV management in rural Kenyan communities to inform the design process, the researchers stated that "in the rural region we studied, the risk of HIV and hypertension was impacted by poverty and illiteracy, which, moreover, presented challenges for the design of appropriate technology" (Oduor, 2019, p. 1601). Accessing healthcare in rural Kenyan communities can present its own unique set of challenges, which are important to consider when designing for this unique context. Information regarding proper treatment of illnesses is also a prominent issue in rural Kenyan communities. Researchers analyzing common barriers to treatment retention for chronic illnesses in western Kenya found that a lack of information regarding the treatment process was one of the common barriers to treatment retention. Some people living with chronic illnesses "may buy pain killers and feel much better and think they are OK. So if you tell such a person to go to the hospital, they'll

always procrastinate" (Rachlis et al., 2016). One HIV-positive patient even noted that people come in expecting a quick and easy treatment process, and stop coming in for treatment once they discover that the treatment lasts for the duration of their life. The mobile clinic would provide information regarding medication and treatment to bridge this gap, and increase treatment retention for chronic illnesses. There are a few existing and prospective interventions designed to improve access to healthcare and health information in rural Kenya, however many of these rely on people having access to a smartphone or a reliable internet connection. One such intervention is the use of SMS reminders to increase adherence to antiretroviral treatment for patients living with HIV in rural resource-limited areas in Kenya. The study found that "weekly SMS reminders increased the percentage of participants achieving 90% adherence to ART by approximately 13–16% compared with no reminder" (Pop-Eleches et al., 2011). However, this technological intervention is dependent on patients having a cellphone, and it is stated in the study that a few of the participants had to be provided with a cellphone, because they did not previously own one. Even those with smartphones in rural areas "experience disproportionate levels of internet access due to infrastructure deficits, high costs of data and devices, low digital literacy, and inconsistent regulatory frameworks" (Chisika & Yeom, 2024). Thus, solutions involving smartphone apps or computers are not likely to be helpful for those living in rural parts of Kenya.

To further understand healthcare challenges from a community perspective, our group had the opportunity to interview students with Egerton University. These interviews gave us the opportunity to gather user feedback and assess how effective the mobile clinic will be when placed in the community. Students took a strong liking to the idea of bringing health care services directly into rural communities, noting that mobile clinics could reduce travel barriers

and improve access to essential medical care. Several interviewees emphasized the importance of aiding health education, preventive services, treatments and medication accessibility. Visual communication was deemed to be the most important so that community members could understand the clinic's services and benefits quickly. Some participants needed clarification about specific features of the prototype, suggesting that clearer labeling and simplified messaging would improve usability. Overall, participant responses reinforced existing research findings by demonstrating that community-centered, physically accessible health care solutions are both understandable and desirable for rural Kenyan communities. These insights guided refinements to our mobile clinic design to better align with community needs and expectations.

These findings highlight the importance of improving healthcare access in rural Kenyan communities. It shows that improvement requires solutions that are accessible to all. Whether that be physically, or culturally, it is vital in order to improve health outcomes. Rather than relying solely on smartphone-based or internet dependent interventions, our mobile health clinic addresses structural barriers by being directly accessible to patients, providing both clinical care and health education, right in their home. This in person support, and meeting patients where they live offers numerous benefits such as consultations, medication management support, and chronic disease treatments. The mobile clinic reduces misinformation and helps patients better understand the long term nature of conditions such as HIV and hypertension, as well as understand medication usage and treatments. Additionally, our mobile health can foster a great relationship and build trust amongst the community and health care through consistent community visits, which can improve treatment adherence, and patient engagement. The mobile health clinic integrates speedy healthcare delivery with education, ensuring that communities not only receive treatment, but gain vital information that will be necessary to manage and upkeep

their health over time. Ultimately, our mobile clinic prototype represents a sustainable and appropriate design to overcome lack of healthcare accesses, and health information gaps that continue to contribute to healthcare disparities in rural Kenya.

Design Ideation, Prototyping, and Iteration

Our design process initially began by focusing on the core issues and trying to identify what they could be in Kenyan communities. One that initially stood out was healthcare, and how it is often difficult to access because of distance, cost, limited infrastructure, and lack of reliable health info. We wanted to make sure we didn't design something that would be useless to these communities. For instance, care that required a cell phone or stable internet connection would be useless as many of these communities do not have access to those tools. We stressed the importance of the design solution being practical for the context rather than some over-designed, Western inspired idea. A few of the main issues that we wanted to design around were how a lot of the areas would have rough roads, limited electricity, and a varying amount of digital access.

During the idea phase, our team discussed a range of possible solutions. One early direction that we decided to scrap was a digital health platform or mobile app that could help people manage medications, receive reminders, or access health information. While we did think that this idea had some merit to it, we quickly realized it would not fully address the barriers we had identified due to the lack of access to technology for everyone. A call-based system may be helpful for some users, but it still assumes consistent access to a smartphone, mobile data, some level of digital literacy, and electricity. It was important to address these Western assumptions that everyone would have access to electricity or a mobile phone, whereas in rural communities, this is often not the case, and would leave many people out of care.

Because of this, we then shifted towards a physical service based location. We explored the idea of things like temporary pop-up clinics, a health kiosk, and transportation vehicles that could deliver care and supplies. As we compared these possibilities, we kept running into the importance of having these clinics be mobile. A static clinic still requires people to travel to it. A small kiosk may help with basic supplies, but it cannot support health checkups, consultations, or transportation if emergencies come up. This line of thinking led us to the idea of a mobile health clinic, built from a large van style vehicle, that could bring healthcare directly to rural communities while also functioning as a place where they can improve medical education in the villages, give treatment, and give out supplies.

This idea became even stronger once we started thinking about how one vehicle could support different levels of need. Some people may need simpler over the counter medication or sanitary products. Others may need to ask questions, receive a vaccine, just get a simple checkup from a medical professional, or be treated for more advanced care. We thought that to respond to this range of needs, the best action would be to design a combination of a staff mobile clinic and a medical vending machine attached to the side of the clinic. The staff portion would likely support more direct care and professional oversight, while the vending machine would make common health products more easily available without forcing every interaction to go through a provider and slow down how fast they can give care. This combination allows us to design for both a safe and efficient mobile health clinic.

As the concept kept developing, we created a list of key design goals that helped to guide our decisions. First, the clinic needed to be mobile and durable enough to hold up on the often poorly maintained roads. Second, it needed to support both healthcare services and health education. Third, it had to be usable by people with different amounts of literacy and varying

familiarity with technology. Fourth, it had to operate in places where power and connectivity may be unreliable. Finally, it needed to be realistic enough that it could be supported through public health systems already in place, NGO partnerships, or community-based support. By laying out these goals, it helped us to stay focused during the transition from the early idea process to more physical prototypes that we would go on to create.

Our first prototype was a low fidelity concept sketch. At this stage, we focused on the overall layout and function rather than making it a high fidelity and highly visually detailed image. The sketch showed a repurposed vehicle with space inside for medical equipment and a patient care area. We included an exterior service window where community members could ask questions or receive medication from a healthcare worker. On the opposite side of this, we placed a vending machine to distribute basic healthcare supplies such as pain relief medication, bandages, menstrual products, and sanitary items. We also began adding educational posters to the sides of the vehicle so that the clinic itself could act as a visible source of health information that people could learn from at a quick glance when it arrived in their community.

Our first prototype helped us to think through what functions needed to be included, but it also showed us some of the weaknesses that the initial design had. The inside space was still not clearly organized, and the connection between the clinic, the vending machine, and the educational posters needed a lot more development. At this point, we still have not fully addressed how the vehicle would be powered or how it would safely operate on Kenya's uneven and rough rural roads. Even though the first prototype was a simple design, it gave us something concrete to work from and helped move the project from just being an idea to something that we could call a real design and start improving upon.

As we continue the design process, we begin to focus more on the constraints we could have using the context of the environment. One important issue was power. Because many rural areas may not have reliable electricity, we added solar panels to the design for more sustainability. These panels would help power the vending machine and support at least some of the onboard medical equipment. This was an important design to us because it made the clinic less dependent on outside infrastructure, which can often be insufficient. It also fits the broader goal of creating a solution that could function under the harsh world conditions that Kenya can often have. We also incorporated satellite network capability into the concepts of the payment system, and health technology could stay updated even when the standard connection was weak due to the rural area.

Another major area of improving the design was transportation and road safety. Since the clinic would need to travel on rough and unpaved roads, we designed the vehicle with large, durable tires. This choice was originally meant to improve mobility, but after later feedback pushed us to think even more carefully about sustainability and safety. After some time, we recognized that it would not be enough for a truck to simply reach a community. The equipment and supplies inside also had to remain secure during travel. This made us reconsider the interior setup of the traveling mobile clinic. We realized the importance of making sure that the equipment inside was strapped down for better storage organization and to prevent health equipment and features of the clinic from getting damaged during long distances.

As the prototype kept developing, we were asked to think more carefully about what the vending machine should and should not be responsible for. At first, it was easy to imagine the machine carrying all kinds of different medications, but after more discussion, we realized that this would not be a realistic or safe way of going about things. While the vending machine could

be a very useful way to provide over-the-counter supplies such as bandages, pain relief medication, sanitary products, and other simple medical items, prescription medication would still need to remain under the control of the licensed medical professional working in the clinic. This became an important part of the design because it helped us create a more realistic boundary between what could be automated and what still needed human oversight. The vending machine would improve convenience and access, but we still needed to be realistic about the fact that it was not there to replace traditional medical care.

As our design became more and more detailed, we also started thinking about how people would actually approach and understand the clinic when they saw it in their own communities. We wanted the outside of the vehicle to clearly look like a mobile health clinic instead of just a random van carrying supplies showing up in these people's communities. That meant making the educational posters more visible, making the service window easier to recognize, and making the vending machine feel like part of the same system instead of something added on as just an afterthought. This stage of the design process was incredibly important because it pushed us to think about the user experience in a more practical way. If someone walked up to the clinic, they should be able to quickly understand where they need to go, what they could get from the vending machine, and when they would need to speak to a medical worker directly.

The evaluation session with our Kenyan colleagues on April 17th played a major role in helping us continue the iteration process. During the session, we showed the prototype over Zoom and rotated it so that they could view it from multiple angles. One of the first things we wanted to know was whether someone could understand what the design was supposed to do just by looking at it. This was important to us because if the clinic is meant to be used in a real community setting, it needs to be easily understood without needing a super long explanation.

The feedback we did get was very encouraging, however, because the participants were able to identify that the prototype was a mobile health clinic and that the attached vending machine was meant to help provide medicine and basic supplies at first glance. This showed us that the basic structure of the design was already communicating its purpose clearly, which was a very good sign.

At the same time, the evaluation also revealed several ways that the design still needed to improve. One of the biggest things we learned was that the specific medical supplies needed in the vending machine and the clinic itself would likely vary depending on the area being visited. Different communities may struggle with different illnesses, meaning that some regions may need more malaria related medication, others may need more HIV related care, or other health resources. It was very important that we took the time to understand each community and its needs before going there to help, which is why we felt that the clinic could not simply rely on a fixed medical supplies model, but a much more dynamic one. The design would need to be flexible enough so that the inventory could be adjusted depending on the local healthcare needs of each community. This was an important insight because it made the design more responsive to the differences that exist across rural Kenya.

Another important area of feedback involved how the clinic would handle patients with more serious health concerns. Questions came up about lab testing, uncommon illnesses, and how to support patients who may require more advanced treatment than the mobile clinic could provide. This helped to encourage us to think more realistically about the role of the vehicle. Rather than trying to act as a complete hospital on wheels, the mobile clinic would be better suited for frontline care, basic checkups, vaccines, and some limited testing if possible. For more advanced needs, the matatu could also serve as transportation to a larger hospital or medical

center. This helped us clarify that our design was not meant to replace hospitals, but instead to act as a tool that can be used between rural communities and more advanced healthcare systems.

The feedback also strengthened the education and outreach side of the design. All the participants were able to understand the posters already shown on the sides of the clinic, and they also suggested other ways that the health information could be shared more effectively. Posters are referenced below in Figure 3. One way was to create larger posters that could be displayed around communities, as well as smaller pamphlets that people could take home and educate themselves with. This would allow the clinic to spread more important health information even after it had moved on to another location. Another especially useful suggestion was to connect clinic visits with market days, since those are times when many people are already gathered. That feedback was very helpful because it reminded us that outreach is not only about the design of the vehicle itself but also about how the clinic fits in with the rhythms and routines of the community we are trying to care for.

After reflecting on the feedback, there were several key areas we had identified that could be used to improve the prototype. We knew the interior of the clinic needed to be better organized so that supplies, medical tools, and participant care spaces would work together more efficiently. We also needed to keep strengthening the separation between the over-the-counter functions of the vending machines and the provider-controlled parts of the clinic. In addition, we wanted the clinic to be more adaptable to regional health needs by allowing different medications and supplies to be stocked depending on the location the clinic would be traveling to. Finally, we wanted to continue building the educational side of the project through posters, pamphlets, and better scheduling strategies, such as community health days and market day visits. Those

improvements showed us that iteration was not just about making the prototype look better, but also about making the overall service a more realistic and useful tool for the community.

Overall, the ideation, prototyping, and iteration process helped us move from an initial concern about healthcare access to a design that felt much more practical and realistic with the context of where we would be providing care in mind. We started with several possible ideas, but through discussion, sketching, and feedback, we narrowed our focus to a mobile health clinic with an attached vending machine that could serve multiple healthcare needs in rural Kenyan communities. At each stage of the process, we were able to find different ideas and concerns that helped reveal different strengths and weaknesses in our original design. Instead of treating the first idea as final, we kept refining the project so that it would better respond to issues like access, infrastructure, safety, power, and community outreach. This process made it clear that good design is not just about creating something innovative, but about something we were continually revising and making better and better, little by little, to better serve the environment and community needs.

Evaluation and Findings

Our evaluation happened on April 17th in class with our Kenyan Colleagues. Two members led the evaluation while another took notes. We were able to talk to six Egerton University students to give us user insights and feedback. The first question asked was if the Egerton students could tell us what our prototype does just by looking at it. We put the prototype for them to see on zoom and rotated it to show all angles. We wanted to know if someone in need looked at the clinic they would be able to understand that the clinic would provide aid. Each colleague was able to tell us what the prototype would be used for. They understood that this was

a mobile health clinic that could also supply people with medication through the vending machine. The vending machine interface is shown in Figure 4 at the end of the paper. Each member was able to read each informative poster on the sides of the clinic. This gave us the feedback that our prototype is easy to understand and if somewhere were to see it in they would get the basic understanding on what it does.

We asked multiple questions on the different products we can supply in the vending machine. We found out that different areas require different medication due to the different illnesses in the areas. Some places require more HIV medication while others more malaria medication. This also sparked questions on how we are going to care for more critical patients and laboratory testing. After some discussion, we solidified an idea to use the matatu as transportation to hospitals where it can take lab testing as well as critical patients in need of more intensive care. If the lab testing can happen fast then it can be done in the vehicle but if not it will be transported to the nearest hospital. Prescription medication also came into topic since the vending machine would only allow for over the counter medications to keep in line with health laws especially with Pharmacy and Poisons Board. Supplying uncommon medication is also important. Of course uncommon and special medication is harder to come by so making sure the clinic is stocked with those medications will be important to address the neglected rarer illness. This also makes sure that those with uncommon illnesses can get treatment at the clinic and not have to be transported to a hospital. The medical professional on board would be the only person allowed to prescribe medication. They also must keep clear organization and documentation of the medication. We need government funding and NGO partnerships to help fund this idea as many rural communities cannot afford large medical bills.

We then asked if each participant could read and understand the informative posters. They were all able to understand that the posters had information on them about common illnesses and medication. Some great feedback we got on this was to print out large posters of the graphics and small pamphlets. The large posters could be put in communities to further educate people on health as well as using the small pamphlets as an easy way to spread the information. Another way we wanted to spread health awareness was going to do community days where the clinic would set a day to go to a community to give vaccinations, check ups, and inform the people about health. Kennedy, an Egerton student, said that "market days would be useful" for our goal (Personal communication with Egerton student, April 17, 2026). We hadn't thought about leveraging the popularity and community provided at market days for our cause so this was fantastic feedback.

Since this clinic will be traveling on rough terrain we mentioned how the wheels on the clinic will have large, thick tires. The appropriate tires would allow the clinic to have traction on these rough surfaces while keeping the clinic stable. We were able to receive feedback to make sure that everything in the clinic is strapped down to avoid damage as well as to get chain links and mudguards to the tires to add more traction and safety. In addition to the tires, we need to make the clinic accessible for the medical professional to live in. Most likely, the trips will be long and the days even longer so having a private space for the doctor to live in will be the most convenient.

The final ideas that were discussed were how to power the amenities. While we are not engineers we had some ideas on how to make sure that all the amenities are powered. We planned to implement solar panels on top of the clinic so it can power the vending machine and

any medical equipment in the clinic. These solar panels can also charge phones and batteries if needed.

Overall our evaluation was extremely informative and helpful. We learned what worked and what didn't on our prototype and what we can improve on. We were able to make an affinity diagram to demonstrate all of our findings. The diagram will be shown below along with our evaluation worksheet in the figures below. We had overall five themes: medical services, infrastructure, power, funding and policy, and community outreach. Most of the evaluation results lined up in the medical services with making sure that the correct medication is being supplied. Our colleagues over at Egerton were very helpful in providing insight, context, and feedback to our prototype which we are deeply appreciative for. We will make sure that these user insights and data will translate into future prototypes.

Conclusion and Future Work

Overall, our project focused on one main question. How can healthcare and health information be more accessible in rural Kenyan communities? Through our research, design process, and evaluation, we found that this issue is shaped by many barriers at once, including distance from healthcare providers, limited infrastructure, lack of reliable electricity, and different local healthcare needs from one area to another. Because of this, our team chose to design a mobile health clinic with an attached medical vending machine rather than a solution that depends heavily on personal devices or a stable internet connection. This concept gave us a way to think about healthcare access as both a service and an information resource, while also keeping the realities of rural Kenyan life in mind.

Through this project, we learned that designing for healthcare access means more than creating something that seems useful at first glance. It also means thinking carefully about safety,

practicality, mobility, and a seamless community fit. Our final concept reflects this thinking. The clinic is intended to provide direct healthcare support, distribute over the counter medical supplies, share health education, and connect patients to larger hospitals when more advanced care is critically needed. Feedback from our Kenyan colleagues helped us understand that the idea was clear and meaningful, but also that it needed to remain flexible. Different communities may need different medications, different types of outreach, and different forms of support. That insight made it clear that a successful design must be adaptable rather than a fixed, rigid solution.

There are still important areas that would need further development if this project were to move beyond a prototype stage and actually be brought into practice. Future work could include creating a more detailed interior layout for the clinic, developing a clear plan for how supplies would be stocked based on regional health needs, and refining how the clinic would coordinate with hospitals or other healthcare providers in order to provide the best care possible. It would be useful to explore more realistic implementation details, such as staffing, maintenance, funding, and partnerships with local organizations or government programs. In addition, the educational side of the project could be expanded through better poster design, take home pamphlets that can be shared with family and friends, and village outreach strategies that connect with local officials to better determine the best days for the clinic to visit.

In the end, this project showed us that good design is not only about innovation, but also about listening, revising, and responding to the people and context a design is meant to serve. Our mobile health clinic is not a complete answer to all healthcare related issues and inequalities that exist in rural Kenya, but it is a practical concept that responds to a lot of real barriers that these people face in their day to day lives. By combining healthcare services, supply distribution, and education into one mobile system, we were able to propose a design that is grounded in both

research and user feedback. Moving forward, we believe this idea has the potential to become even stronger through continued iteration and deeper collaboration with the communities it intends to serve.

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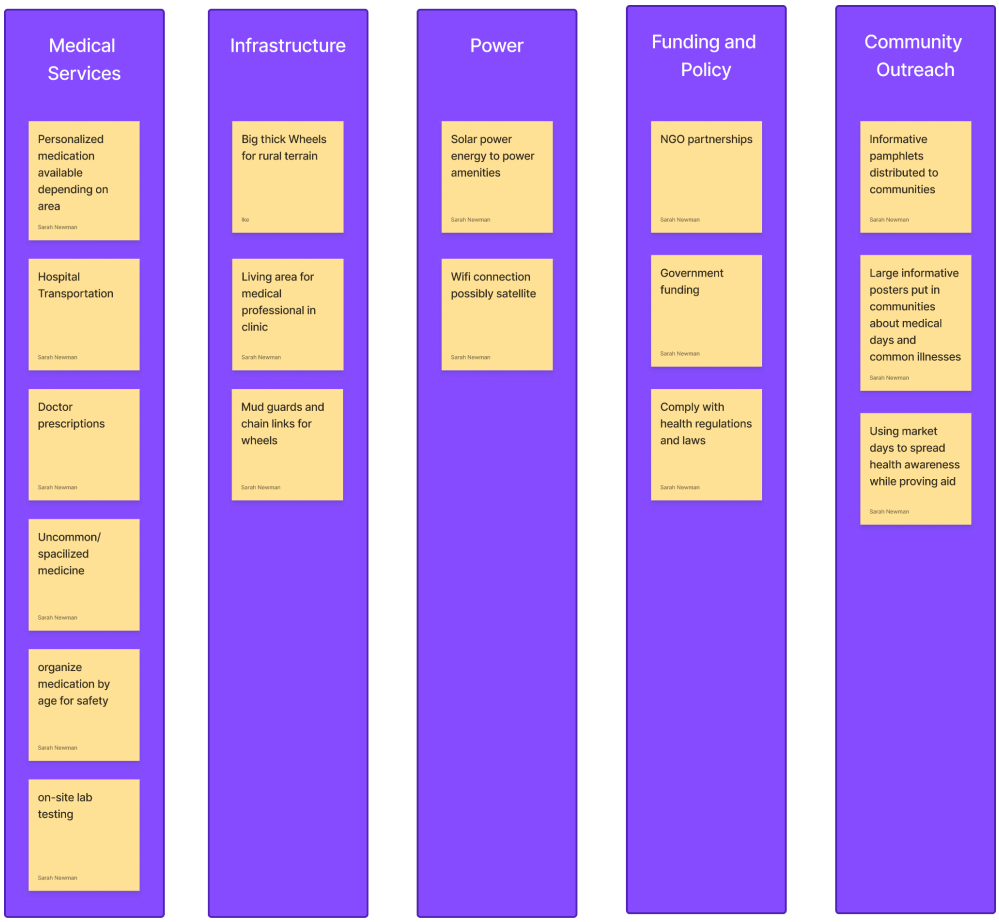
Figures

Figure 1

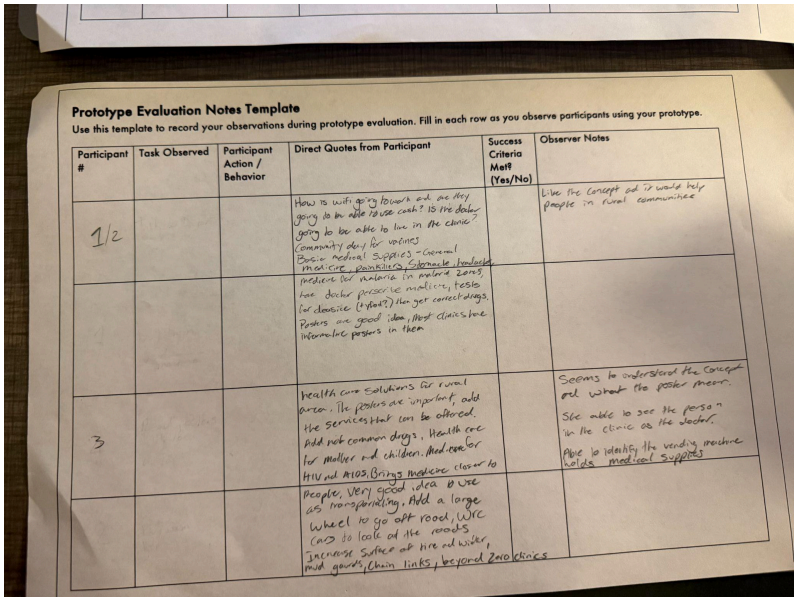
Affinity Diagram



Note. This is an affinity diagram made from our evaluation that took place on April 17, 2026. There were five main themes being medical services, infrastructure, power, funding and policy, and community outreach. This evaluation helped us understand what worked and what didn't on our prototype. It also gave us insights on what needed to be improved.

Figure 2

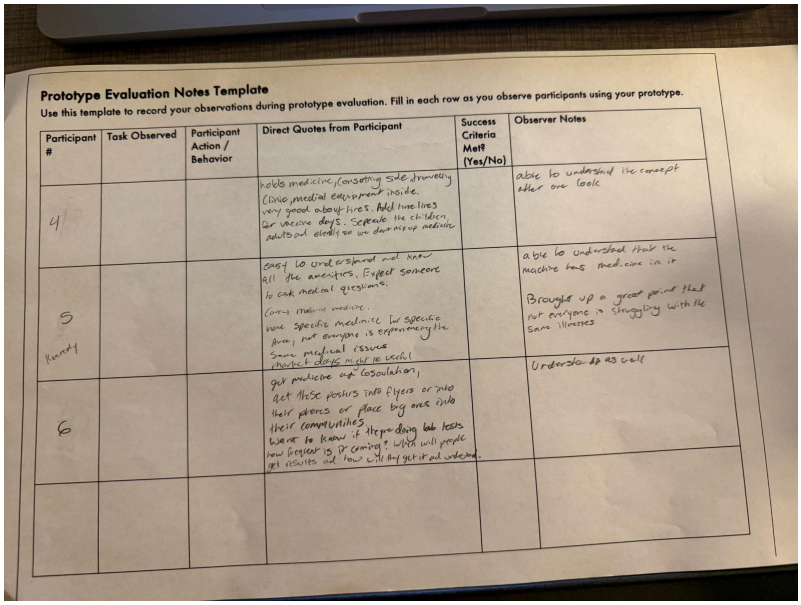
Evaluation Worksheet



Prototype Evaluation Notes Template

Use this template to record your observations during prototype evaluation. Fill in each row as you observe participants using your prototype.

Participant #	Task Observed	Participant Action / Behavior	Direct Quotes from Participant	Success Criteria Met? (Yes/No)	Observer Notes
1/2			How is wifi going towards and are they going to be able to use cash? Is the doctor going to be able to live in the clinic? Community diary for visitors. Basic medical supplies - General medicine, painkillers, Stomach medicine, medicine for malaria in malaria zones, has doctor prescribe medicine, tests for disease (what?) then get correct drugs. Posters are good idea, most clinics have informative posters in them		Like the concept and it would help people in rural communities
3			Health care solutions for rural areas, the posters are important, add the services that can be offered. Add not common drugs, Health care for mother and children. Med-cert for HIV and AIDS. Brings medicine closer to		Seems to understand the concept and what the poster means. Is able to see the person in the clinic as the doctor. Able to identify the vending machine holds medical supplies
			People, Very good idea to use as transporting, Add a large wheel to go off road, Use cars to look at the roads. Increase surface air tire and water, mud guards, Chain links, beyond Zero clinics		



Prototype Evaluation Notes Template

Use this template to record your observations during prototype evaluation. Fill in each row as you observe participants using your prototype.

Participant #	Task Observed	Participant Action / Behavior	Direct Quotes from Participant	Success Criteria Met? (Yes/No)	Observer Notes
4			holds medicine, Consulting side, Drawing clinic, medical equipment inside. very good about fires. Add timelines for vaccine days. Separate the children, adults and elderly so we don't mix up medicine		able to understand the concept after one look
5 Kwanty			easy to understand not know all the amenities. Expect someone to ask medical questions. Carry malaria medicine. have specific medicine for specific areas, not everyone is experiencing the same medical issues. Market drugs might be useful		able to understood that the machine has medicine in it. Brought up a great point that not everyone is struggling with the same illnesses
6			get medicine e.g. Consultation, Get these posters into flyers or into their phones or place big ones into their communities. Want to know if they're doing lab tests how frequent is it coming? With will people get results and how will they get it and interact		Understood it all well

Note. This is the notes taken from our evaluation that happened on April 17, 2026. Our team was able to speak to 6 students at Egerton University in Kenya. These students were able to give us feedback on our prototype.

Figure 3

Informative Posters

Note. These are the informative posters that were put on the side of the prototype. Our posters were generated using ChatGPT after explaining the context of the situation. The first poster is a welcome sign to show the purpose of the clinic. The second poster is about common illnesses and their symptoms and treatments. The last poster is the products available in the vending machine and what they're used for. There is also a price next to each product.

Figure 4

Vending Machine Interface

Note. This is the front of the vending machine. It was created by ChatGPT after explaining the context of the situation and what we needed. It has multiple rows of products of basic medical supplies. We told the AI agent to keep the interface simple to reduce information overload and to keep it easy to use.