Provider Perceptions on Integrated Health Care in Rural Kenya: The Case of Matibabu

Foundation Hospital in Siaya County

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#### **Abstract**

The following study qualitatively examines providers' perceptions of integrated health care models utilized at the Matibabu Foundation Hospital in rural Siaya County, Kenya. Kenya as a whole experiences health care personnel shortages and a high prevalence of poverty, HIV/AIDS, tuberculosis, and malaria; Siaya County has an exceptionally high rate of these conditions. Integrated care is seen as a possible solution to limited health care resources and is currently advocated for by the Kenyan government and the World Health Organization. Because of the increase in integrated care, it is important to understand providers' feelings about this model. To gain an understanding of providers' perceptions, key informant interviews were utilized. These interviews were transcribed and analyzed for common themes. The results of the interviews showed that the main positives of integrated care included decreased patient stigma, increased patient confidence, and a feeling of unity among the providers. The most notable challenges of integration were staffing and space limitations, increased wait time, and difficulty educating patients about their diseases. Overall, providers thought that integrated care was a good option in providing health care. Addressing the main challenges associated with an integrated model has the potential to improve both patient and provider satisfaction with integrated care.

#### Introduction

In Siaya County, Kenya, 35.8% of the population is living below the poverty line (Siaya County, 2012). The county has high rates of HIV/AIDS, tuberculosis, and malaria. There is one doctor per 44,000 people and limited health care facilities (Matibabu Kenya, 2014). These statistics are not unique to this county in Kenya. In Kenya, 20% of all mothers' deaths are AIDS-related (UNAIDS, 2014). The child mortality rate is also high — of every 1,000 children born, 73 die before age five (World Health Organization, 2014). In addition to these health crises, the county also faces an extreme shortage in trained health care professionals. In 2011, Kenya had 0.2 doctors per 1000 people (World Bank Physicians, 2014). The number of nurses is also extremely low at 0.8 nurses or midwives per 1,000 people (World Bank Nurses and Midwives, 2014). The country of Kenya and its citizens face extreme health challenges. In an effort to improve the health status of Kenyans, the 2010 Kenya Constitution gives healthcare as a right for all citizens.

The country has taken steps to accomplish the goal of equitable healthcare for all citizens by creating the Kenya Health Policy 2012 – 2030. One of these steps is the devolution of the Ministry of Health; devolution gives all counties increased independence in creating their health policy (Ministry of Medical Services, 2012). The Kenya Health Policy 2012 – 2030 also includes policy objectives. Two of the policy objectives: eliminate communicable conditions; and halt and reverse the rising burden of non-communicable conditions, call for integration of health services. The Policy Orientations included in the Kenya Health Policy also include a focus on integration, stating that there should be "Implementation of an integrated service delivery approach based on clients' needs." This integration should include preventive, curative, and rehabilitative services (Ministry of Medical Services, 2012).

The World Health Organization (WHO) defines integrated delivery of care as, "The management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs over time and across different levels of the health system." Included in this definition are six types of integrated services (World Health Organization, 2008). In 2007, the WHO Director-General called for an integrated approach to the delivery of health care services, citing a rise in single disease funding, low income country health services resource constraints, and the Millennium Development Goals (MDGs) as reasons for an integrated approach (World Health Organization, 2008). While integration is encouraged, a WHO systematic review also brought forth three important points concerning integration:

- 1. Integration does not solve problems related to lack of resources.
- 2. There are multiple ways to effectively integrate services; all services at a facility do not need to be integrated.
- 3. While many policies favor integration, few implement integration.

These points are crucial to consider when developing or studying an integrated system of care, particularly in a developing country. While there are studies of integrated care, reviews of integrated care systems have called for more research on the topic (Dudley & Garner, 2011, Vasan et al., 2014).

In addition to understanding types of integrated care and when integrated care is best utilized, it is also important to understand providers' perceptions of integrated care. While there is much research on types of integrated health care and patient perceptions of integration, there is limited research on the topic of providers' perceptions of integrated care, particularly in the context of developing countries. This study seeks to address the gap in knowledge of provider perceptions. Additionally, this study was conducted at a site with integration of all services, meaning that outpatient, inpatient, HIV/AIDS, tuberculosis,

chronic illness, youth services and maternal and child services are all provided at one location. This unique form of integration is also important to study. Further details of the study site are included below. As the government of Kenya continues to push for integration of services, understanding of providers' perceptions, particularly in rural, resource-limited settings, is necessary.

Study Site

This study took place at Matibabu Foundation Hospital in Uwkala, Kenya. Uwkala is located in Siaya County. Siaya County has high rates of HIV/AIDS, tuberculosis, and malaria. The county also has limited health care facilities and health care professionals (Matibabu Kenya, 2014). The hospital has been open for about two years; Matibabu Foundation was officially registered as an NGO in 2006. On average, 155 patients visit the hospital each week. According to the Matibabu Foundation website the hospital has the following services: out-patient services, in-patient services, maternal and child health services, obstetric ultrasound services, cervical cancer screening, laboratory diagnostics, pharmacy services, and HIV care and treatment services (Matibabu, 2014).

## **Statement of Problem**

High rates of AIDS, tuberculosis, and maternal and child health issues in Kenya, particularly in Siaya County, illustrate the need for improved health services. Integration of services is one way to address multiple health issues through one intervention. By integrating services, patients spend less time at clinics and hospitals, have potentially higher prescription adherence, and may face less stigma when seeking treatment. Improving patient and provider satisfaction with the health care system is another prospective positive of integrated health care. The consequences of not integrating health care services could include low patient follow-up rates and lack of adherence to physician recommendations. According to the Kenya National Patients' Rights Charter, all patients have the right to access health care,

including promotive, preventive, curative, reproductive, rehabilitative and palliative care (Republic of Kenya, 2013). Without improvement to the health care system, this charter may not be realized.

Integrated health care systems may be a solution to the health care problem; however, there is little understanding of provider perceptions of integrated health care models. Without knowledge of these perceptions, it becomes difficult to create a system that satisfies both providers and patients while meeting the health charter requirements. This research will attempt to address this research gap and aid in Kenya's health care system improvements.

## **Objectives**

The broad objective of this study is to understand health care provider perceptions of integrated health services at the Matibabu Foundation Kenya.

Specific objectives are:

- Identify health care services which have been integrated at Matibabu Foundation Kenya.
- 2. Understand providers' perceptions of integrated health services.
- 3. Understand influence of governmental policy on integrated care at Matibabu.

## Literature Review

Access to health care services is critical for all populations; however, health care access in developing countries may be particularly challenging. There are four important aspects to consider when understanding health care access. These include geographic accessibility—physical distance; availability—having the correct type of care available at the right time; financial accessibility—services patients are willing and able to care for; and acceptability—social and cultural considerations made by service providers. Additionally, a country's governmental focus on health care also influences health care access, especially to the poor (Peters et al. 2008).

Recently, the Kenyan government has reformed the health care system and constitutionalized access to health care as a human right. This includes the right to promotive, preventive, rehabilitative and palliative care (Republic of Kenya, 2013). With this systematic health care change come new challenges in health care access. To ensure patients have adequate access, new strategies are necessary. Integrated health care models may be an option. A study in Kenya outlined three types of integrated health care:

- 1. Provider-level: providers are responsible for multiple services for one client
- 2. Unit-level: patients receive multiple services, by different providers, in the same facility
- 3. Combination: provider-level and unit-level integration is present

  In this study, providers discussed the benefits and challenges associated with the integrated care model. Challenges included low salaries, lack of psychological support, larger workload, increased patient session length, longer waiting times, supply shortages and lack of guidelines. However, there were also multiple benefits associated with integration. Benefits included increased client satisfaction, improvements in personal and professional skills, more effective staff communication, and an increase in client repeat visits (Mutemwa et al., 2013). This study effectively illustrated multiple positive effects of integration.

A review of research concerning the effects of integrated care systems has yielded mixed results. Much of the research surrounding integrated care focuses on HIV/AIDS treatment integration, particularly in African countries. Suther et al. (2013) conducted a review that showed the amount of pregnant women in Antiretroviral Therapy (ART) was consistently greater in clinics with integrated care. Researchers also mentioned that the locations of the studies included in the review were areas of high HIV prevalence, which led to the integration of ART services. The review also identified key issues in patients accessing care including stigma of HIV status, long clinic wait times, and cost related to the

clinic and travel to the clinic. These issues may be solved by integrated care systems (Suther et al., 2013).

In a study conducted in Kenya, Vo et al. (2012) looked at the impact of full integration of HIV care with antenatal care in clinics. Researchers compared patient satisfaction in integrated and nonintegrated clinics in rural Kenya. Both clinics had high rates of satisfaction; 96% of women were satisfied at integrated clinics and 97% were satisfied at nonintegrated clinics. When the women were split into HIV positive and HIV negative groups, there was little difference in HIV negative women's clinic satisfaction. However, 79.3% of HIV positive women reported being "very satisfied" with integrated clinics, while 53.9% of HIV positive women had the same level of satisfaction with nonintegrated clinics. Of the HIV positive women who participated in this study, 82% said they preferred integrated clinics. Researchers also observed that while integrated services often increased wait time, the increased wait time did not decrease patient satisfaction (Vo et al., 2012). This study gives evidence that integration is improving HIV patients' satisfaction with health care services. Increasing care satisfaction can potentially lead to increased treatment-seeking and drug adherence, both of which may decrease the rate of HIV in Kenya.

Smit et al. (2012) also studied integration. Their focus was the integration of sexual and reproductive health with HIV care in the country of South Africa. The researchers utilized key informant interviews to gather their information. Researchers sampled until they reached redundancy. The overall purpose of the study was to understand policies and service delivery environments that were conducive to integrated care. Some of the challenges facing integrated care were lack of national policies, vertical programs due to funding, and lack of coordination between different levels of health care. There were also challenges within the services; these challenges included staff shortages, lack of training, poor management and shortage of space. These challenges made integration implementation difficult. The

conclusion researchers reached was that overall, many desired the integration of family planning into HIV clinics. The researchers recommended that integration be implemented in increments and stated that maximizing chances to provide family planning in HIV clinics was critical (Smit et al., 2012). It is also necessary to critique this study; while this study interviewed many participants, interviewing patients would have added to the information presented. Information concerning patient attitudes about family planning would be particularly helpful. This is a limitation of the study; however, the information gathered still contributes important knowledge when considering integration implementation.

Another study conducted in Kenya also focused on family planning. Grossman et al. (2013) utilized a cluster-randomized trial to determine the effects of integrating family planning into HIV care. The specific outcomes of interest were rate of effective contraceptive use and pregnancy incidence in locations with and without family planning service integration. Intervention sites were dispensaries, health centers, sub-district and district hospitals with HIV clinics in Nyanza Province in Kenya. The study took place at 12 sites; 6 were controls sites and 6 were intervention sites. Intervention sites integrated family planning in accordance with the Kenyan Government standards. At intervention sites use of family planning increased from 16.7% to 36.6%; at control sites rates increased from 21.1% to 29.8%. The study subjects' use of two methods of family planning increased by 10.8% at study intervention sites and by 7.6% at study control sites. Rates of pregnancy were also measured; during the last year of the study, per 100 clinic visits, 1.5 new pregnancies were reported in the intervention clinics and 1.7 new pregnancies were reported in the control clinics. The researchers concluded that the integration of HIV care and treatment with family planning was associated with more effective contraceptive methods. A limitation of the study was the short study period of one year. There were also limitations in incomplete data and inconsistencies between clinics; some charged a small fee for contraceptives (Grossman et

al., 2013). While limitations of the study must be acknowledged, as a whole the information presented contributes to a greater understanding of the impact of service integration.

Much of the literature surrounding integration focuses on health issues related to HIV and looks to understand the patients' perspectives. This review shows the need for increased understanding of the impact of integration on health issues outside of HIV and better understanding of providers' perceptions of integrated care. The literature reviewed here also contributed to the overall understanding of the results of this study. Some aspects of this literature were utilized in the discussion of the results observed.

## Methodology

A total of 15 participants were interviewed for this study. Of the 15 participants interviewed, 12 were currently providing health care services at Matibabu Foundation Hospital in Uwkala, Kenya. The professions of those interviewed were nurses, laboratory technicians, pharmacy technicians, and clinical officers. Professionals were asked to state their position at Matibabu and how long they had worked at the facility. The professionals interviewed who were not providing health care served as a way to fact check interviewee responses. They also provided a more in-depth look at integration and hospital strategy. The majority of the daily hospital staff was interviewed; a staff list was provided by the Finance and Administration Manager.

Objective one, determining if integrated services were utilized, was completed through observation at the hospital and by asking providers to describe integrated services.

Integration was defined using World Health Organization definitions. The second objective, understanding provider perceptions on integration, was achieved through provider interviews. Providers were asked multiple questions about integration, including if they preferred working in integrated or non-integrated care settings. Objective three, the impact of governmental policy, was also understood through provider and employee responses to

questions about governmental impact. The 2010 Constitution and 2012 – 2030 Kenya Health Policy were also used to determine this objective.

Interviewees were contacted the day of the anticipated interview and asked if they would be willing to participate. All interviews took place at the Matibabu Foundation Hospital. Prior to beginning the interview, participants read the consent form, Appendix A, and gave verbal consent. Participant interviews were recorded and then transcribed. The questions answered by each health care provider interviewee are attached in Appendix B. No identifying information was collected from participants and recordings were labeled with the date of interview. Participants were thanked for their time, but were not compensated in any way.

The transcribed interviews were reviewed for common themes between providers.

After common themes were identified, similarities of opinions between types of providers and length of employment at the hospital were reviewed. These themes are reported in the results.

## **Results**

## Integration

All health care providers interviewed at Matibabu Foundation Hospital reported that the hospital utilized an integrated care. Using the definition of integrated services provided by WHO, the services at the foundation can be classified as integrated on multiple levels. First, Matibabu Foundation Hospital offers multiple services, including inpatient, outpatient, HIV/AIDS, tuberculosis, maternal and child health services, chronic illness clinic, youth health services, laboratory, and pharmacy, at one location. This type of integration is considered "integrated health service", which is defined by the provision of multiple services in one location (World Health Organization, 2008). Matibabu Foundation Hospital also provides services defined as "integrated" meaning a service that target a specific population

with a combination of preventative and curative health services. This definition is met through the provision of care to maternal and child (MCH) populations. Matibabu Foundation Hospital has integrated MCH care by providing prenatal and antenatal care, child immunizations, family planning, cervical cancer screening, and HIV care for mother and children through one program at the hospital. When asked to discuss integration, hospital staff frequently referred to the MCH integration and felt this integration was working well. The hospital had similar programs for youth; the Youth Friendly Center had integrated services for the youth population. These services included general health, sexual health, and social programs, which had things like social and sport clubs.

## Patients' Attitudes

Providers were also asked about their perceptions of the integrated system utilized at Matibabu Foundation Hospital. The majority of providers shared positive comments about the integrated system, particularly in how integration made patients feel. Reports of increased patient confidence and self-esteem and reduced stigma, due to the implementation of integration, were most common. One provider said, "What integration has is that we are trying to kill that stigma. And the first way to do it is by letting patients come to the hospital knowing that they came to be treated, not to be segregated." Another provider stated, "Integration to me, that one is the best thing to do for HIV care and treatment, and we improve patient self-esteem and lower stigma, if stigma improves everywhere than HIV will lower…" The majority of providers reported patients' attitudes as a positive success of integration.

## **Provider Challenges**

Providers also expressed their thoughts about the challenges of integration. Providers reported longer wait times for patients and difficulties with performing many tasks during one appointment, because of integration. It is important for them to have adequate time to be organized and prepared for each patient, because the integrated system requires that multiple areas of health be addressed in one appointment. However, providers reported sometimes this was difficult to achieve due to large patient volume. They also had difficulties when managing multiple stations in the hospital. The management of multiple stations was also due to the implementation of integration; because they had skills in all areas, providers were responsible for multiple areas of the hospital, especially during the night shift. The majority of providers also mentioned staffing and lack of leave time was an issue. One provider stated that lack of leave time has the potential to impact job performance. Management acknowledged that integration had led staff to feel a greater work burden.

Limited staff also impacted other areas, such as provider trainings. The administration reported providing weekly staff trainings, called Continuous Professional Development. However, multiple staff believed more training was necessary. The desire for more training was especially observed in staff newer to the Matibabu Foundation Hospital. Providers may have also desired more training because of additional tasks or tasks in multiple areas of health, as a result of integration. The combination of additional tasks due to integration and limited staff may have contributed to the lack of training. If providers have little leave time, they also have limited time to attend trainings, which as one provider mentioned are usually not held at the hospital. One staff also mentioned that standardization of practices or developing protocol for all staff to be trained on would be helpful for organizational purposes and training new staff members.

Additionally, staff discussed lack of space as a hindrance to providing services.

Integration implementation caused multiple services, and the equipment they required, to all

be in one exam room. Multiple rooms contained the provider's desk or work space with an exam table and additional equipment, such as an ultrasound machine. The integration of space caused cramped spaces. The pharmacy was another integrated area with space issues. The pharmacy held two desks, all medication for the hospital, a fridge for medications and vaccines, and nutrition services, which included food supplements for some patients. Staff said more inpatient and outpatient rooms were necessary. One provider described, "...infrastructure, minimal. It's serving the purpose, but we are squeezed. If we had infectious disease, it would spread so fast."

Lastly, one of the most significant challenges, reported by multiple providers, was the difficulty of educating large groups of patients because of integration. Because of the confidentiality integration ensures, providers cannot talk to a large group of patients with the same condition, like HIV, about drugs, adherence, and related issues. If patients are not separated they feel uncomfortable asking questions a provider described, "...you tend not to get anybody raising their hand easily like you used to... I think they are shy because now you will be identified as HIV positive when you raise your hand and ask a question about HIV drugs." They are working to solve this problem, however, currently, according to one provider; patients who attend condition specific clinics, such as an HIV clinic, receive superior patient education.

## Provider Successes

Providers reported largely positive feelings about integrated care. Integrated care was seen as a time saver and a way to use resources most effectively, by both management and providers. While providers discussed staff and space limitations, they also believed the current integrated care was the most effective way to utilize hospital resources. One provider also believed the holistic care given because of integration led to more comprehensive treatment of patients. Additionally, providers thought integration led to improved patient

follow-up. Management and providers also said that through integrated care, providers also maintain skills in multiple areas of medicine and treatment. Providers also felt that the integrated care model led to a sense of unity. One provider stated, "The first thing I can say is that integration also brings closeness of workers." The majority of providers had also worked in a non-integrated clinic and when asked to compare their experiences, all preferred the integrated care setting.

## Governmental Health Policy Impact

Providers also commented on the impact of governmental influence, in the form of the 2012 – 2030 Kenya Health Policy, which pushed for integration of health care services, and 2010 Kenya Constitution, which included changes to citizens' health care rights (Ministry of Medical Services, 2012). Matibabu Foundation Hospital was not integrated as a result of this policy; the hospital used integration to improve the quality of care for all patients, not only patients with an issue that was well-funded. Providers generally perceived governmental policy as a slow process, saying that more private hospitals were integrated than public hospitals. Staff also reported that Matibabu Foundation Hospital did not adopt all governmental policies; they do not provide free care for maternity and under-five populations. This is because the hospital is not funded by the government. While some governmental services are free, one staff reported that this is "tricky" particularly in the case of maternal services; unavailable services or unexpected costs often bring patients from government hospitals to Matibabu Foundation Hospital.

According to most providers the 2010 Kenya Constitution had a positive effect.

Patients have taken a proactive role in their health. One provider stated, "The kinds of clients and patients we are seeing now are more informed; they're more aware that they are supposed to get quality health services. That makes us raise our standard of practicing, if you don't provide correct services you'll be questioned by the patients themselves. It makes you

want to read more, do what is right and put the client first." Another provider believed more health-seeking behaviors, particularly from males, was a result of the 2010 Constitution. The provider said, "I talked of health-seeking behavior for clients, especially for males. For past years, male health-seeking behaviors have been low. Now, local people and integrated services have led to greater male health-seeking behavior." Providers also explained that patients now had the right to health services and could not be denied emergency care, both of which had impacted services at Matibabu Foundation Hospital.

#### Discussion

This qualitative study highlights the challenges and successes health care providers perceive in an integrated system. While providers reported an overall positive view of integration, there are still multiple challenges to be addressed. As the government of Kenya pushes for more health care integration, it is increasingly important to address these challenges. Due to the shortage of health care workers, future and current health care workers must be satisfied with integrated care to encourage growth in this field. If health care workers are unhappy with integrated care, the shortage of health care workers, which integrated care is thought to address, could become worse. Fulfilled, motivated providers will improve health outcomes. Additionally, provider satisfaction may help to solve the provider shortage issue. If providers are satisfied with their work, they will be less likely to seek employment outside of the country. An increases in number of providers will also make workloads more manageable, which may in turn increase providers' job satisfaction. All of these possible outcomes have the potential to improve health care in Kenya.

The setting of the study allowed for an understanding of a combination of integration types. In this setting all services were provided in one setting and services were grouped in a way to target a specific population with preventative and curative services. Providers seemed to like integrated services that targeted a population, such as maternal and child health

services. However, there were more challenges associated with having the entire location integrated, particularly education sessions. Locations with integration services must develop a system to effectively educate their clients. This finding shows that some types of integration may work better than others and that providers may have different thoughts on different types of integration.

Because provider perceptions and satisfaction are so integral to the improvement of health in Kenya, it is important to address provider concerns. Multiple concerns have been discussed by providers. Not having enough staff, which led to little to no leave time, was a major concern for providers. Providers also discussed having limited space and equipment. One of the most concerning issues was difficulty educating patients on their conditions due to integration. Addressing these concerns may improve both patient and provider satisfaction. Providers were also satisfied with multiple aspects of integration. Interviewees expressed that providing a variety of services in a variety of departments leads to a strong sense of staff unity. Furthermore, integration of services was perceived to be an effective way to utilize limited resources. The increased patient confidence and lowered stigma was also seen as a major success of integration by providers.

Overall, providers thought integration of services was a step toward improving health care in Kenya and preferred working in an integrated health care facility. Understanding provider perceptions and making changes based on these perceptions will improve integration. Improving integration at small, non-governmental hospitals will also increase knowledge for implementing integration at large government hospitals. Integration has the potential to significantly improve health, if properly implemented.

The results of this study are also supported by previous studies. Vo et al. (2012) studied integration in Kenya and found that patients reported a reduction in stigma. This supports providers' observations of reduced stigma for patients. Suthar et al. (2013) also

reflected the results of decreased stigma and increased patient confidentiality observed in the present study. The negative aspects of integration reported by providers have also been observed in previous studies. These include longer patient wait time, staffing limitations, and greater work load (Mutemwa et al., 2013). However, recent studies have also reported that integration decreased patient wait time (Suthar et al., 2013). This shows that, with proper implementation, integrated systems can decrease patient wait time. The type of integration a clinic uses could also impact wait time. As a whole, the results of this study are complemented by previous studies and suggest that integration is a step toward improving health care, if recurring problems are addressed.

This research also has limitations. One limitation is narrow generalizability of results. While the results highlight issues of focus for integration studies, the setting of an NGO hospital, in a rural setting may not be generalizable to larger hospitals or governmental hospitals. While all providers spoke fluent English, some interviews may have been limited by a lack of knowledge concerning governmental health policies and the Kenya Constitution. These limitations should be addressed in future research.

Future research should utilize quantitative methods to learn more about issues discussed by providers including high patient volume, staffing, difficulty with educational sessions, and limited resources. Positive provider reports of reduced stigma, increased follow-up, and skills in multiple areas should also be quantitatively studied. Additionally, more information regarding patient experiences in an integrated care setting should be determined. Perceptions of integrated care should be understood in both private and public or governmental hospitals, a comparison of these two settings will also provide valuable information. Because integration of services often takes place in resource-limited settings, further understanding the impact of outside factors, such as limited resources or staff, on perceptions of integration should also be a topic of further study.

#### Conclusion

Integrated health care services are proving effective. Providers report that integrated services decrease stigma, increase patient confidence and follow-up rates, improve providers' sense of unity, and effectively utilize the available resources. However, integrated services also contribute to lack of space, lack of leave time, limited training, and difficulty educating patients. To address the root of multiple concerns of integration, hospital management must find the resources to hire more staff. The Kenya government must also acknowledge staffing challenges and increase funding to the health care sector, particularly to organizations that are utilizing innovative methods to effectively treat patients. While governmental and organizational funding challenges are acknowledged, increasing staff has the potential to improve issues with lack of leave time and lack of training. Training must become a priority for the Matibabu Foundation Hospital. Because providers currently have limited time to leave the hospital, due to staffing, administrators need to bring training to the providers at the hospital. If more providers are hired, providers will have more time to attend training in other locations. Increased training can also help providers develop innovative ways to educate patients in an integrated care system. Providers must also communicate regarding the training they feel is necessary to properly fulfill their roles at the hospital. If the government and Matibabu Foundation are able to make the recommended changes, the integrated system will be improved for both providers and patients.

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## Appendix A

## Informed Consent – Providers

The purpose of this interview is to understand provider perception of integrated care at Matibabu Foundation. To understand your perceptions, I'll be asking a series of questions about the services you provide at Matibabu and how you feel about the services. You have been chosen for this interview because you are providing Maternal health services at Matibabu. The interview should last 15 to 30 minutes. I will not collect your name, but will instead record your time and date of interview. No personal or health information will be collected. I may use a translator to aid in communication and take notes about the interview. This interview, and anything you say in it, will in no way impact or influence your employment at Matibabu. Participation in this study is completely voluntary and you many withdraw from the study at any time. The results of this study will provide Matibabu with valuable insights concerning the foundations' integrated care model and may also be utilized for presentations or publication.

# Appendix B

Health	Care P	rovider Interview Questions
1.	What i	s your occupation at the Matibabu Foundation?
	a.	Physician
	b.	Clinic Officer
	c.	Nurse
	d.	Pharmacy Technician
		Lab Technician
	f.	Other:
2.	How long have you worked at Matibabu Foundation?	
	a.	Less than one year
	b.	1 to 3 years
	c.	3 to 5 years
	d.	Over 5 years: years
3.	What services do you provide?	
4.	How would you describe the concept of integrated services?	
5.	Are there integrated services at the Matibabu Foundation? Yes No  a. If so, which services?  b. When did these services become integrated?  c. How has integration of services changed the care given?	
6.		you worked in a facility that does not have integrated services? Yes No If yes – How do you compare integrated services with non-integrated services?
7.	The 2012-2030 Kenya Health Policy calls for integration of health services. Have you observed any changes in care integration due to this policy? Yes No a. If yes – Please describe the changes.	
8.	The 2010 Kenya Constitution gave all citizens the right to the highest possible standard of health. Have you observed changes at Matibabu Foundation as a result of the constitutional changes?	
9.	In terms of services offered and service integration, what could be improved at Matibabu?	
10.	In tern Matiba	ns of services offered and service integration, what is working well at abu?