Observation ID:_____

INFORMED CONSENT FORM: Patient observation

Protocol Title: **Evaluating the Impact of Solar Power on Maternity Facility Quality**
Description of Subject Population: Women giving birth at facility
Investigators: **Dr. Jessica Cohen,** Harvard School of Public Health, Boston, USA **Dr**. **Slawa Rokicki**, University College Dublin, Ireland
Funding Agency: UBS
Version/ Date: 10 May 2018; Version 4

Introduction

Hello, my name is _____. I am working with Innovations for Poverty Action (IPA) Uganda, a nongovernmental organization (NGO) that studies solutions to global poverty problems. IPA is based in Kampala and is currently conducting research together with the Harvard School of Public Health to collect information about the availability of electricity in rural health facilities, and how electricity affects health workers' ability to provide care during deliveries. IPA has selected this facility to participate in this study. We are asking if you would like to participate in the study as you are giving birth at this facility. This component of the study includes observing the care you are provided during your labor and delivery at this health facility.

About this consent form

Please listen to the reading of this form carefully. This form provides important information about agreeing to participate in the research. You have the right to take your time in making decisions about participating in this research. You may discuss your decision with others. If you have any questions about the research or any portion of this form, please ask us. If you decide to participate in this research you will be asked to sign this form. A copy of the signed form will be provided to you for your record.

What can I expect if I take part in this research?

From the time of your admission until shortly after you have delivered, we would like to observe and take notes on the services that you are receiving at this facility. One or two data collectors will be observing the delivery. Both data collectors have medical training; however, they will not take part in the care you are receiving or interact with you during the observation. They are only here to observe. In addition, they may record some information from your medical records. None of the information recorded will have your name attached to it or identify you in any way. No specific action will be required from you. At the completion of the observation, you will receive a small gift as a token of our appreciation for your participation.

Do I have to take part?

Participation in this study is completely voluntary. If you choose to participate, you may change your mind and leave the study at any time. You will not be treated any differently at this facility if you choose not to participate.

How many people will take part in this research?

Over 1000 women will take part in this research across up to 20-30 health facilities.

How long will I take part in this research?

You will take part in this research for the duration of your delivery at the health facility.

What are the risks and possible discomforts?

We expect there to be very little risk in participating in this study. The presence of an observer in the delivery room may cause you slight discomfort. We will ensure that data collectors do not interfere with the care you are receiving. You can choose to end your participation at any time and the observers will leave. As with any

research study, there is a possibility that someone else may see the information we record, but all efforts will be made to protect your privacy.

Are there any benefits from being in this research study?
There are no direct benefits from being in this study, but we hope that the results of our work can benefit your community by generating important information on the role of electricity in maternity care.

What will I have to pay for if I participate in this research?
It will not cost you anything to participate in this research.

Can my taking part in the research end early?
You may decide not to continue in the research at any time without it being held against you. The person in charge of the research can remove you from the research at any time without your approval for any reason**.**

Confidentiality
Your name will not be reported or connected to any of the findings that result from this study. Until data collection is finished the data will be kept in a password protected file and all paper surveys will be kept in locked cabinets that only researchers have access to. Data collected from this study may be seen by the Harvard Institutional Review Board (IRB) and Mildmay Uganda Research Ethics Committee (MUREC), which will oversee the research.

Ethical aspects of the study
This research has been reviewed and approved by the ethics committee of MUREC and the Harvard IRB. They will also approve any changes made to the study procedures.

What will happen to the results of the research study?
The results of this study will be written up in a report which will be shared with Ugandan policymakers. We will also publish findings from our research in academic journals. You will not be identified in any report or publication..We will circulate our research findings with study districts to ensure that participants are able to benefit from the findings. Any new information gained during the course of the study that would be helpful to research participants, or that may affect your willingness to continue taking part in the study, will be shared.

Questions
If you have questions in the future regarding the research, please contact one of the members of IPA**.** If you have questions about your rights as a research subject or regarding any damage attributable to the research and wish to discuss this with someone not involved in the study, you may contact the Mildmay Uganda Research Ethics Committee (MUREC) or the Uganda National Council of Sciences and Technology (UNCST):

Innovations for Poverty Action (IPA) - Uganda: Innovations for Poverty Action Uganda (IPA), P.O. Box 40260, Nakawa, Tel: (0414 669 840), Website: www.povertyaction.org
Field Manager: Juliet Ajilong (0772 977 446)

Mildmay Uganda Research Ethics Committee (MUREC): P.O Box 24985, Kampala Tel: +256 312 210200, +256 392 614 022, Ext. 262 Website: www.mildmay.or.ug, Mildmay Chairperson: Dr. Christine Nabiryo (0392174236)

Uganda National Council of Sciences and Technology (UNCST): P.O Box 6884, Kampala Tel: +256 414 705 513, Website: www.unsct.go.ug

Harvard IRB: 90 Smith Street, Boston, Massachusetts 02120. +1-617-432-2157 (or toll-free: 1-866-606-0573)

Observation ID:_____

Sponsor: This research study is funded by the UBS Optimus Foundation, an organization that is committed to the welfare of children around the world. For more information, please visit: https://www.ubs.com/microsites/optimus-foundation/en/home.html

Protocol Title: **Evaluating the Impact of Solar Power on Maternity Facility Quality**
Description of Subject Population: Women giving birth at facility
Investigators: **Dr. Jessica Cohen,** Harvard School of Public Health, Boston, USA **Dr**. **Slawa Rokicki**, University College Dublin, Ireland
Funding Agency: UBS
Version/ Date: 10 May 2018; Version 4

Statement of Consent

i. I have read the content of this consent form, and agree to participate in this study.
ii. I have had the opportunity to ask questions and all have been answered to my satisfaction.
iii. I have been given enough time to consider the above information and to seek advice if I so choose.
iv. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected.
v. I understand that relevant sections of my medical records may be recorded during the study by authorized individuals from Innovations for Poverty Action (IPA) and the Harvard School of Public Health, and I give permission for these individuals to have access to my records.
vi. I will be given a copy of this signed consent form. By signing the consent form, I have not given up any of my legal rights.

PARTICIPANT

I consent to participate: ☐ Yes ☐ No

Signature or thumbprint of patient	Patient name	[___]/[___]/[___] Date
Signature of witness if thumbprint was given by patient	Witness name	[___]/[___]/[___] Date
		[___]/[___]/[___]

ENUMERATOR

I confirm having met with the patient at the time of enrollment to answer questions about this study.

Signature of enumerator administering consent form	Name of Enumerator	[___]/[___]/[___] Date

Health Facility ID:_____

REQUEST FOR PARTICIPATION AND INFORMED CONSENT FORM: Medical Officer In-Charge

Protocol Title: **Evaluating the Impact of Solar Power on Maternity Facility Quality**
Description of Subject Population: Medical Officer In-Charge
Investigators: **Dr. Jessica Cohen,** Harvard School of Public Health, Boston, USA **Dr**. **Slawa Rokicki**, University College Dublin, Ireland
Funding Agency: UBS
Version/ Date: 10 May 2018; Version 4

Introduction

Hello, my name is _____. I am working with Innovations for Poverty Action (IPA) Uganda, a nongovernmental organization (NGO) that studies and promotes effective solutions to global poverty problems. IPA is based in Kampala and is currently conducting research in collaboration with the Harvard School of Public Health and with approval from the Ministry of Health to collect information about the availability of electricity in rural health facilities, and how electricity affects health workers' ability to conduct deliveries. We are asking for your permission for your facility to participate in this research study.

About this consent form

Please read this form carefully. This form provides important information about participating in research. You have the right to take your time in making decisions about participating in this research. You may discuss your decision with others. If you have any questions about the research or any portion of this form, please ask us. If you decide to allow your facility to participate in this research you will be asked to sign this form. A copy of the signed form will be provided to you for your record.

What can I expect if I take part in this research?

If you choose to allow your facility to participate, we will collect the following information:

1. **Facility Electricity, Services, and Staffing:** An interview with the In-Charge or Administrator that is estimated to take between 1-2 hours to gather information about the facility's electricity supply, staffing, procedures performed, commodity management, and delivery costs. No patient identifiable data will be recorded.
2. **Direct observations of deliveries:** Data collectors with medical or health training will observe deliveries for about 2-3 months in total. One or two data collectors will observe each delivery. In addition, they will record information from the patients' medical records. Each patient will be asked for consent before observation begins; if the patient refuses to consent then the data collectors will not observe the delivery. The data collectors will silently watch the delivery and take notes. The data collectors will not interact with the patient. No identifiable information from either the patient or health worker will be written on the notes.
3. **Staff interviews:** An interview with staff members of the facility about their experience with electricity at the facility, as well as their training, knowledge, and experience in conducting deliveries, which is estimated to take 1 hour each.
4. **Register Review:** Observation of service volumes as recorded in the HMIS Monthly Form and Integrated Maternity Register that is estimated to take 30 minutes. No patient identifiable data will be collected.

Additionally, at some point during the study, a Solar Suitcase will be installed in your facility. We Care Solar Suitcases are complete solar electric systems that provide essential lighting and power for charging phones and small medical devices, and are specifically for maternal health facilities in low-resource environments. The Solar Suitcase comes with: 2 bright, rugged LEB lights, 1 Lithium Ferrous Phosphate (LFP) 12 volt battery, 1 homerun

cable for connection to solar panels, 1 aluminum glass 100 watt solar panel, 2 rechargeable LED headlamps, 1 universal cell phone charger, 1 USB adapter, 1 fetal Doppler, 1 AA/AAA battery charger, expansion box (provides 2 additional lights), and hardware installation kit.

Installations will be done by a local solar contracting firm based in Uganda called Ekide. Installers will teach your facility staff how to use and maintain the Solar Suitcase on the day of installation. The training usually takes about an hour. We will also install a plastic light sensor on the wall of the delivery room for the duration of the study. This light sensor takes readings of how bright the room is.

At the completion of the study, health workers at this facility will receive a small gift as a token of our appreciation for your participation.

Participation is voluntary
Participation in this study is completely voluntary. If you decide that your facility will participate, we will ask you to sign the form and you will be given a copy. You may refuse to participate or discontinue your participation at any time without explanation or penalty.

How many people will take part in this research?
About 120 health care workers will take part in this research across 20-30 health facilities.

How long will I take part in this research?
Researchers will first observe deliveries daily at your facility for roughly one month. During this time we would also conduct staff interviews, register reviews and the facility assessment with the in-charge or administrator. We will return 1-2 times to collect this data again, for a period of roughly one month each time.

What are the risks and possible discomforts?
We expect there to be very little risk in participating in this study. The presence of an observer in the delivery room may cause health workers slight discomfort. We will ensure that data collectors do not interfere with the care that patients are receiving in any way. During the interview, if any question makes you feel uncomfortable, you do not have to answer it and you can end the survey at any time. As with any research study, there is a possibility of a risk of breach of confidentiality, but all efforts will be made to protect your privacy.

Are there any benefits from being in this research study?
There are no direct benefits from being in this study, but we hope that the results of our work can benefit your community and your profession by generating important information on the role of adequate electricity in maternity care quality.

What will I have to pay for if I participate in this research?
It will not cost you anything to participate in this research.

Can my taking part in the research end early?
You may decide not to continue in the research at any time without it being held against you. The person in charge of the research can remove your facility from the research at any time without your approval for any reason**.**

Confidentiality

Health Facility ID:_____

The names of the providers, staff and managers at this facility will not be reported or connected to any of the findings that result from this study. No facility-level information will be shared outside of the primary research team and we will not identify individual providers or staff, except any information which IPA is ordered to disclose by court or tribunal of competent jurisdiction or otherwise required or permitted to disclose by law as amended from time to time. Until data collection is finished the data will be kept in a password protected file and all paper surveys will be kept in locked cabinets that only researchers have access to. Data collected, including any identifiable information, may be seen by the Harvard Institutional Review Board (IRB) and Mildmay Uganda Research Ethics Committee (MUREC), which will oversee the research.

Ethical aspects of the study
This research has been reviewed and approved by the ethics committee of MUREC and the Harvard IRB. They will also approve any changes made to the study procedures.

What will happen to the results of the research study?
The results of this study will be written up in a report which may be shared with Uganda policymakers and circulated with study districts. We may also publish findings from our research in academic journals. You will not be identified in any report, publication or media communications. The findings will also be shared at the district level within the study sample to ensure that participants are able to benefit from the findings. Any new information gained during the course of the study that has clinical relevance to any research participant, or that may affect your willingness to continue taking part in the study, will be shared.

Questions
If you have questions in the future regarding the research, please contact one of the members of our team: Kizza Stevins, Survey Coordinator at IPA Uganda, Tel: 0784 108 600**.** If you have questions about your rights as a research subject or regarding any damage attributable to the research and wish to discuss this with someone not involved in the study, you may contact the Mildmay Uganda Research Ethics Committee (MUREC) or the Uganda National Council of Sciences and Technology (UNCST):

Innovations for Poverty Action (IPA) - Uganda: Innovations for Poverty Action Uganda (IPA), P.O. Box 40260, Nakawa, Tel: (0414 669 840), Website: www.povertyaction.org

Field Manager: Juliet Ajilong (0772 977 446)

Mildmay Uganda Research Ethics Committee (MUREC): P.O Box 24985, Kampala Tel: +256 312 210200, +256 392 614 022, Ext. 262 Website: www.mildmay.or.ug, Mildmay Chairperson: Dr. Christine Nabiryo (0392174236)

Uganda National Council of Sciences and Technology (UNCST): P.O Box 6884, Kampala Tel: +256 414 705 513, Website: www.unsct.go.ug

Harvard IRB: 90 Smith Street, Boston, Massachusetts 02120. +1-617-432-2157 (or 1-866-606-0573)

Sponsor: This research study is funded by the UBS Optimus Foundation, an organization that is committed to the welfare of children around the world. For more information, please visit:
https://www.ubs.com/microsites/optimus-foundation/en/home.html

Health Facility ID:_____

Protocol Title: **Evaluating the Impact of Solar Power on Maternity Facility Quality**
Description of Subject Population: Medical Officer In-Charge
Investigators: **Dr. Jessica Cohen,** Harvard School of Public Health, Boston, USA **Dr**. **Slawa Rokicki**, University College Dublin, Ireland
Funding Agency: UBS
Version/ Date: 10 May 2018; Version 4

Statement of Consent

i. I have read the content of this consent form, and agree on behalf of this facility to study participation.
ii. I have had the opportunity to ask questions and all have been answered to my satisfaction.
iii. I have been given sufficient time to consider the above information and to seek advice if I so choose.
iv. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected.
v. I understand that relevant sections of my health facility's medical records collected during the study may be looked at by authorized individuals from Innovations for Poverty Action (IPA) and the Harvard School of Public Health, and I give permission to these individuals to have access to my records.
vi. I will be given a copy of this signed consent form. By signing the consent form, I have not given up any of my legal rights.

PARTICIPANT

I consent for my facility to participate: ☐ Yes ☐ No

_____ [____]/[____]/[____]
Facility Name Date

_____ _____
Signature of Facility Representative Name of Facility Representative

ENUMERATOR

I confirm having met with the participant at the time of enrolment to answer questions about this study.

_____ _____ [____]/[____]/[____]
Signature of enumerator administering consent form Name of Enumerator Date

Health worker ID:_____

INFORMED CONSENT FORM: Health Care Worker

Protocol Title: **Evaluating the Impact of Solar Power on Maternity Facility Quality**
Description of Subject Population: Health Care Workers at Facilities
Investigators: **Dr. Jessica Cohen,** Harvard School of Public Health, Boston, USA **Dr. Slawa Rokicki**, University College Dublin, Ireland
Funding Agency: UBS
Version/ Date: 10 May 2018; Version 4

Introduction

Hello, my name is _____. I am working with Innovations for Poverty Action (IPA) Uganda, a nongovernmental organization (NGO) that studies and promotes effective solutions to global poverty problems. IPA is based in Kampala and is currently conducting a pilot in collaboration with the Harvard School of Public Health to collect information about the availability of electricity in rural health facilities, and how electricity affects health workers' ability to conduct deliveries. IPA has selected this facility to participate in this study. We are asking if you would be willing to participate in the study as you are a health care worker at this facility. Your decision to participate will not affect your job or the care anyone will receive at this facility.

About this consent form

Please listen to the reading of this form carefully. This form provides important information about agreeing to participate in the research. You have the right to take your time in making decisions about participating in this research. You may discuss your decision with others. If you have any questions about the research or any portion of this form, please ask us. If you decide to participate in this research you will be asked to sign this form. A copy of the signed form will be provided to you for your record.

What can I expect if I take part in this research?

As a participant, you may be asked to take part in the following activities:

1. **Direct observations of deliveries:** 1 or 2 data collectors with medical experience will observe you and other medical professionals at this facility as you conduct deliveries, for about 2-3 months. Each patient will also be asked for consent before observation begins; if the patient refuses to consent then the data collectors will not observe the delivery. The data collectors will silently watch the delivery and take notes. In addition, they may record some information from the patients' medical records. The data collectors will not interact with the patient. No identifiable information about either the patient or you will be written on the notes.
2. **Interview:** a data collector will conduct an interview with you that will take approximately 1 hour about your experiences and opinions about electricity failures, as well as your training, knowledge, and experience in conducting deliveries.

At the completion of the study, you will receive a small gift as a token of our appreciation for your participation.

Do I have to take part?

Participation in this study is completely voluntary. If you choose to participate, you may change your mind and leave the study at any time. If at any point during the delivery you are uncomfortable with the observation, the data collector will stop observing. Refusal to participate or stopping your participation will involve no penalty or loss of benefits to which you are otherwise entitled.

How many people will take part in this research?

About 120 health care workers will take part in this research across 20-30 health facilities.

How long will I take part in this research?
Researchers will first observe deliveries daily for roughly one month. During this time we would also conduct the interview. We will return 1-2 times to collect this data again, for a period of roughly one month each time.

What are the risks and possible discomforts?
We expect there to be very little risk in participating in this study. The presence of an observer in the delivery room may cause you slight discomfort. We will ensure that data collectors do not interfere with your work and are trained to limit any possible discomfort to you. During the interview, if any question makes you feel uncomfortable, you do not have to answer it and you can end the survey at any time. As with any research study, there is a possibility of a risk of breach of confidentiality, but all efforts will be made to protect your privacy.

Are there any benefits from being in this research study?
There are no direct benefits from being in this study, but we hope that the results of our work can benefit your community and your profession by generating important information on the role of adequate electricity in maternity care quality.

What will I have to pay for if I participate in this research?
It will not cost you anything to participate in this research.

Can my taking part in the research end early?
You may decide not to continue in the research at any time without it being held against you. The person in charge of the research can remove you from the research at any time without your approval for any reason**.**

Confidentiality
Neither your supervisor nor any staff at this facility will know what you have said in the interview or have access to any research data that is being collected. The names of the providers, staff and managers at this facility will not be reported or connected to any of the findings that result from this study. Any information that is shared (e.g., for purposes of quality improvement) will not identify individual providers or staff, except any information which IPA is ordered to disclose by court or tribunal of competent jurisdiction or otherwise required or permitted to disclose by law as amended from time to time. Until data collection is finished the data will be kept in a password protected file and all paper surveys will be kept in locked cabinets that only researchers have access to. Data collected from this study may be seen by the Harvard Institutional Review Board (IRB) and Mildmay Uganda Research Ethics Committee (MUREC), which will oversee the research.

Ethical aspects of the study
This research has been reviewed and approved by the ethics committee of MUREC and the Harvard IRB. They will also approve any changes made to the study procedures.

What will happen to the results of the research study?
The results of this study will be written up in a report which may be shared with Uganda policymakers and circulated with study districts. We may also publish findings from our research in academic journals. You will not be identified in any report, publication or media communications. The findings will also be shared at the district level within the study sample to ensure that participants are able to benefit from the findings. Any new information gained during the course of the study that has clinical relevance to any research participant, or that may affect your willingness to continue taking part in the study, will be shared.

Questions
If you have questions in the future regarding the research, please contact one of the members of IPA. If you have questions about your rights as a research subject or regarding any damage attributable to the research and wish to discuss this with someone not involved in the study, you may contact the Mildmay Uganda Research Ethics Committee (MUREC) or the Uganda National Council of Sciences and Technology (UNCST):

Health worker ID:_____

Innovations for Poverty Action (IPA) - Uganda: Innovations for Poverty Action Uganda (IPA), P.O. Box 40260, Nakawa, Tel: (0414 669 840), Website: www.povertyaction.org Field Manager: Juliet Ajilong (0772 977 446)

Mildmay Uganda Research Ethics Committee (MUREC): P.O Box 24985, Kampala Tel: +256 312 210200, +256 392 614 022, Ext. 262 Website: www.mildmay.or.ug, Mildmay Chairperson: Dr. Christine Nabiryo (0392174236)

Uganda National Council of Sciences and Technology (UNCST): P.O Box 6884, Kampala Tel: +256 414 705 513, Website: www.unsct.go.ug

Harvard IRB: 90 Smith Street, Boston, Massachusetts 02120. +1-617-432-2157 (or toll-free: 1-866-606-0573)

Sponsor: This research study is funded by the UBS Optimus Foundation, an organization that is committed to the welfare of children around the world. For more information, please visit: https://www.ubs.com/microsites/optimus-foundation/en/home.html

Protocol Title: **Evaluating the Impact of Solar Power on Maternity Facility Quality**
Description of Subject Population: Health Care Workers at Facilities
Investigators: **Dr. Jessica Cohen,** Harvard School of Public Health, Boston, USA **Dr. Slawa Rokicki**, University College Dublin, Ireland
Funding Agency: UBS
Version/ Date: 10 May 2018; Version 4

Statement of Consent

i. I have read the content of this consent form, and agree to participate in this study.
ii. I have had the opportunity to ask questions and all have been answered to my satisfaction.
iii. I have been given sufficient time to consider the above information and to seek advice if I so choose.
iv. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected.
v. I will be given a copy of this signed consent form. By signing the consent form, I have not given up any of my legal rights.

PARTICIPANT

I consent to participate: ☐ Yes ☐ No

Signature of Participant	Name of Participant	[____]/[____]/[____] Date

ENUMERATOR

I confirm having met with the participant at the time of enrolment to answer questions about this study.

Signature of Enumerator administering consent form	Name of Enumerator	[____]/[____]/[____] Date