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Ethics & ICT4D: The Application of the Ethics Canvas to an mHealth Project in Sierra Leone

Dr P.J. Wall
ADAPT Centre
School of Computer Science
Trinity College Dublin

Engaging Content
Engaging People

Ethics & ICT4D

Increasing engagement with ethics and the "ethical turn" in ICT4D

Ethics, rights, power, social justice, data justice

Causal links between "ICT" and "D"

Ethics & ICT4D

These issues are likely to become more important with the increasing power of technology

Artificial intelligence (AI4D)

Ethics & ICT4D

The conversation has shifted from "How do we do this …"

to

"Should we be doing this at all !!!"

Ethics & ICT4D

This increasing engagement with ethics in ICT4D requires a more practical method of engaging with ethical issues

We need a means of highlighting and resolving any ethical issues that may arise

The Ethics Canvas

The ethics canvas was developed by ADAPT in TCD

Designed to structure ideas about the ethical implications of any project

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Ethics Canvas

Project Title:

Date:

Ethics Canvas v1.8 - ethicscanvas.org © ADAPT Centre & Trinity College Dublin & Dublin City University, 2017.

Individuals affected

Identify the types or categories of individuals affected by the product or service, such as men/women, user/non- user, age-category, etc.

1

Behaviour

Discuss problematic changes to individual behaviour that may be prompted by the application e.g. differences in habits, time-schedules, choice of activities, people behaving more individualistic or collectivist, people behaving more or less materialistic.

3

Relations

Discuss problematic differences in individual behaviour such as differences in habits, time-schedules, choice of activities, etc

4

What can we do?

Select the four most important Ethical impacts you discussed. Identify ways of solving these Impacts by changing your project's product/service design, organisation.Or by providing recommendations for its use or spelling out more clearly to users the values driving the design

9

Worldviews

Discuss how the general perception of somebody's role in society can be affected by the project,

5

Group Conflicts

Discuss the impact on the relationships between the groups identified, e.g. employers and unions

6

Groups affected

Identify the collectives or communities, e.g. groups or organisations, that can be affected by your product or service, such as environmental and religious groups, unions, professional bodies, competing companies and government agencies, considering any interest they might have in the effects of the product or service.

2

Product or Service Failure

Discuss the potential negative impact of your product or service failing to operate as intended,eg technical or human error, financial failure/ receivership/acquisition, security breach, data loss, etc.

7

Problematic Use of Resources

Discuss possible negative impacts of the consumption of resources of your project, e.g. climate impacts, privacy impacts, employment impacts etc.

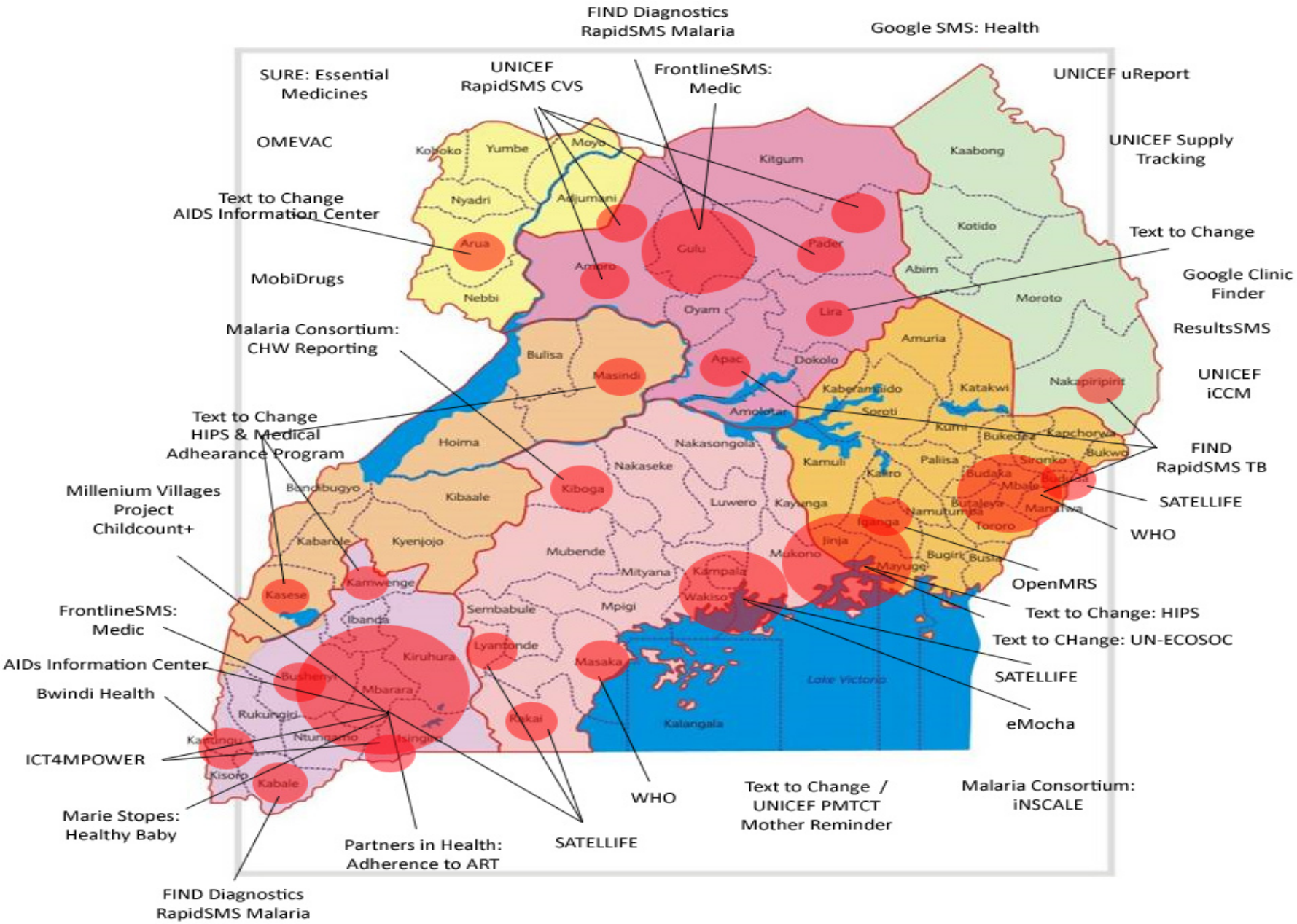
8

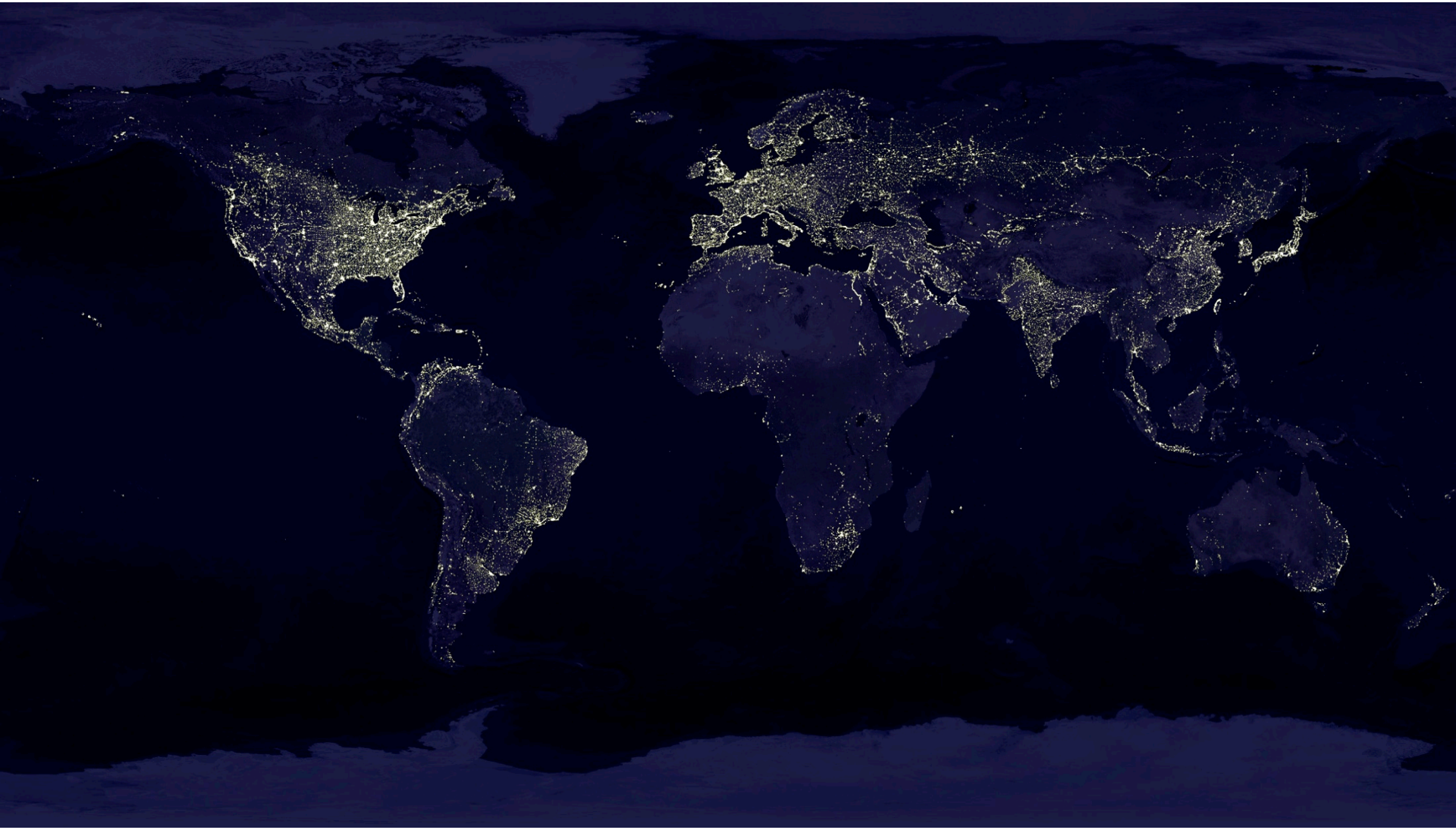
The Ethics Canvas is adapted from Alex Osterwalder's Business Model Canvas. The Business Model Canvas is designed by: Business Model Foundry AG. This work is licensed under the Creative Commons Attribution-Share Alike 3.0 unported license. To view a copy of this license, visit https://creativecommons.org/licenses/by-sa/3.0/. To view the original Business Model Canvas, visit https://strategyzer.com/canvas.

Ethics Canvas

Exercise

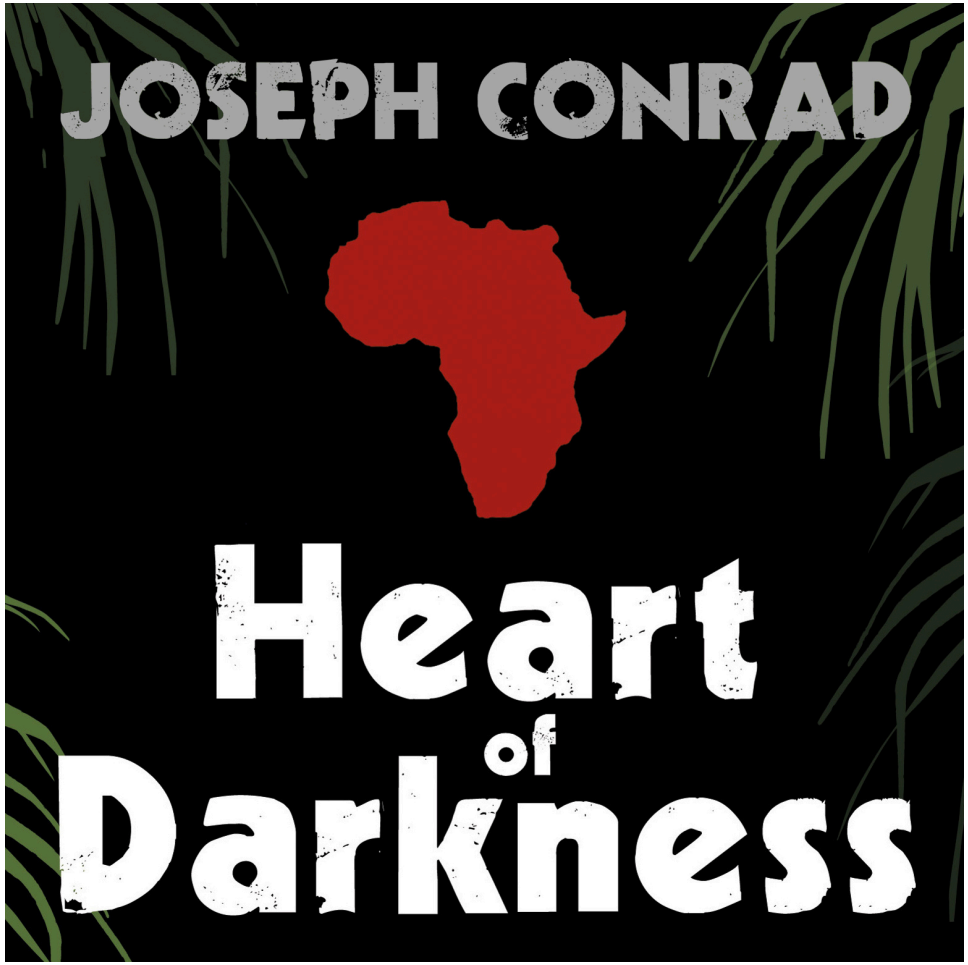
Use the ethics canvas to note ethical issues as we talk about ICT4D and the Sierra Leone mHealth


FIND Diagnostics
RapidSMS Malaria
Google SMS: Health
SURE: Essential
Medicines
UNICEF
RapidSMS CVS
FrontlineSMS:
Medic
UNICEF uReport
OMEVAC
UNICEF Supply
Tracking
Text to Change
AIDS Information Center
Text to Change
MobiDrugs
Google Clinic
Finder
Malaria Consortium:
CHW Reporting
ResultsSMS
UNICEF
iCCM
Text to Change
HIPS & Medical
Adhearance Program
FIND
RapidSMS TB
Millenium Villages
Project
Childcount+
SATELLIFE
WHO
OpenMRS
Text to Change: HIPS
FrontlineSMS:
Medic
Text to CHange: UN-ECOSOC
AIDs Information Center
SATELLIFE
Bwindi Health
eMocha
ICT4MPOWER
Text to Change /
UNICEF PMTCT
Mother Reminder
Malaria Consortium:
iNSCALE
WHO
Marie Stopes:
Healthy Baby
Partners in Health:
Adherence to ART
SATELLIFE
FIND Diagnostics
RapidSMS Malaria
Kotido
Yumbe
Moyo
Kitgum
Kaabong
Nyadri
Adjumani
Kotido
Arua
Gulu
Pader
Amuru
Abim
Nebbi
Moroto
Oyam
Lira
Amuria
Bulisa
Masindi
Apac
Dokolo
Nakapiripirit
Kaberamaido
Katakwi
Amolatar
Soroti
Kumi
Bukedea
Kapchorwa
Bukwo
Hoima
Nakasongola
Kamuli
Palisa
Sironko
Nakaseke
Kairo
Budaka
Mbale
Bandibugyo
Kibaale
Kiboga
Luwero
Kayunga
Butaleja
Namutumba
Manafwa
Tororo
Iganga
Kabarole
Kyenjojo
Jinja
Mubende
Mukono
Bugiri
Busia
Mityana
Mayuge
Kampala
Kasese
Kamwenge
Wakiso
Sembabule
Mpigi
Ibanda
Lyantonde
Kiruhura
Masaka
Bushenyi
Mbarara
Lake Victoria
Rukungiri
Rakai
Kalangala
Kanungu
Ntungamo
Kisoro
Kabale



"Knowledge is like light. Weightless and intangible, it can easily travel the world, enlightening the lives of people everywhere. Yet billions of people still live in the darkness of poverty – unnecessarily ... "

(Gianluca Miscione, 2007)



”… I was going to take charge of a twopenny-half-penny river-steamboat with a penny whistle attached! It appeared, however, I was also one of the Workers, with a capital—you know. Something like an **emissary of light**, something like a lower sort of apostle. There had been a lot of such rot let loose in print and talk just about that time, and the excellent woman [Marlow's aunt], living right in the rush of all that humbug, got carried off her feet. She talked about **'weaning those ignorant millions from their horrid ways,'** till, upon my word, she made me quite uncomfortable."

Sierra Leone

Sierra Leone has a land area slightly greater than the Leinster, Munster and Connaught combined (or approximately half the size of England) with a population of 7.5 million

Civil war between 1991 and 2002 - estimated death toll 50,000-75,000

Africa's biggest cholera outbreak in 2012 with 22,885 reported cases and 298 confirmed deaths

Ebola virus outbreak between May 2014 and March 2016 - death toll 3,956

Glasgow
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Isle of Man
Liverpool
Sheffield
Ireland
Dublin
Birmingham
Bristol
London

mHealth in Sierra Leone

In 2010, the Ministry of Health and Sanitation in Sierra Leone introduced free health care for pregnant women, breastfeeding mothers, and children under 5 years of age

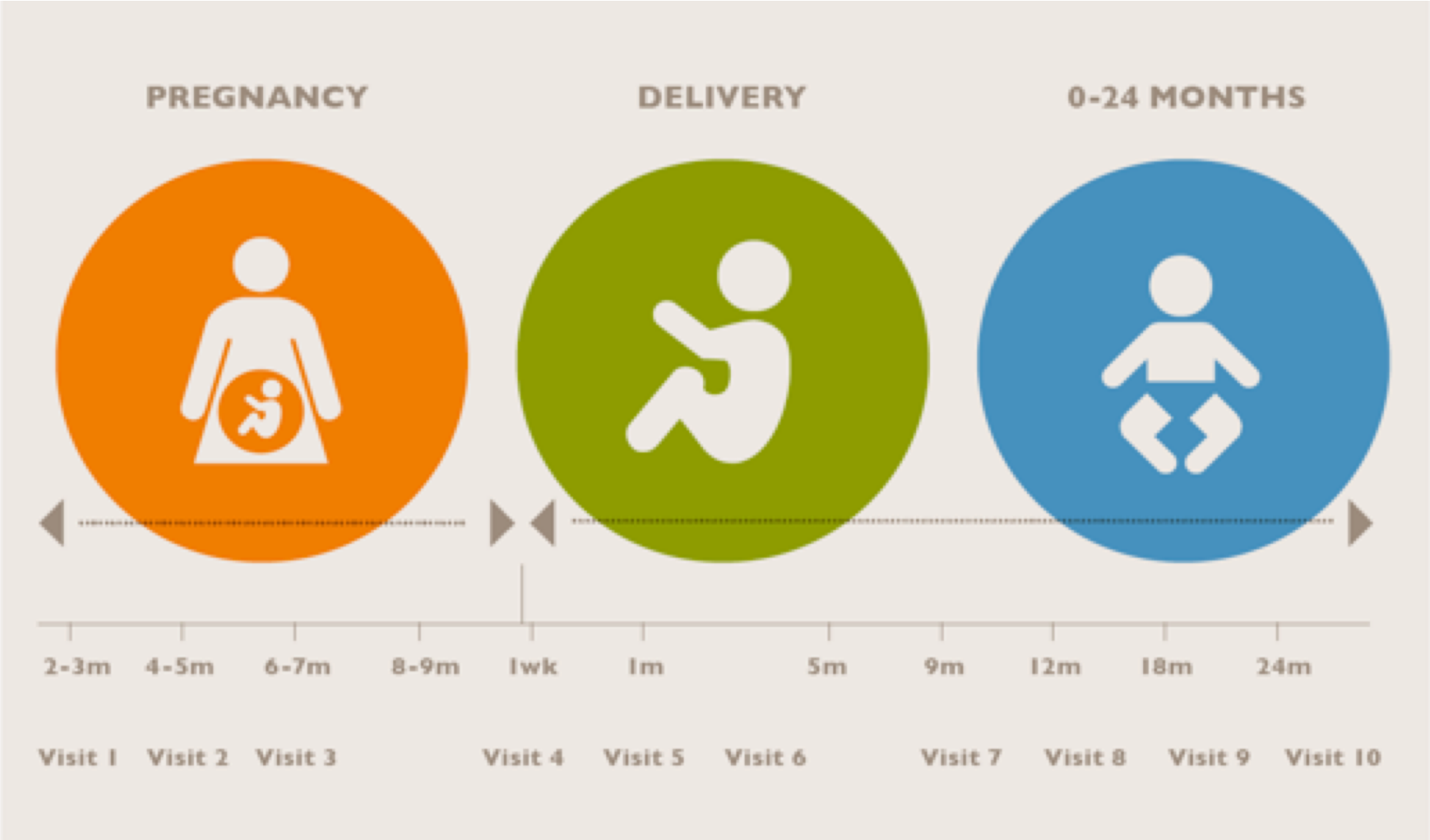
October 2013 a pilot mHealth project launched in Bonthe District

Nokia C2-01 phones, solar charger and MOTECH app given to 217 CHWs

Plans to scale this project to all CHWs in Bonthe in Q2 2014, and then to all 24 WV ADPs in Sierra Leone in Q4 2014

7/11 ttc

Targets	Pregnant Women: 9 months	Children: 0-24 months
Core Issues	1. Adequate Diet 2. Iron/Foliate Supplements 3. Tetanus Toxoid Immunization 4. Malaria Prevention and Intermittent Preventive Treatment 5. Healthy Timing and Spacing of Delivery and Birth Preparedness 6. De-worming 7. Facilitate access to Maternal Health Service: ANC PNC, Skilled Birth Attendance, PMTCT, HIV/TB/STI Screening	1. Appropriate Breastfeeding 2. Essential Newborn Care 3. Hand Washing with soap 4. Appropriate Complementary Feeding (6- 24 months) 5. Adequate Iron 6. Vitamin A Supplementation 7. Oral Re-Hydration Therapy/Zinc 8. Prevention/Care Seeking: Malaria 9. Full Immunization for Age 10. Prevention/Care Seeking: ARI 11. De-worming (+12 months)


PREGNANCY
DELIVERY
0-24 MONTHS
2-3m
4-5m
6-7m
8-9m
1wk
1m
5m
9m
12m
18m
24m
Visit 1
Visit 2
Visit 3
Visit 4
Visit 5
Visit 6
Visit 7
Visit 8
Visit 9
Visit 10

Caregiver Kits
URGENT

TAKE YOUR CHILD
FOR MARKLATE
MINISTRY OF HEALTH AND SANITATION
2014 DISTRIBUTION OF
INSECTICIDE-TREATED BED NETS
DON'T WAIT...VACCINATE NOW!!
unicef

SIERRA RUT
Saving Lives in Communities Every Day
unicef for every child

NDC
TOP GLOVE
Lifetouch
Safety Box

mHealth in Sierra Leone

October 2013 a pilot mHealth project launched in Bonthe District

Nokia C2-01 phones, solar charger and MOTECH app given to 217 CHWs

TRONIC®
100% 75% 50% 25%
C2
NOKIA
1 qo
2 abc
def 3
4 ghi
5 jkl
mno 6
7 pqrs
8 tuv
wxyz 9
* +
0
#

mHealth During Ebola

Ebola crisis in Sierra Leone May 2014 - March 2016

This impacted the mHealth project severely, e.g. the project manager was redeployed, and the digital health M&E technical specialist left the project

Nokia ASHA phones given to CHWs as part of an Ebola “community mobilization” project

mHealth2 post-Ebola

Samsung J2 mobile phones, cases, power bank given to 300 CHWs in August 2018

Plans to scale the project across Sierra Leone and 4 other countries (Kenya, Tanzania, Uganda and Mauritania) in place

Galaxy J1 Ace
Galaxy J1 Ace
Galaxy J1 Ace

SURGE PROTECTOR
MVSL - TBL 014

xy
mm (4.7")
sAMOLED
im & Easy to Grip
Fast Processor
Quad Core
×4
ES-5B

SAMSUNG
Galaxy
J2

MESS AND PEE' TELE CENTR
DO YOUR LOCAL AND INTERNATIONAL CALLS ON
airtel
top up available here
airtel

Mobile phone "charging station" in Mattru Jong, Sierra Leone

africell
africell
africell
sold
HERE

117/FREE
079565064
079565032
079565062
079565068

CHO
CONSULTATION
ROOM
Community
Sierra Leone

Ethical Issues with this Research

1.

2.

3.

4.

5.

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wallp2@tcd.ie
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