Belinda Chiang, Jonathan Leland, Ying Sun, Dan Wiesenthal

# ENDESha Medical Hotline

#### Diarrheal Deaths in Kibera

- Leading killer of children <5</p>
- Extremely treatable
  - Oral Rehydration Therapy
  - Immediate clinic/hospital treatment for severe cases
- Barriers
  - Perception barrier to ORS use
  - Self-medication



#### Joyce Achieng

- 24-year-old mother
- Daughter Topista
  - 2 years old
  - Acute diarrhea
- Clinics are closed
- She needs to help her daughter and feel like she is taking real medical action when she does.
- In a world where there are no trustworthy sources of personalized medical advice available to her.



Disclaimer: Joyce is fictional & serves as a representation.

## ENdesha Medical Hotline

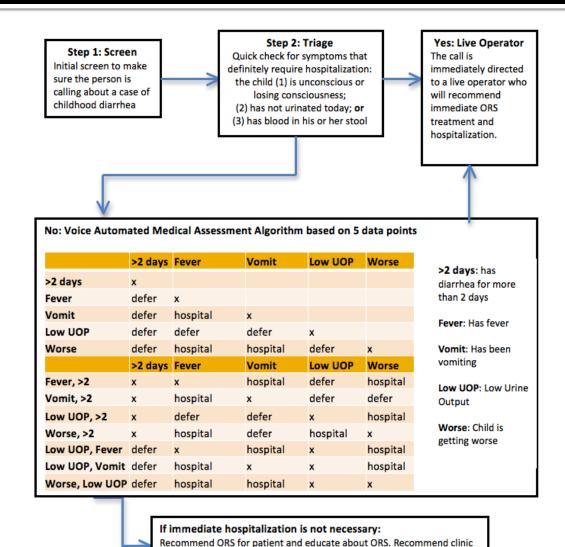
- 24-7 free personalized hotline for treating childhood diarrheal disease
- ORS Distribution
- Assessment
- 3. Actionable Medical Counsel
- 4. Follow-Up



#### **ENDesha Hotline Video**

http://youtu.be/sageU5AG45E

#### **ENDesha Assesment Algorithm**



visit when the clinic opens.

#### Why the ENDesha Hotline?

- Widespread cellphone access
- 24-7 assistance
- ORS distribution
- Free, immediate personalized care

 Educate about diarrheal disease and change perceptions of ORS

## Viability: patient uptake and compliance

- Will patients use the hotline?
  - 24/7 rape hotline widely known and used in Kibera
  - 24/7 fistula hotline for women in Kenya
  - Medical hotlines operational in developing countries
    - Healthline (Bangladesh), TeleDoc (Pakistan), MedicallHome (Mexico)
- Will patients follow recommendations of the hotline?
  - ORS distribution lowers barrier to action
  - Personalized medical counsel
  - Follow-up communication

#### Viability: partnership with the CDC

- CDC's International Emerging Infections Program
  - Understand disease burden of infectious disease syndromes
  - Free healthcare for surveillance population at Tabitha Clinic
- ENDesha addresses the lack of medical services at night & on weekends
- Mission alignment with CDC's IEIP
  - ENDesha rich resource for data collection
  - ENDesha doesn't replace role of Tabitha; complements
    - Saves lives
    - Refers to Tabitha Clinic for treatment

#### Viability: operating costs

\$18,000		Total annual operating cost
+	\$2,000	Overhead: transportation, IT, food, etc
		flyer/stickers with hotline # per hh
		2 SMS ads (1 KSh each),
		3 ORS sachets (\$0.06 each),
+	\$3,000	Marketing:
+	\$5,000	Half-time on-call nurse/physician
+	\$5,000	Half-time program manager
	\$3,000	Total annual communication cost
X 	4,500	Number of households in catchment area
X	3	Number of calls per household per year
	18 Ksh	Communication cost per use (5 min voice & 3 SMS)

#### **Moving Forward**

- User prototype testing
  - Adoption: mothers will make the initial call
  - Compliance: mothers will follow directions over the phone
  - Frequency, timing, medium of the exchange
- Medical viability
  - Medical algorithm
  - Budget and resources

### Thank you!