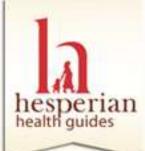


Empowering
Community
Health Workers
through mobile
applications

Geneva Foundation mHealth Course March 18, 2013





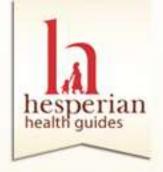
Mobile App: Safe Pregnancy and Birth



Carrent Varnous *** * * 10 Emergs 0

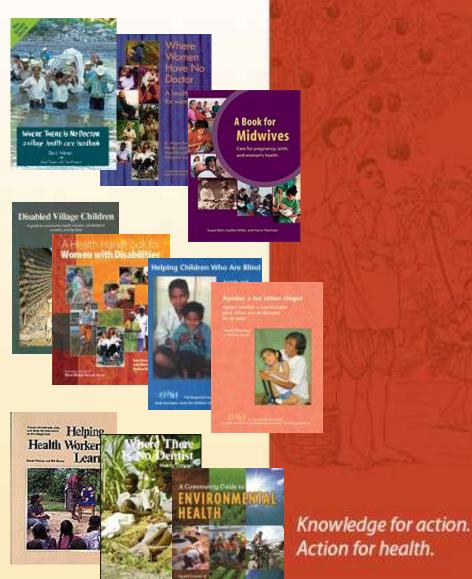
Web demo:

www.hesperian.org/mobileapp/



Hesperian Books

- Where There Is No Doctor
- Where Women Have No Doctor
- A Book for Midwives
- Disabled Village Children
- A Health Handbook for Women with Disabilities
- Helping Children Who Are Blind
- Helping Children Who are Deaf
- Helping Health Workers Learn
- Where There Is No Dentist
- A Community Guide to Environmental Health





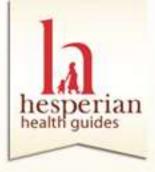
REACHING THE WORLD

Over 80 languages, 221 countries: Hesperian's books reach millions.

Albanian · Amharic · Arabic · Aymara · Azeri · Bahasa · Bengali · Bicol · Burmese Cebuano · Chichewa · Chinese · Chitimbuka · Croatian · Dari · English · Farsi Filipino · French · Fulfulde · German · Gujarati · Haitian Creole · Hiligaynon · Hindi Iban · Ibatan · Ilocano · Ilongo · Indonesian · Italian · Japanese · Jinghpaw · Kannada Karakalpak · Karen · Kazakh · Khmer · Kirundi · Kisit · Korean · Kwangali · Kyrgyz Lao · Luganda · Macedonian · Malagasy · Malayalam · Malaysian · Maranao · Marathi Miskito · Mongolian · Mortlockese · Amharic · Naga · Oriya · Oshivambo · Pashto Pidgin · Portuguese · Quechua · Romanian · Russian · Samoan · Sepedi · Serbian Sgaw Karen · Shan · Shuar · Sindhi · Sinhala · Somali · Sotho · Spanish · Swahili Tamil · Telugu · Tetum · Thai · Tibetan · Tigre · Tigrina · Tsonga · Tswana · Turkish Tzotzil · Urdu · Uzbek · Vietnamese · Wolof · Zulu

"[Where There Is
No Doctor] is an
indispensable
resource...This book
has been, quite
literally, a lifesaver for
the poor – even where
there is a doctor."

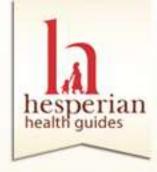
 Dr. Paul Farmer Founder,
 Partners In Health



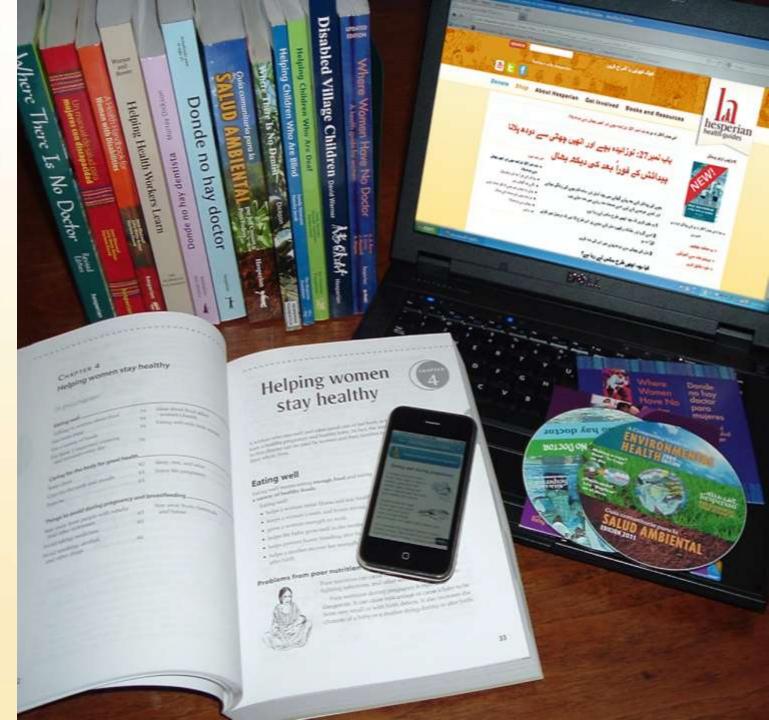
How we make our health materials empowering

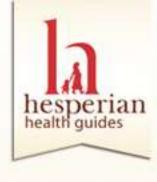


- 1. Start from people's own experience
- 2. Offer practical solutions
- 3. Find opportunities for compassion and validation
- Encourage participation and action in ways that do not depend on literacy, and that encourage critical thinking



Going digital





Technical partner



The UnaMesa Association is a public charity dedicated to improving healthcare, education, and social services through innovations in technology and tools for sharing knowledge.

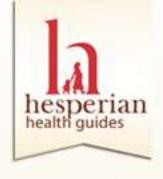


Mobile Team

- Content person
- Project manager
- 2 programmers
- User interface/ Design

Field tested with ~20 reviewers

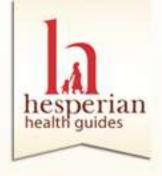




Hesperian's mHealth perspective

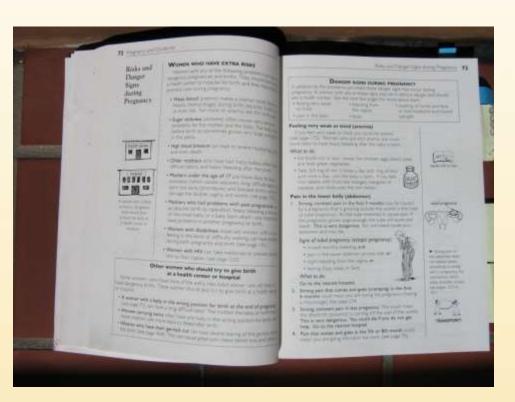


Supporting and empowering Community Health Workers with accessible and trusted health information



Challenges of Moving from Print to a Small Screen

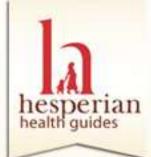
How do we go from this...



to this?



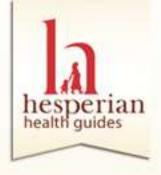




New Opportunities







App
Development
Process

Draft content (in PowerPoint)

Advisors review content

Revisions to content

Build the app

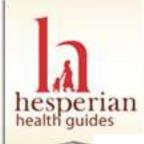
Field test #1 (navigation and design)

Revisions to navigation and design

Field test #2 (clarity of language)

Final revisions

Launch



"Chunking" the content

Danger Signs during Pregnancy and Birth

PART 1: Danger Signs during last weeks of Pregnancy and during Labor and Birth:

- 1. Waters break but labor does not start
- 2. Green or brown waters
- 3. Baby is lying sideways (arm comes out first)
- Heavy bleeding: before labor begins, before the baby is born, or too much bleeding after birth
- 5. Too long labor
- 6. Signs of infection: Fever, chills, or a bad smell from her vagina
- Seizures or "fits"
- Pre-eclampsia: danger of fits: swollen face, hands and feet; high blood pressure; blurred vision; severe headaches

#1. The Bag of Waters Breaks Early, but labor does not start within 12 hours. [pic chunked 1: from poster—water breaking]

Most women will give birth within 24 hours after their waters break. If labor has not started, the woman and her baby could get a serious infection.

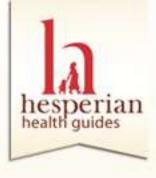
#1.2 What to do? if the Bag of Waters has broken and labor has not started within 12 hours

- The mother must not put anything in her vagina. She should not have sex. This could cause an infection.
- If she has a fever or there is a bad smell in the vagina, an infection is starting. She needs intravenous (IV) antibiotics. Even if labor starts, the woman and her baby could die. Go to a health center or hospital.
- Try to get labor started. The woman should swallow 2 tablespoons of castor oil, roll her nipples, or have someone suck them for a while every few hours until labor starts. There may also be special local teas that women use to start labor. If labor still does not start after a few more hours, she should go to a health center or hospital.

Do not use injections to start labor. They can cause contractions that are so strong that they can kill the woman or the baby.

(see #9.2)





Sketching out presentation

#3.2 Check the baby's position during the last months of pregnancy

During pregnancy, it is common for a baby to change position several times in the womb. By the end of the pregnancy, the baby should be lying in the womb with its head down. This is the best position for birth. To make sure the baby is head down, feel for the head like this





If baby is sideways during childbirth!

How-to check the baby's position

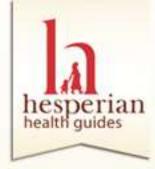
Exercise for mother to change baby's position



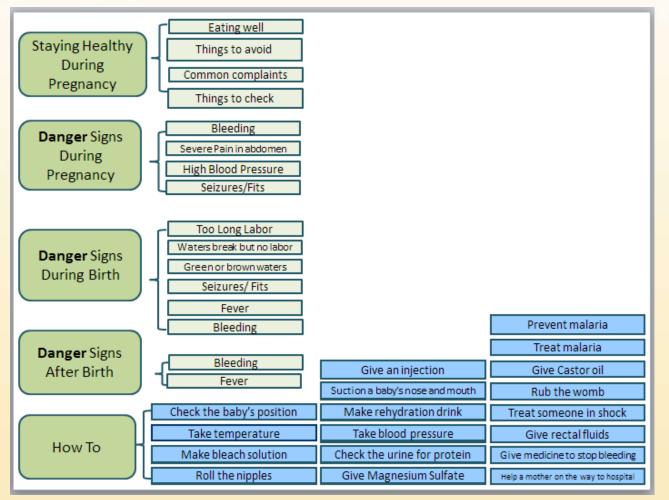
Other Signs to watch for during Pregnancy

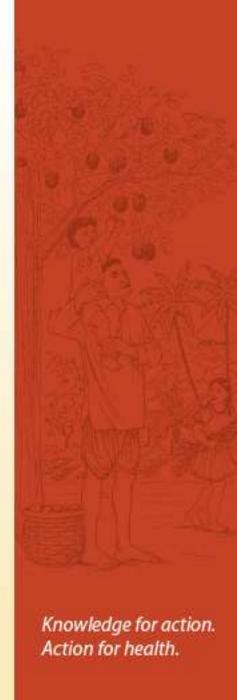


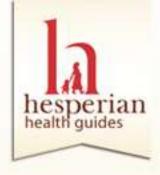




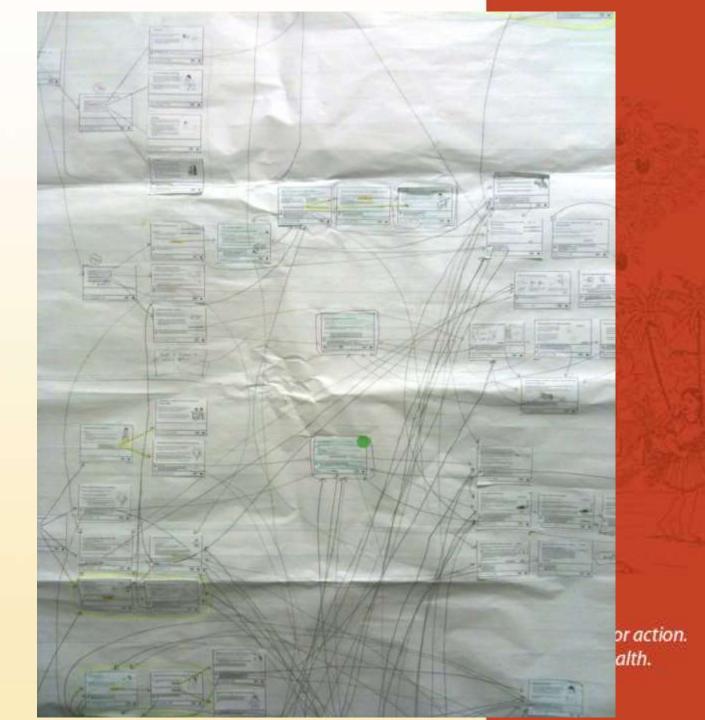
Establishing the structure

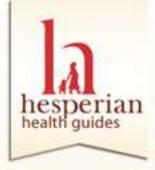






Mapping out the connections

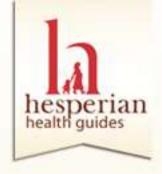




User Interface and Design

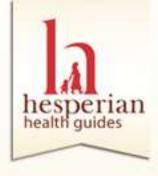






New Challenges: Icons



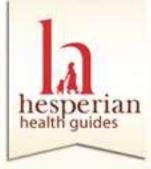




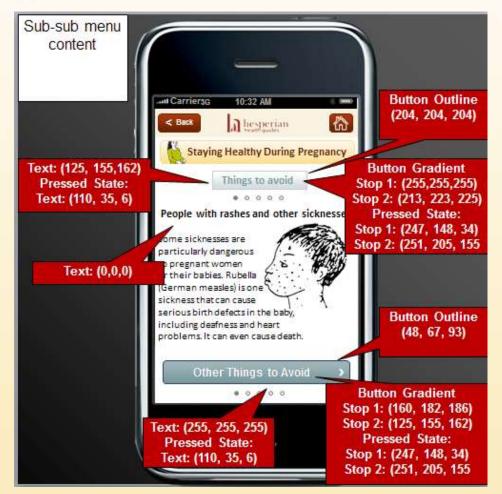


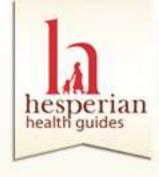






Design specs



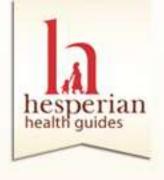


Safe Pregnancy and Birth

Over 60,000 downloads from 172 countries

Spanish version launching any day now!



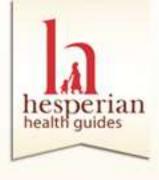


Winner of Ashoka Changemakers and Intel competition



Selected as one of the worlds most innovative solutions that equip girls and women with new digital technologies

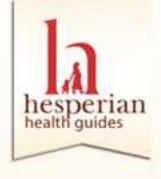
Chosen as 1 of 3 winners from 292 submissions from 54 countries.



Current Challenges

- Getting good user data
 - Analytics don't give us a good picture of how people are actually using the app





Future plans

- Translations
- Non-smartphones
- Reach our target audience
- Additional content/topics

