Mobile Forms for Data Collection

Megan Noel

SC4CCM Project

IAPHL
International Association of
Public Health Logisticians

JSI
John Snow, Inc.

What logistics data can the tool provide to program implementers and decision makers?

- Physical counts
- Stockout rates
- Stock Status
- Order Fill Rates
- Lead times

- Reporting, training, coverage
- Any system level
- *M&E data*

Who is trained to use the technology?

- Intuitive design interface

- Data collectors need basic training – SC4CCM held 7-8 day training on Magpi and SC, including 2-day pre-test

- Simple to enter, edit, save and send data using forms

What kinds of hardware are needed/can be used?

- *Design*: Computer with internet (high speed preferred), and mobile device to verify functions work correctly

- *Data collection*: any of 47 models of mobile device (brands include Nokia, Samsung, SonyEricsson, Apple, Android)

- Nokia e71, used by SC4CCM, costs around $120

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What software is used and approximately what does it cost?

- The application is called Magpi, available for **free** download

- Additional costs for greater storage space, special features

- Data can be loaded and sent to the online database by cellular, wifi, or cable connection to the mobile device

Data Security

Phone

- Password protected on all devices
- Encryption
- All Blackberry, iPhone/iPad
- Some Android (not all devices)

Transmission/Uploading

- Encrypted to 256 bit strong standard

Online

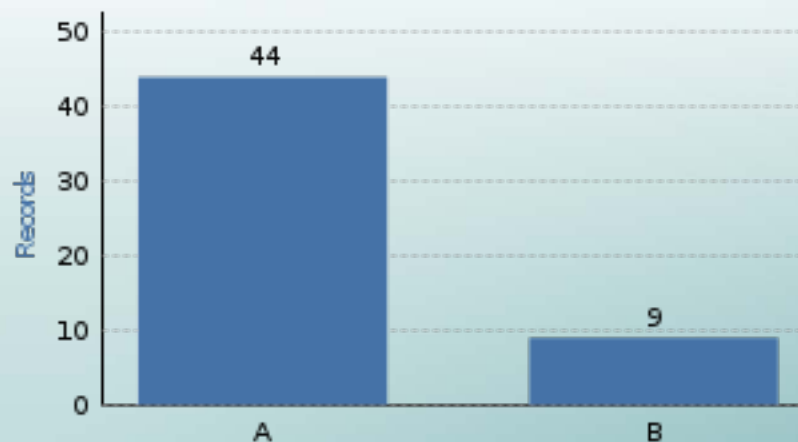- Password protected, encrypted, backed up 4x daily (including to remote site), monitored 24/7/365

Data Outputs

	A	B	C	D	E	F	G	H
1	**Last Submitter**	**Start Record Date**	**End Record Date**	**Last Submission Date**	**region**	**Arm**	**WoredaName**	**HealthCenter**
2	mnoel@jsi.com	2012-07-11 11:33:33	2012-07-11 11:33:33	2012-07-11 11:33:33	TI	intensive	Adwa	eshir
3	mnoel@jsi.com	2012-07-12 17:13:13	2012-07-12 17:13:13	2012-07-12 17:13:13	TI	non-intensive	Asiged Tsimbla	maihanse
4	mnoel@jsi.com	2012-07-12 14:59:59	2012-07-12 14:59:59	2012-07-12 14:59:59	TI	non-intensive	Asiged Tsimbla	kisad gaba
5	mnoel@jsi.com	2012-07-13 10:38:38	2012-07-13 10:38:38	2012-07-13 10:38:38	TI	non-intensive	Asiged Tsimbla	edaga hibret
6	mnoel@jsi.com	2012-07-13 12:09:09	2012-07-13 12:09:09	2012-07-13 12:09:09	TI	non-intensive	Asiged Tsimbla	endabaguna
7	mnoel@jsi.com	2012-07-12 11:36:36	2012-07-12 11:36:36	2012-07-12 11:36:36	TI	non-intensive	Asiged Tsimbla	debremariam
8	mnoel@jsi.com	2012-07-11 17:22:22	2012-07-11 17:22:22	2012-07-11 17:22:22	TI	non-intensive	Asiged Tsimbla	adi gebru
9	mnoel@jsi.com	2012-07-10 14:41:41	2012-07-10 14:41:41	2012-07-10 14:41:41	TI	intensive	Adwa	yeha
10	mnoel@jsi.com	2012-07-10 10:10:08	2012-07-10 10:10:08	2012-07-10 10:10:08	TI	intensive	Adwa	wedi keshi
11	mnoel@jsi.com	2012-07-09 16:10:10	2012-07-09 16:10:10	2012-07-09 16:10:10	TI	intensive	Adwa	rahiya
12	mnoel@jsi.com	2012-07-10 16:26:26	2012-07-10 16:26:26	2012-07-10 16:26:26	TI	intensive	Adwa	gendebta
13	mnoel@jsi.com	2012-07-10 12:22:22	2012-07-10 12:22:22	2012-07-10 12:22:22	TI	intensive	Adwa	bete yohanis
14	mnoel@jsi.com	2012-05-15 11:04:04	2012-05-15 11:04:04	2012-05-15 11:04:04	AM	intensive	Mecha	merawi
15	mnoel@jsi.com	2012-05-13 10:00:09	2012-05-13 10:00:09	2012-05-13 10:00:09	AM	intensive	Yilmana Densa	enegadi
16	mnoel@jsi.com	2012-05-22 16:16:16	2012-05-22 16:16:16	2012-05-22 16:16:16	AM	non-intensive	Tenta	fito
17	mnoel@jsi.com	2012-05-25 09:48:48	2012-05-25 09:48:48	2012-05-25 09:48:48	AM	non-intensive	Tenta	billa
18	mnoel@jsi.com	2012-05-23 09:49:49	2012-05-23 09:49:49	2012-05-23 09:49:49	AM	non-intensive	Tenta	ajbar
19	mnoel@jsi.com	2012-05-24 15:01:01	2012-05-24 15:01:01	2012-05-24 15:01:01	AM	non-intensive	Mekdela	gogos
20	mnoel@jsi.com	2012-05-24 11:33:33	2012-05-24 11:33:33	2012-05-24 11:33:33	AM	non-intensive	Mekdela	debrezeit
21	mnoel@jsi.com	2012-05-26 10:01:03	2012-05-26 10:01:03	2012-05-26 10:01:03	AM	non-intensive	Kalu	ketetiya
22	mnoel@jsi.com	2012-05-26 15:51:02	2012-05-26 15:51:02	2012-05-26 15:51:02	AM	non-intensive	Kalu	degan
23	mnoel@jsi.com	2012-05-26 14:42:42	2012-05-26 14:42:42	2012-05-26 14:42:42	AM	non-intensive	Kalu	endode

Basic Analysis

Is the stock card available for cotrimoxazole 120mg tabs?

Label	Name	Code	Value	%
A	Yes	1	44	59.5
B	No	0	9	12.2
		Total	53	71.7

What is the physical count (usable stock only) of cotrimoxazole 480mg tabs today?

Measure	Value
Mean	89742.2
Maximum	816400.0
Minimum	0.0

Advantages

- Easy to design data collection tools
- Flexible to accept many kinds of data – open text, bivariate, multiple response, coded - numeric or text
- Multiple ways to transmit data to site
- Relatively low cost, especially formatted text option
- Best for short monitoring reports

Limitations

- Limited ability to perform calculations within the program – do this after data are collected, ex.OFR, stock status
- Smart phones can be prohibitively expensive for community and low resource settings
- Heavy front end work (design and training) required for larger data collection activities

Programs:

- Available programs using ODK (Open Data Kit) platforms:
  - iFormBuilder, FormHub, ODK Collect, KoBo Toolbox

- Proprietary software:
  - Magpi, CommCare

*All require some programming skills **except Magpi**

Thank you!