Improving information for better health – HMIS Project
MSF OCBA

HMIS OCBA Team
VIII International Workshop on ehealth in Emerging Economies – IWEEE 2015 Sep 26
Las Palmas
Presenter: María José Sagrado
MSF OCBA HMIS Medical data Analyst
Mariajose.sagrado@barcelona.msf.org
What is MSF?
MSF stands for Médecins Sans Frontières (Doctors without Borders), an international medical humanitarian organisation providing care to populations in distress, regardless of race, religion or political beliefs.
In operation since 1971. We have been providing medical humanitarian care for over 40 years. Currently, we have nearly 400 projects.

WE WORK IN 64 COUNTRIES*


Place names and mapping boundaries on this map do not reflect any position by MSF on the legal status of countries and territories.

Sources: MSF International Activity Report 2014
MSF

When do we intervene?

MSF intervenes in response to a sudden deterioration in the medical condition of populations affected by humanitarian crises that threaten their survival or health, especially for those who do not receive assistance.
Patients admitted to the Bangui Community Hospital during the escalation of violence in the Central African capital at the end of 2013 and early 2104. Most of them suffered gunshot wounds to their legs.  

Central African Republic, 2014 © Juan Carlos Tomasi
Victims of endemic and epidemic diseases. Activities aimed at reducing deaths from cholera, measles, haemorrhagic fevers, HIV/AIDS, malaria, TB, Chagas disease, kala azar, sleeping sickness, malnutrition, etc.

MSF medical staff do the rounds in the high-risk zone of the Ebola treatment centre in Kailahun during the 2014 epidemic. Sierra Leone, 2014 © Sylvain Cherkaoui / Cosmos
Presence

- 64 countries
- 400 projects

Resources

- Income: 1,280 M€
- Expenses: 1,066 M€
  - 80% Field projects
- Staff: 31,052
  - 85% National

Main Health Services

- Outpatient Consultations: 8,250,700
- Malaria Cases Treated: 2,114,900
- Surgical Procedures: 81,700
- Babies Delivered: 194,400
- Measles Vaccinations: 1,573,700

Sources: MSF International Activity Report 2014.
IT Challenges for MSF

Security
OpenData
Data Integration
Knowledge
Emergencies
Governance
Mobility
Connectivity
Efficiency
Innovation
What is a HMIS?

System that captures, stores and manages routine health data for:

- Aggregation and analysis of data in time and space
- Supporting management of health activities
- Evidence based decision making
Why our HIS was perceived weak?

- Manual aggregation
- No quality checks
- Local & Static analysis
- Several information files
- Non robust tool
- Delayed access to information
- Low quality of information
- Do not facilitate feedback
- Limited Data sharing
- Non sustainable
What was the aim of the project?

- To improve the Medical Information Systems and quality approach in our Operations

To facilitate medical data capture, validation, analysis and transmission across the different levels of the projects

Aligned with MSF international vision

MSF DATA SHARING POLICY Dec 2013: “MSF will prioritize for its data, information technology solutions that facilitate data sharing”

ISM Statement June 2013: “interoperability, with an open model and shared knowledge rather than imposing a ‘one system fits all’ approach”
Project goals

**Quality information for all levels**
Ensure near real-time access to quality information throughout the organization in order to analyse data at all levels.

**Information for action**
Compress the delay between the identification of outbreaks and the response to it.

**Decision making**
Support decision-making processes improving the adequacy and quality of information.

Data => Information => Knowledge => Actions => Results
To implement a health information system supported by a software that facilitates the data entry, validation, analysis and transmission through all the different levels of the organization
Project strategy

- Accompanying and guiding the user through the change

Change management

- Training for new comers
- Training for recurrent users

Continuous training

- Useful information for the field and HQ
- Minimum data set
- Decision making based on evidence

Meaningful use of information

- Analysis at all levels
- Facilitate feedback

Empower field user

- Automatic aggregation
- Reduce data duplication
- Minimize manual errors
- Enables data sharing

Quality of data

- Training for new comers
- Training for recurrent users

Continuous training
How was the software selection?

- **October 2013** identifying needs for improving medical data collection and analysis (143 requirements: 87 functional and 56 technical)

- **December 2013** assessment of the four candidate tools
  - Three MSF solutions
  - **University of Oslo** dhis2

- **February 2014**: IS Steering Committee endorsed the project
Resulting scenario

- Automatic aggregation
- Quality control
- Shared & dynamic analysis
- Integrated information
- Robust software

- Near real time access to information
- Quality of information
- Facilitates feedback & data sharing
- Transversal analysis
- Sustainable tool
Project plan 2014-2015

Where we are now:

- end users training
- medical data and indicators
- field deployment: average of 80 projects

Field deployment Regional Trainings Migration
HMIS evolution 2016

Next steps:

- Individual data
- Emergency focus
- Surveys
- HMIS maintenance
- Newcomers training and recurrent users
- Medical information update
THANKS
MSF OCBA HMIS team

OCBA HMIS contact hmis@barcelona.msf.org