Technical Assistance to Improve HIV National Information System in Niger

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Life Sciences' challenging role in our expanding cities

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SOLTHIS
A medical international association dedicated to people with HIV/AIDS in Africa

GOAL:
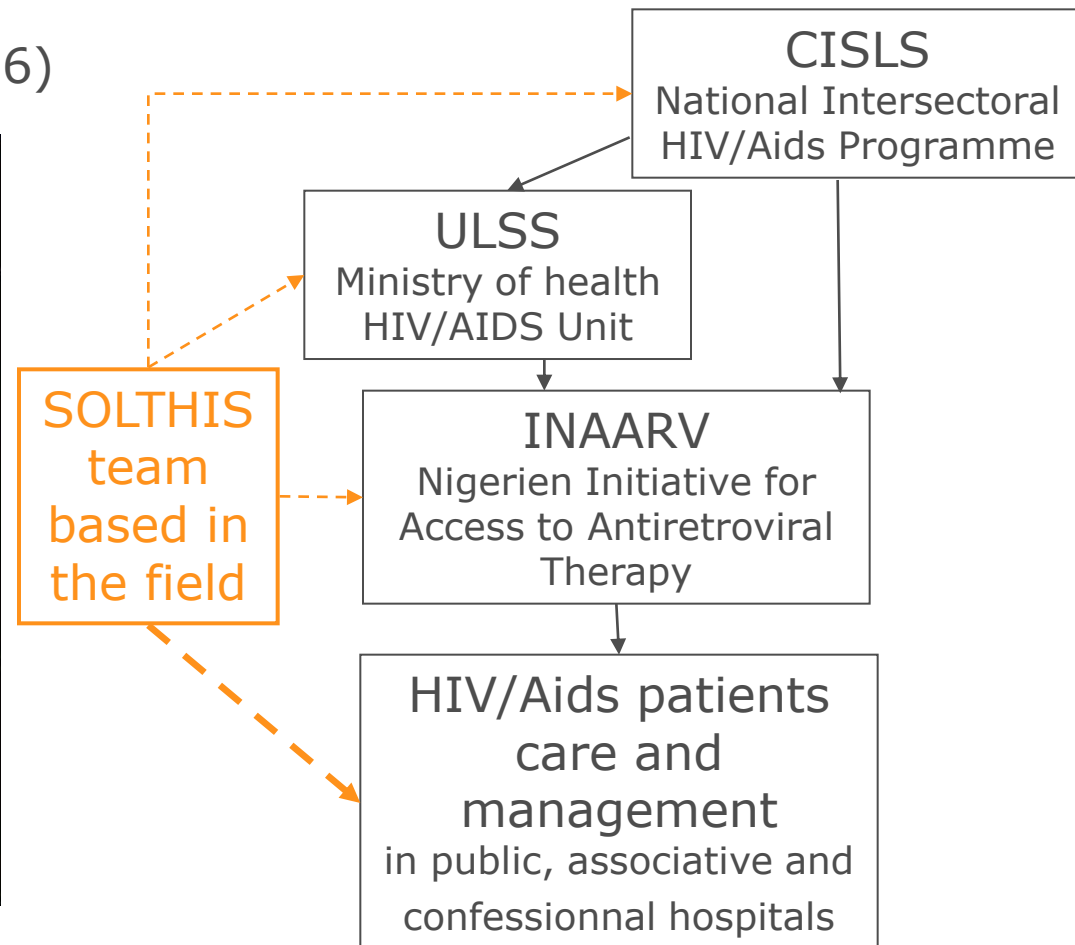To ensure access to high-quality care to people living with HIV/AIDS

STRATEGY:
1. Supporting national coordination bodies for HIV/AIDS care strategies
2. Capacity strengthening of local health-care workers
3. Technical improvement of laboratories
4. Enhancing drugs procurement and supply chain management
5. Developing a data collection and analysis system for all patients monitored

Mali
Niger
Benin
Guinea
Burundi
Madagascar

Access to Antiretroviral Therapy in Niger: 2004

HIV prevalence: 0,7% (DHS 2006)

⭐ Solthis Offices

SOLTHIS team based in the field

CISLS
National Intersectoral HIV/Aids Programme

ULSS
Ministry of health HIV/AIDS Unit

INAARV
Nigerien Initiative for Access to Antiretroviral Therapy

HIV/Aids patients care and management
in public, associative and confessionnal hospitals

Electronic medical record system

WHAT ?

• Gathering together data
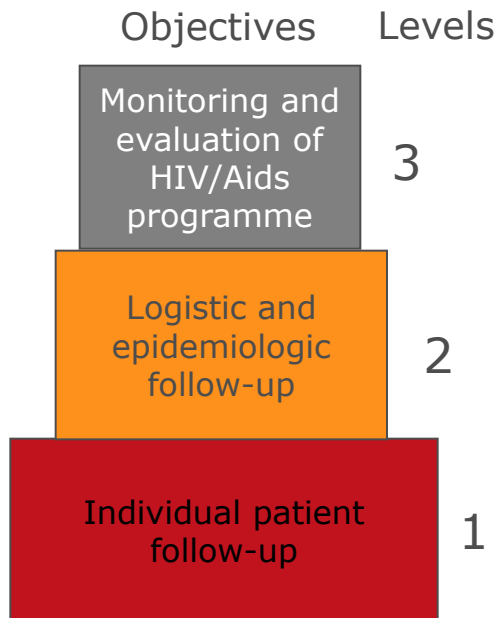
• Complex system design

• Technical challenge

WHY ?

• To improve population health

• To strengthen health system

Essential role in the scale-up of HIV/AIDS management, care and treatment in lower-income countries

Objectives	Levels
Monitoring and evaluation of HIV/AIDS programme	3
Logistic and epidemiologic follow-up	2
Individual patient follow-up	1

Solthis strategy on EMR system

Objectives   Levels

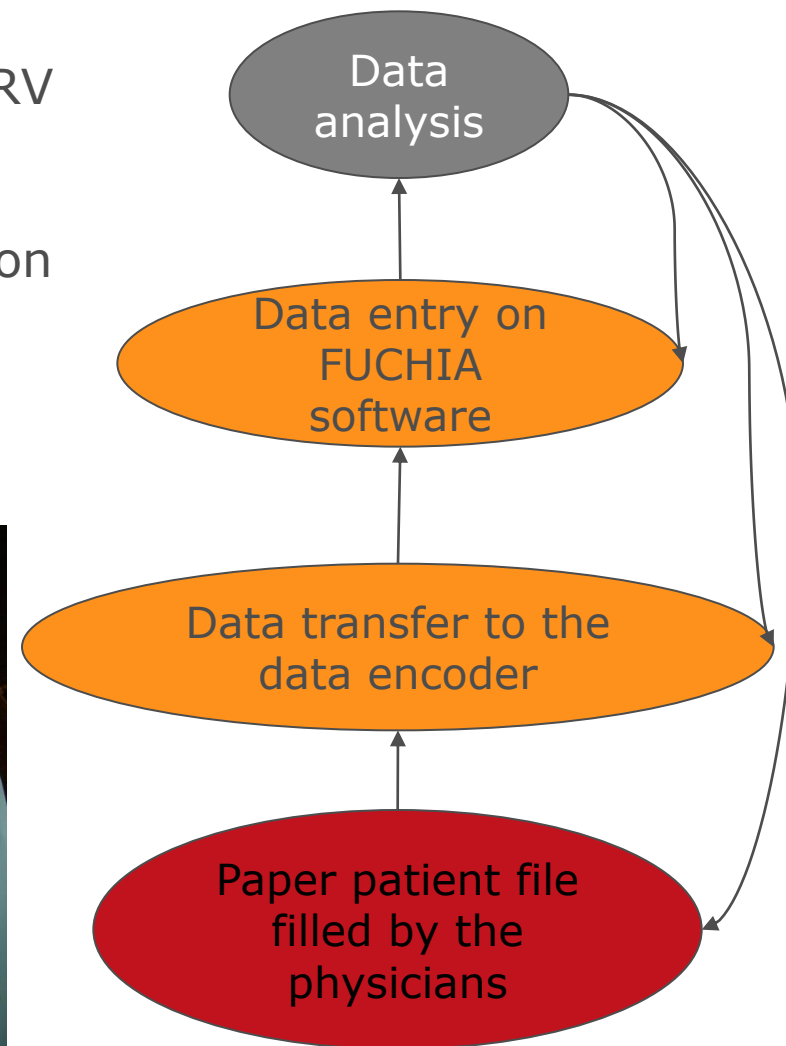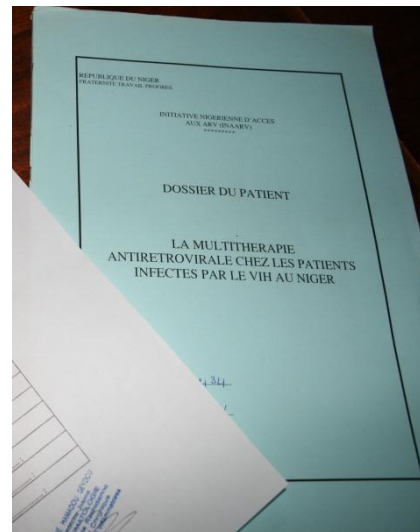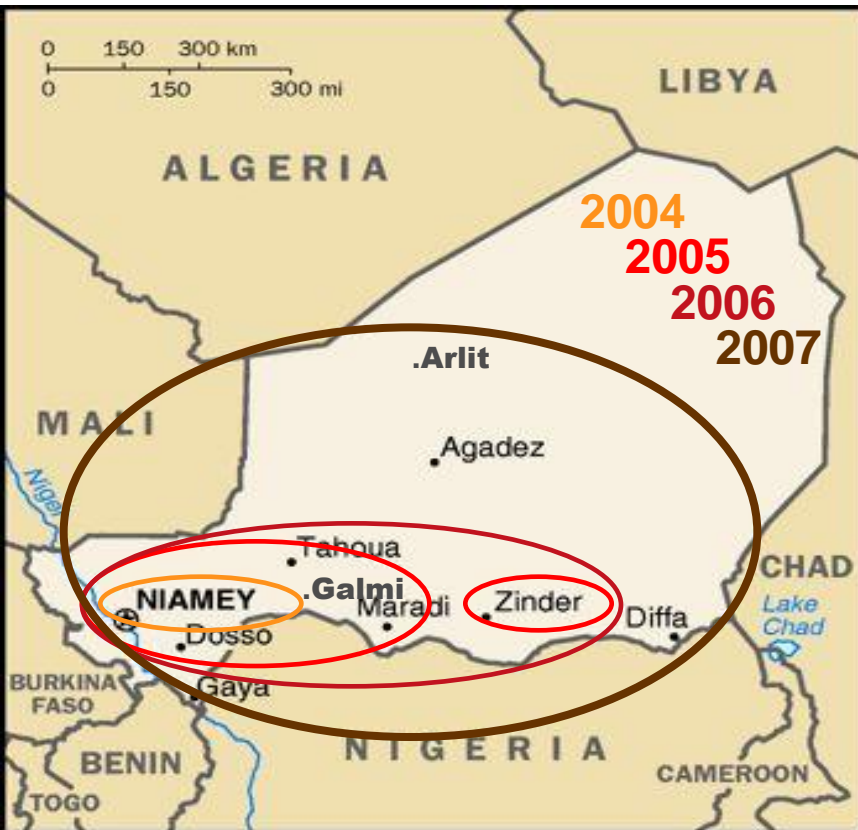|	
Monitoring and evaluation of HIV/Aids programme	3
Logistic and epidemiologic follow-up	2
Individual patient follow-up	1

- EMR system must frame and support the scale-up of the HIV/AIDS care system

- Key elements:
  - System must be part of initial requirements for an efficient HIV/AIDS national programme
  - National outreach
  - Bottom-up approach
  - Practice-driven
  - Patient based

- Aim: HIV/AIDS EMR system is integrated in the National Health Information System with only limited resources

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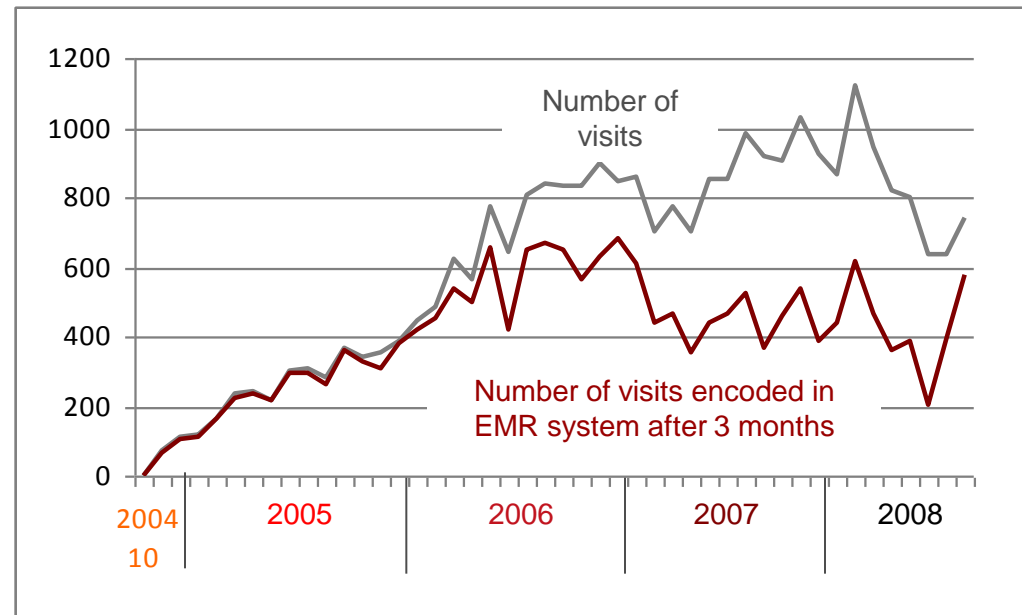
Role of Solthis in designing initial system

• Advocacy at national level for early integration of M&E competencies into INAARV institutions

• Setting up a vertical centralised information system based on reliable data

• Specific interventions at each level of the system

Data analysis

Data entry on FUCHIA software

Data transfer to the data encoder

Paper patient file filled by the physicians

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2005 - 2008:
Decentralization of INAARV

Solthis' support to this decentralization process:
-Additional staff
-Decentralized office in Zinder
-Lobbying and support for the decentralization of EMR system
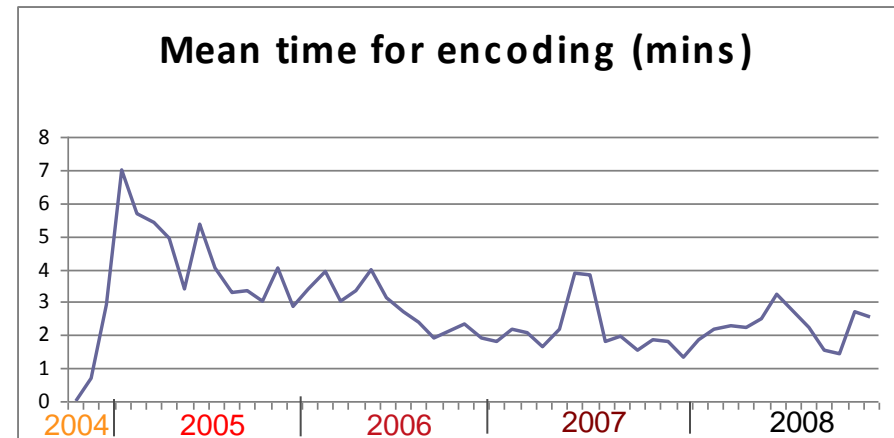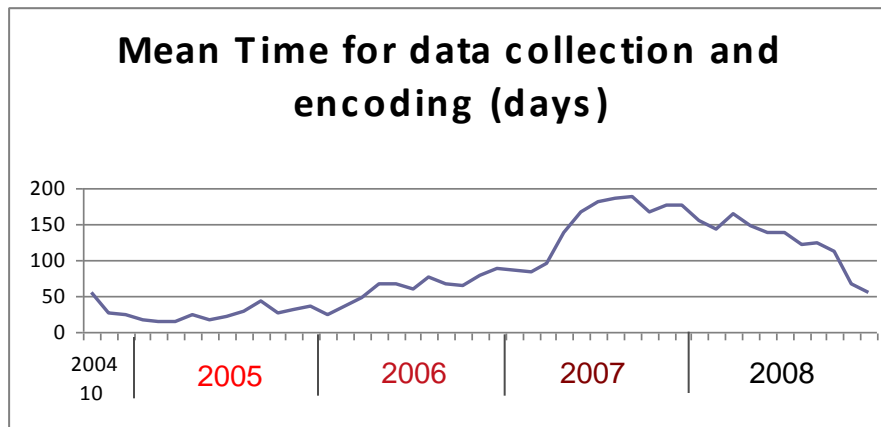
2008 – 2009: Scaling-up of EMR system (1)

➢ **Solthis intervention:** organisation of a multidisciplinary workshop

➢ **Objective**: to identify the barriers and induce operational improvements to scale up the system

➢ **Outcome 1: Improvement of data collection**
  - Patient file revision
  - Stronger involvement of health workers
  - Identification of a more efficient data collection process

  ✓ **Result** : Improvement of data quality
  ✓ **Challenge** : Insufficient investment from national counterpart in data collection

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2008 – 2009: Scaling-up of EMR system (2)

➢ **Outcome 2: Standardization of data encoding**
- Adaptation of Fuchia data entry system
- Training sessions for 15 data encoders
- Elaboration of set of technical support tools

✓ **Result :** Improvement of data entry

Mean Time for data collection and encoding (days)

Mean time for encoding (mins)

✓ **Challenges:** - High turn over of data encoders
- Fuchia software: stand-alone system

➢ **Outcome 3: Formal organisation of system architecture**
- Creation of a network of 10 decentralized databases
- Assignment of responsibilities

- ✓ **Result :** Improvement of national outreach
- ✓ **Challenge**: Problems with data collection/circulation/entry on certain point of care

➢ **Outcome 4: Definition of a national quality framework for statistics**
- Schedule of national report, supervision and feedback
- Design of data storing and management

- ✓ **Result** : National reports on HIV/AIDS follow-up data produced by Nigerien institutions from November 2008
- ✓ **Challenges**: - Low capacity of complex analysis
  - Irregular data reliability

Solthis approach

Strengths

- Long-term development approach based on principle of non substitution

- National outreach: design of a single EMR system that fits all environments

- Systemic design: a given data set can be used for multi-purpose information needs

- Bottom-up approach: point-of-care data are used to generate more complete and accurate aggregate reports

- Adaptability to an increasingly complex system

Challenges

- The role of Solthis is seen more as technical support for data management than as a monitoring and evaluation technical referent

- Limit pressure from government and funding agencies to alter data system in order to produce specific statistics

Conclusion

Evolution of EMR system in Niger is promising

- Unified and practice-driven source of information for its national HIV/Aids programme, containing information for more than 5 000 patients
- Can be used from individual follow-up to international standard indicators production

But Niger still faces numerous challenges

Perspective

Perspective to exploit EMR system

- Level 1: To reduce medical errors and to improve patient monitoring
- Level 2: To improve drug supply management
- Level 3: To produce regular national and feedback reports

Perspective to improve EMR system

- Being reactive to the decentralization issues
- Stronger ownership of the stakeholders
- Reducing the data entry lead time
- Regular upgrading of system
- Integration in the National Health Information System

Perspective to evaluate EMR system

- Specific outcomes will be measured

Aknowledgements

- CISLS Coordinator, Dr Moussa Idé, & team

- ULSS Director, Dr Fati Maïga and team
- Nigerien Ministry of Health

- Y. Madec, Institut Pasteur

- Solthis team in Niger & France

- Solthis scientific working group

- Fondation Bettencourt Schueller