



# **Data Management and Biostatistics Facilities**

**by  
Ammarin Thakkinstian**





# Data Management

**Section for Clinical Epidemiology and Biostatistics,  
Faculty of Medicine Ramathibodi Hospital (CEB-RAMA)**

**AND**

**Center of Excellence for Biomedical and Public Health  
Informatics (BIOPHICS)**

**Faculty of Tropical Medicine  
Mahidol University**





# Roles & Responsibilities

- **Study Preparations**

- ✓ Modify questionnaire format to comply with the DataFax software
- ✓ Setup databases
- ✓ Construct data-quality checking program for data quality-control

- **Quality Assurance**

- ✓ Enter data to DataFax system
- ✓ Validate data to source document
- ✓ Check quality of entered data
- ✓ Generate quality control report
- ✓ Transfer data for analysis
- ✓ Lock database for data submission





# Timelines

- **Data Collection @ 4 EGAT sites**
  - ✓ July – Oct 2013
- **Data Management @ BIOPHICS & CEB-Rama**
  - ✓ Aug 2013 – Jan 2014
- **EGAT Web-databases**
  - ✓ Feb – April 2014



# EGAT Data Work Flow



1



Data delivery

Rama-CEB & BIOPHC

2

Questionnaire Checking



3

Questionnaire sequencing



4

Scan individual binder



DataFax Server

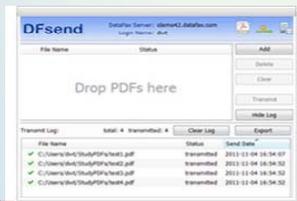


Data Validation in DataFax System



7

Import to DataFax system



6

Insert DataFax barcode & save as pdf



5

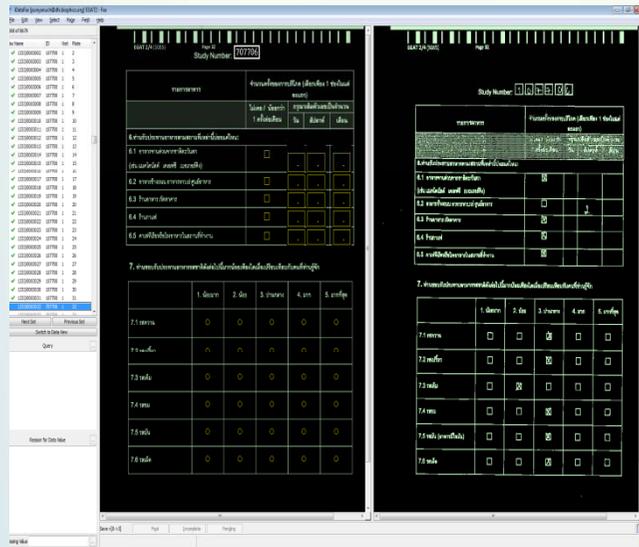
Save as pdf





# Data Validation Work Flow for DataFax System

New questionnaires in DataFax format are in place



DataFax Server



Disc Storage

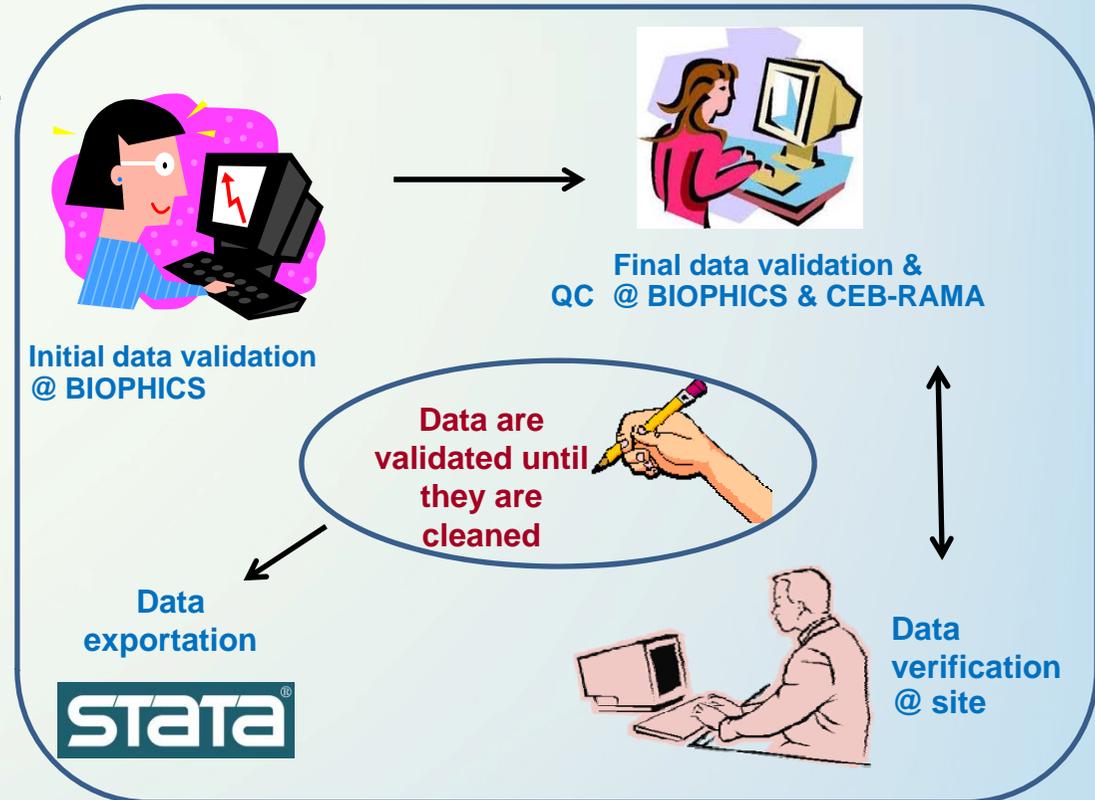


Tape Backup

Sites are able to view/enter/edit questionnaires online



Web-database





# CEB-Rama

- **3 Clinical Epidemiologists**
- **7 Biostatisticians**
- **1 Programmer**





# Facilities

- **Data management**
  - EGAT-Webdatabases
  - Retrieve data
- **Request for data**
  - [WWW.ceb-rama.org](http://WWW.ceb-rama.org)
    - Lodge application form
  - Contact
    - Dittapol Muntham
      - [Email: dittapol.mun@mahidol.ac.th](mailto:dittapol.mun@mahidol.ac.th)
      - Tel: 022011269, 022011284





## Numbers of subject for EGAT2-2013

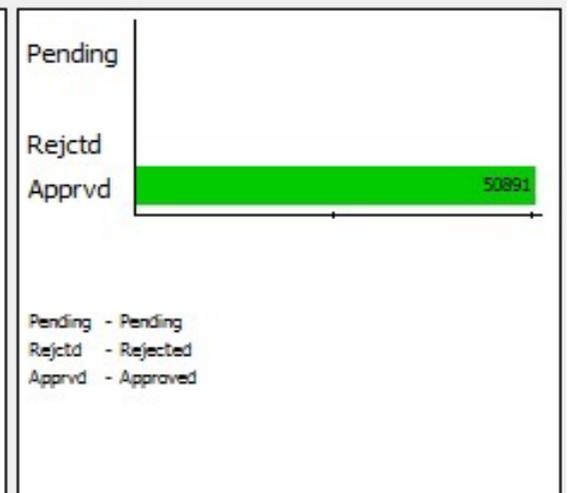
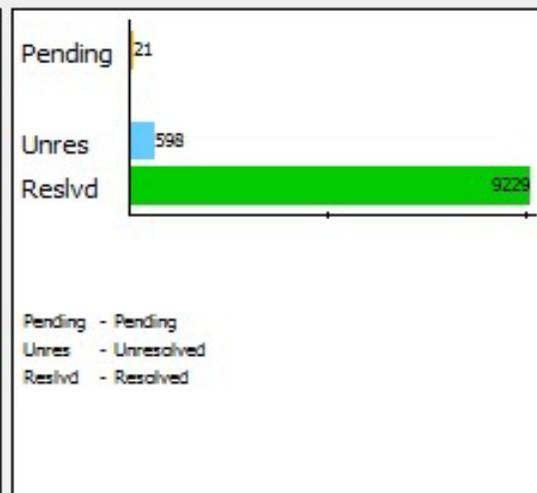
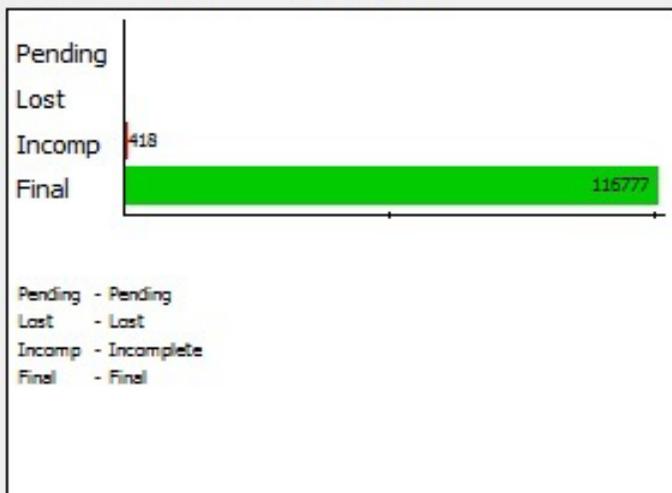
Site	Expected N	Actual N
Bang Kruay	1438	1428
Srinagarind Dam	250	214
<u>Vajiralongkorn Dam</u>	130	116
<u>Bhumibhol Dam</u>	250	259
<b>Total</b>	<b>2068</b>	<b>2017</b>



# Data QC

Data Records						Queries				Reasons			
Level	Pending	Lost	Incomp	Final	Total	Pending	Unres	Reslvd	Total	Pending	Rejctd	Apprvd	Total
Level 0: 0													
Level 1: 1													
Level 2: 2				16	16	20			20			4	4
Level 3: 3				45917	45917			2	2			20782	20782
Level 4: 4				6403	6403	1		7	8			2868	2868
Level 5: 5			418	64441	64859		598	9220	9818			27237	27237
Level 6: 6													
Level 7: 7													
<b>Total</b>			418	116777	117195	21	598	9229	9848			50891	50891

Graphics:  by level  by status





# Mahidol University Faculty of Medicine Ramathibodi Hospital

## Section for Clinical Epidemiology and Biostatistics

กลุ่มสาขาวิชา

- DPC Projcet
- EGAT
  - EGA
  - EGA
  - EGA

### Section for **Clinical Epidemiology and Biostatistics (Rama-CEB)**



#### Announcement

- Risk Scores and Clinical Decision Rules Conference at 12 December 2013
- Clinical Research: From Basic to Practical Points short course (17-20 Dec 2013) - UPDATED

[more](#)



#### Risk Scores and Clinical Decision Rules Conference at 12 December 2013

Risk Scores and Clinical Decision Rules Conference at 12 December 2013 Free

[more](#)



#### Clinic Basic short 2013

Local Medicin



# Mahidol University

## Faculty of Medicine Ramathibodi Hospital

### Section for Clinical Epidemiology and Biostatistics

กลุ่มสาขาวิชา

Ph.D. and M.Sc. Student Resources

## EGAT

View

Edit

Track

Grant

## EGAT

Subject	Data	Download File
EGAT 1	1985 - 2012	
EGAT 2	1998 - 2013	
EGAT 3	2009 - 2014	



# Facilities

- **Data analysis**
  - Linear regression
  - Fractional polynomial regression
  - Logistic regression
  - Survival analysis
  - Longitudinal data analysis
  - Survey data analysis
  - Meta-analysis
  - Analysis for genetic association studies
- **Request for data analysis**
  - Contact
    - Wipada Purawat
      - [Email: wipada.pur@mahidol.ac.th](mailto:wipada.pur@mahidol.ac.th)
      - Tel: 022011269, 022011284





Thank you

