# CLINICAL AND BIO-SPECIMEN DATA COLLECTION IN A LIMITED RESOURCE CONTEXT: OPENCLINICA AND OPENSPECIMEN INTEGRATION

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**Abstract ID: P-100 (Session 2 - Repository Automation Technology)** 

## INTRODUCTION

| SPECIMEN COLLECTION STUDY PIPELINE |    |  |  |   |                                   |   | ISSUES |  |
|------------------------------------|----|--|--|---|-----------------------------------|---|--------|--|
| FIN                                |    |  |  |   |                                   | <ul> <li>No communication between OpenClinica (OC) and OpenSpecimen (OS)</li> <li>There is no direct linkage between participant clinical information and to</li> </ul> |        |  |
| RAMS                               | ТВ |  |  | Participant clinical data are<br>electronically captured in<br>CRFs on the EDC platform Open Source for Clinical Research | Open Source for Clinical Research | <ul> <li>corresponding collected specimens</li> <li>Use of two separate platforms to enter data on site is error prone and time consuming</li> </ul>                    |        |  |



#### **PROPOSED SOLUTION - OPENCLINICA + OPENSPECIMEN INTEGRATION**



Specimen Aliquot

0

0

Event

ID

Ω

Ο

0

type ID number

1 0 0 1

#### **HOW DOES IT WORK?**



The OS user can deploy the OC-OS plugin through a configurable interface in a few object-syncing steps:

- OC study ID and site ID with OS collection protocol (CP)
- OC subject ID and event ID with OS participant ID and event ID
- Scanned barcodes in the specimen collection CRF on OC lead to registration and collection of specimen on OS platform for the associated participant
- OC CRF metadata are moved to OS read-only forms, acquiring universal variable names through a user configurable dictionary (uploaded csv file)
- All user-desired OC metadata can be easily queried in OS and associated with samples

### **ADDED BENEFITS FOR FIND & BIOBANKING COMMUNITY**

Study

Β

PLUGIN

**CIMEN JSON** 

ORMS

ONLY

Ô

FILE EXPORT

OC ODM XML

CLINICAL CRFs ECIMEN COLLECTION CR Site

Subject

ID

ID

• Use of **open-source web-based platforms** (excellent value-for-money, minimal hardware pre-requisites) with easily configurable JSON functionality, readily available to the community

- Use of a single EDC software on site, avoiding data entry errors and saving time
- Real-time specimen tracking from the moment of collection to the point of distribution

## **IN A FEW WORDS...**

**FIND (Foundation for Innovative New Diagnostics)** is an international non-profit organization that enables the development and delivery of much-needed diagnostic tests for poverty-related diseases

**OpenSpecimen** is a highly configurable web-based open-source biobanking informatics platform

- Tracking and **minimization of human error**, such as mislabelling of samples
- Simplification of the shipment process from sites to our biorepository, and finally to requestors
- Possibility of offline electronic data capture, resolving issues with poor internet connectivity
- Improved **quality** of our biobank in an effort meet high QA/QC **standards**

**OpenClinica** is an open-source software for Electronic Data Capture (EDC) and Clinical Data Management (CDM) used to optimize clinical trial workflow





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