LIFTB
Leveraging Innovation for Faster Treatment of Tuberculosis

International Tuberculosis Research Center

KNCV TUBERCULOSIS FOUNDATION

TB Alliance

Guidance on the BPaL OR Data Collection

Pilot study to estimate the effectiveness and safety of the BPaL treatment regimen in The Philippines

Veriko Mirtskhulava, KNCV

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General Principles BPaL OR data collection

- BPaL OR data will be collected using the specially designed standardized data collection forms
- Still, BPaL OR patient data will be part of routine surveillance system and recorded on NTP forms
- BPaL OR Data collection will occur at BPaL OR sites from multiple sources: patient interview, data abstraction from patient medical cards, NTP registers and forms, laboratory and aDSM data system
- Data from the paper forms will be entered in the specially designed standardized electronic data collection system - REDCap, with core set of variables for BPaL OR

Data collection process

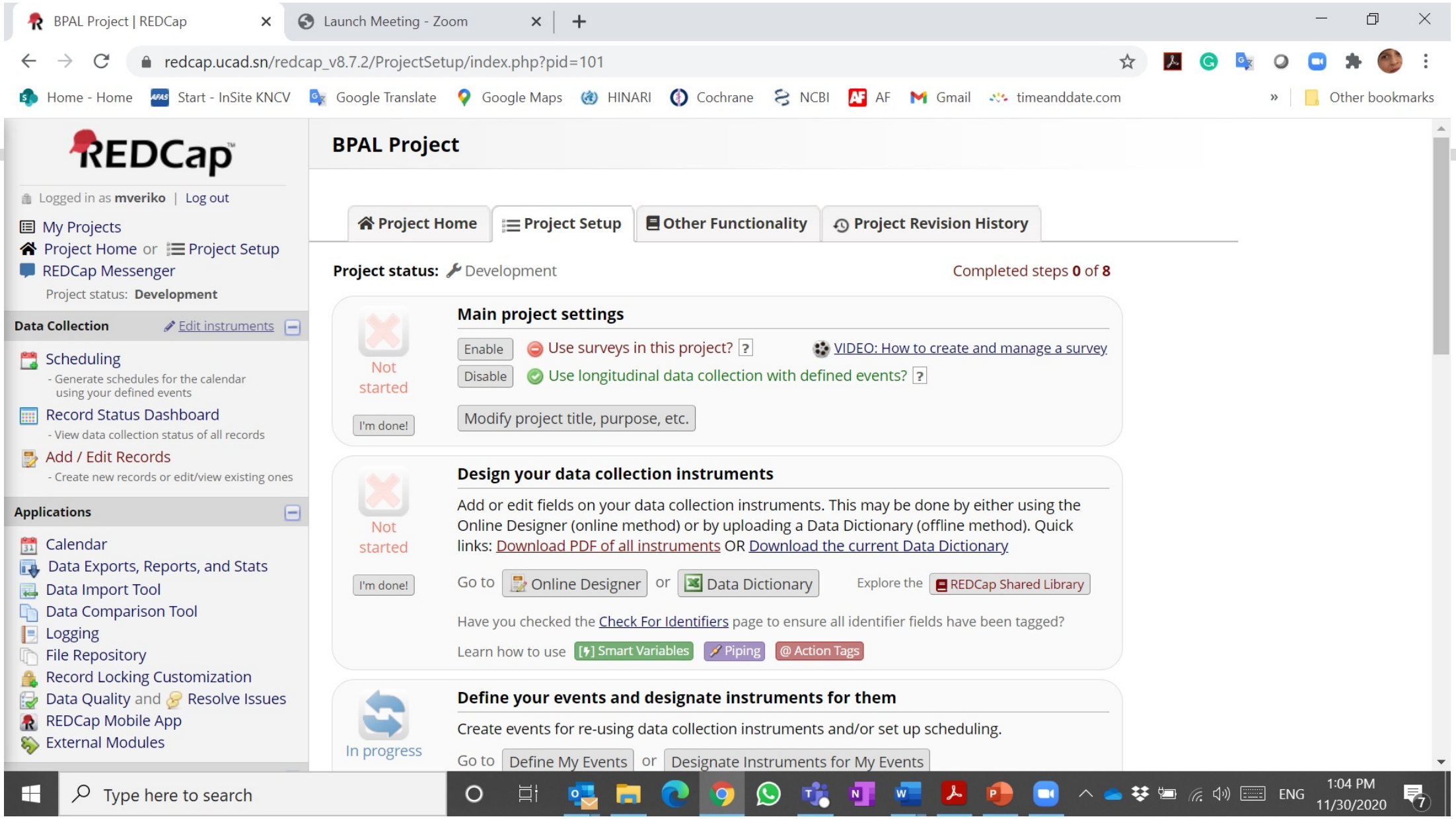
- Paper-based & digital
- BPaL OR site staff is responsible for screening the patient and completing the BPaL OR forms
- BPaL OR site staff will be responsible for the data entry from the paper data collection forms in the REDCap database at the facility level within 48 hours
- TB doctors must verify the record in the REDCap.

Data Collection Tools: Paper Forms

- The core set of variables agreed, and 6 standardized data collection forms developed
  - The forms can be
    - printed and then filled in by hand
    - filled in by typing in MS Word or pdf and then printed

Data Collection Tools: Electronic Database

- Electronic data collection platform – REDCap
  - Online use
  - Desktop version


BPAL Project | REDCap
Launch Meeting - Zoom
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Project status: Development
Data Collection
Edit instruments
Scheduling
- Generate schedules for the calendar using your defined events
Record Status Dashboard
- View data collection status of all records
Add / Edit Records
- Create new records or edit/view existing ones
Applications
Calendar
Data Exports, Reports, and Stats
Data Import Tool
Data Comparison Tool
Logging
File Repository
Record Locking Customization
Data Quality and Resolve Issues
REDCap Mobile App
External Modules
BPAL Project
Project Home
Project Setup
Other Functionality
Project Revision History
Project status: Development
Completed steps 0 of 8
Not started
I'm done!
Main project settings
Enable
Use surveys in this project?
VIDEO: How to create and manage a survey
Disable
Use longitudinal data collection with defined events?
Modify project title, purpose, etc.
Not started
I'm done!
Design your data collection instruments
Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method). Quick links: Download PDF of all instruments OR Download the current Data Dictionary
Go to Online Designer or Data Dictionary
Explore the REDCap Shared Library
Have you checked the Check For Identifiers page to ensure all identifier fields have been tagged?
Learn how to use Smart Variables Piping @ Action Tags
In progress
Define your events and designate instruments for them
Create events for re-using data collection instruments and/or set up scheduling.
Go to Define My Events or Designate Instruments for My Events
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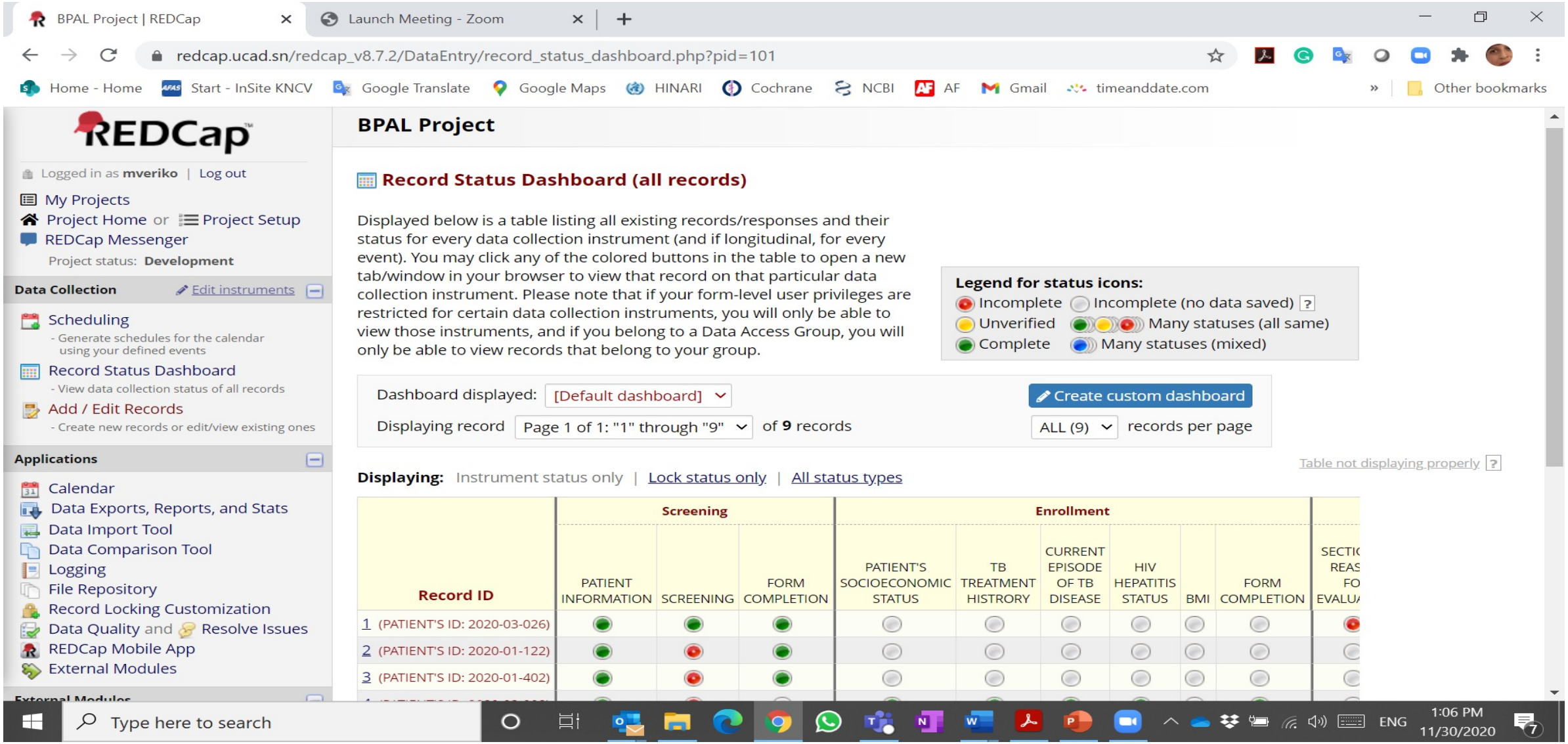
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Record Locking Customization
Data Quality and Resolve Issues
REDCap Mobile App
External Modules
BPAL Project
Record Status Dashboard (all records)
Displayed below is a table listing all existing records/responses and their status for every data collection instrument (and if longitudinal, for every event). You may click any of the colored buttons in the table to open a new tab/window in your browser to view that record on that particular data collection instrument. Please note that if your form-level user privileges are restricted for certain data collection instruments, you will only be able to view those instruments, and if you belong to a Data Access Group, you will only be able to view records that belong to your group.
Legend for status icons:
Incomplete
Incomplete (no data saved)
Unverified
Many statuses (all same)
Complete
Many statuses (mixed)
Dashboard displayed: [Default dashboard]
Create custom dashboard
Displaying record Page 1 of 1: "1" through "9" of 9 records
ALL (9) records per page
Table not displaying properly
Displaying: Instrument status only | Lock status only | All status types
Screening
Enrollment
Record ID
PATIENT INFORMATION
SCREENING
FORM COMPLETION
PATIENT'S SOCIOECONOMIC STATUS
TB TREATMENT HISTRORY
CURRENT EPISODE OF TB DISEASE
HIV HEPATITIS STATUS
BMI
FORM COMPLETION
1 (PATIENT'S ID: 2020-03-026)
2 (PATIENT'S ID: 2020-01-122)
3 (PATIENT'S ID: 2020-01-402)
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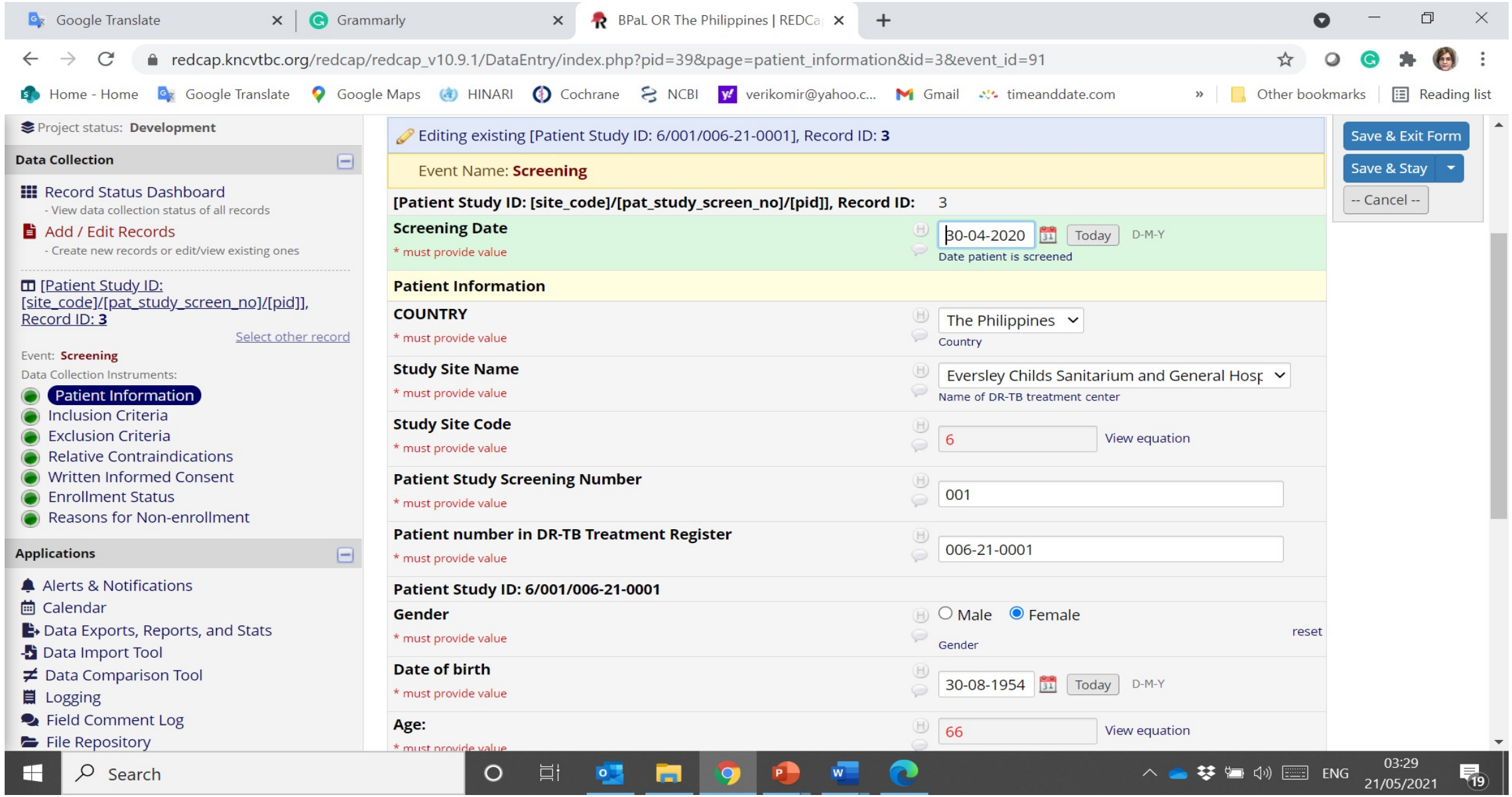
11/30/2020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BPaL OR The Philippines | REDCa
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Gmail
timeanddate.com
Other bookmarks
Reading list
Project status: Development
Data Collection
Record Status Dashboard
- View data collection status of all records
Add / Edit Records
- Create new records or edit/view existing ones
[Patient Study ID: [site_code]/[pat_study_screen_no]/[pid]], Record ID: 3
Select other record
Event: Screening
Data Collection Instruments:
Patient Information
Inclusion Criteria
Exclusion Criteria
Relative Contraindications
Written Informed Consent
Enrollment Status
Reasons for Non-enrollment
Applications
Alerts & Notifications
Calendar
Data Exports, Reports, and Stats
Data Import Tool
Data Comparison Tool
Logging
Field Comment Log
File Repository
Editing existing [Patient Study ID: 6/001/006-21-0001], Record ID: 3
Event Name: Screening
[Patient Study ID: [site_code]/[pat_study_screen_no]/[pid]], Record ID: 3
Screening Date
* must provide value
30-04-2020
Today
D-M-Y
Date patient is screened
Patient Information
COUNTRY
* must provide value
The Philippines
Country
Study Site Name
* must provide value
Eversley Childs Sanitarium and General Hosp
Name of DR-TB treatment center
Study Site Code
* must provide value
6
View equation
Patient Study Screening Number
* must provide value
001
Patient number in DR-TB Treatment Register
* must provide value
006-21-0001
Patient Study ID: 6/001/006-21-0001
Gender
* must provide value
Male
Female
reset
Gender
Date of birth
* must provide value
30-08-1954
Today
D-M-Y
Age:
* must provide value
66
View equation
Save & Exit Form
Save & Stay
-- Cancel --
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DATA COLLECTION FORMS AT A GLANCE																				
Form number	Form name	Screening	Enrolment	Baseline	Treatment													End of treatment[1]	Follow-up after treatment	
					End of wk. 2	End of mo. 1	End of mo. 2	End of mo. 3	End of mo. 4	End of mo. 5	End of mo. 6	End of mo. 7	End of mo. 8	Ad hoc visit 1	Ad hoc visit 2	Ad hoc visit 3	Ad hoc visit 4		6 mos. after the end of treatment	12 mos. after the end of treatment
Form 1	Screening	X																		
Form 2	Enrolment		X																	
Form 3	Evaluation			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Form 4	Treatment Completion																	X		
Form 5	After treatment Follow-up																		X	X
Form 6	Adverse Event			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

[1]If 6 months treatment, then week 26
If 9 months treatment, then week 39

BPaL OR Data Collection Form Completion: General Principles

- Each page of the form must have PATIENT STUDY ID on top of the page
- Pages in each paper form must be stapled together
- Keep completed forms in a specially created patient study folder with the OR name and the PATIENT STUDY ID on the cover

Checking the Boxes

When filling in a printed form manually use a black pen to check the box, as in the example below

Example:

Gender: ☐ Male ☒ Female

Answer “Unknown”

"Unknown" means any of the following:

- Patient refused to answer question
- Patient cannot remember information requested in question
- Information requested in question cannot be found from medical records

SPECIAL CONSIDERATIONS WHEN FILLING IN BPAL OR DATA COLLECTION FORMS

Form 1. Screening: Patient Information

PATIENT STUDY ID: _____-_____-_____

STUDY SITE - STUDY SCREENING NUMBER - DR-TB REGISTRATION NUMBER

- **STUDY SITE CODE:**
- **PATIENT STUDY SCREENING NUMBER:**

Consecutive number given to a patient at the study site during the BPaL screening event despite the patient's enrollment status in the BPaL operational research.

- **PATIENT DR-TB REGISTRATION NUMBER:**

Unique identifier of the patient on DR-TB treatment in the country. For the data validation purposes, BPaL OR patient can be traced in the national surveillance system and using Patient Study ID

- Patient Study ID is assigned when screening the patient for enrollment on the BPaL regimen irrespective of the enrollment status.

Form 1. Screening: Patient Information

- Screening data is entered in the REDCap irrespective whether the patient is eligible for BPaL treatment or not
- If date of birth is unknown report year of birth and the 1st of January
- If less <15 years of age patient does not meet the eligibility criteria;
- if >15 and <18 years old, patient should be evaluated by the Expert Committee

Form 1. Screening: Inclusion Criteria

- Patient must have laboratory-confirmed (rapid and/or conventional DST) resistant TB to at least rifampicin and fluoroquinolones within the last three months of the screening date. Otherwise, Xpert testing, and 2nd line LPA must be done for the patient before enrollment in the study

- Note: among patients with documented MDR/RR-TB treatment non-response or intolerance, only line LPA must be done for the patient before enrollment in the study

- Patient with documented MDR/RR-TB treatment non-response or intolerance and bacteriologically confirmed active TB within the last three months of the screening date can be enrolled on the BPaL regimen irrespective of resistance to fluoroquinolones

Form 1. Screening: Relative Contraindications

- Patient must be evaluated for the Relative contraindications within the last 14 days of the patient screening date for enrollment on the BPaL regimen

- If patient has any of the relative contra-indications, then the patient must be discussed at the Expert committee meeting. The expert committee must make decision about the patient enrollment on the BPaL regimen

- If the decision is “Yes”, then report the status of the relative contraindication(s) at the time of the patient enrollment in Form 1. Screening, Section 3. Relative contra-indications, Questions 7.

Form 2. Enrollment

- Enrollment date:
  - Date when patient signs informed consent form.
  - Enrollment date can be different from the BPaL treatment initiation date

- Patient's Socioeconomic Status
  - Employed includes self employed and business owners

Form 3. Evaluation

SCHEDULE OF BASELINE, TREATMENT AND AFTER TREATMENT EVALUATION					
	Baseline	**2 weeks**	**Monthly**	**End of treatment**	**6- and 12-months after treatment completion**
Clinical evaluation					
Clinical assessment*[1]	X	X	X	X	X
Psychosocial assessment*[2]	X	X	X	X	X
Performance status[3]	X				
Weight / BMI	X	X	X	X	X
Peripheral neuropathy screen[4]	X	X	X	X	X
Chest X-Ray	X		X-If no response to treatment	X	X
ECG	X	X	X	X	X-If indicated
Visual acuity and colour discrimination screen	X	X	X	X	X
Assessment and follow-up of AEs	X(X)	X(X)	X(X)	X(X)	X(X)
Treatment outcome assessment				X	X
Bacteriological evaluation					
Gene Xpert	X				
Sputum smear	X		X	X	X
Sputum culture[5]	X(X)		X (X)	X(X)	X(X)
Sputum drug susceptibility testing [6]	X (X)		X-If culture positive[7]		
Other sample smear	X		X-If no response to treatment		
Other sample culture	X(X)		X-If no response to treatment		
Other sample drug susceptibility testing	X		X-If culture positive[7]		
Laboratory evaluation					
Full blood count	X	X	X	X	X-if indicated
Liver function tests (AST, ALT, bilirubin)	X	X	X	X	X-if indicated
Thyroid stimulating hormone (TSH)	X		X - if indicated		
Serum electrolytes (Na, K, Ca, Mg)	X		X	X	X-if indicated
Serum amylase			X - if indicated		
Kidney function tests (Urea, Creatinine)	X		X - if indicated		
BSL (fasting or random)[8]	X				
HIV / HBV / HCV tests	X				
Pregnancy test[9]	X		X - if indicated		

Form 4. Treatment Completion

SECTION 2. REASON FOR NOT COMPLETING THE STUDY TREATMENT AS PER PROTOCOL

- The BPaL regimen not started
- Participant was withdrawn after enrollment due to protocol violation(s),
- Physician judged it no longer advisable for patient to continue the BPaL regimen,
- Participant refused further treatment and withdrew consent,
- Participant became pregnant during the study treatment
  — *Complete Form 6. Adverse Event*
- Other

Protocol deviation / Violation

- A protocol deviation is any change, divergence, or departure from the study design or procedures defined in the protocol whether by the subject or investigator.

- A protocol violation is any change, divergence, or departure from the study design or procedures defined in the protocol, whether by the subject or investigator, that may significantly impact the completeness, accuracy, and reliability of the study data or affect a subject's rights, safety, or well-being substantially.

Protocol Deviations

Examples of the protocol deviations:

- Patient missed 14 days on treatment with good clinical progress
- Patient enrolled on treatment without baseline Hep C testing
- Patient missed 14 days of treatment in every month of the first 3 months
- The patient fails to complete a maximum of 14 doses out of all required BPaL treatment doses within 60 days after the intended end of the BPaL treatment

Form 4. Treatment Completion

Examples of the protocol violation:

- Patient started on treatment without baseline ECG and following ECG monitoring not conducted
- Patient misses > total of 14 doses within the first four weeks of the BPaL treatment
- Patient misses >35 consecutive doses of the BPaL treatment
- Patient fails to complete required number of the BPaL treatment doses within maximum period 60 days after intended end of the treatment

Form 4. Treatment Completion

SECTION 3. INTERIM TREATMENT OUTCOME (SPUTUM CULTURE CONVERSION)

- Date of initial sputum culture conversion: _____-_____-_____

  MM-DD-YYYY

- Two consecutive cultures taken at least 30 days apart are found to be negative.
- Record the specimen collection date of the first negative culture.

Form 4. Treatment Completion

SECTION 4. END OF TREATMENT OUTCOME

- **Cured**: BPaL treatment completed **without evidence of failure AND two or more consecutive cultures taken at least 30 days apart** within the last three months of treatment, are negative.

- **Treatment completed**: BPaL treatment completed **without evidence of failure BUT no record** that two or more consecutive cultures taken at least 30 days within the last three months of treatment , are negative.

- **Treatment success**: The sum of cured and treatment completed.

Form 4. Treatment Completion

SECTION 4. END OF TREATMENT OUTCOME

- **Treatment failed**:
- Lack of culture conversion at the 6th month of treatment, or
- Culture reversion at 5th month or later in a patient with previous culture conversion to negative
- Decision to terminate treatment early because of:
  - poor clinical or radiological response as decided by the expert committee; or
  - permanent discontinuation of either Bdq or Pa, or both at any time due to Adverse Event; or
  - Permanent discontinuation of Lzd if having less than four weeks of full dosage due to Adverse Event.

Form 4. Treatment Completion

SECTION 4. END OF TREATMENT OUTCOME

- **Died**: A patient who dies for any reason during the course of treatment.
  - *Complete Form 6. Adverse Event*

- **Lost to follow-up**: A patient whose treatment was interrupted for 2 consecutive months or more.

- **Not evaluated:** A patient for whom no treatment outcome is assigned, including but not limited to participant was withdrawn after enrollment due to protocol violation(s)

Form 4. Treatment Completion

SECTION 4. END OF TREATMENT OUTCOME

- **Treatment termination due to baseline resistance to any of the BPaL component drugs (Bedaquiline, Pretomanid, Linezolid)**: Patients who receive **culture-based DST results** several months after starting the BPaL regimen are to be switched to an individualized regimen if **resistance to BPaL component drugs** is discovered. For such patients, this outcome should be reported.

Form 5. After treatment Follow-up

- Complete the form even if patient

1. Dies during the after-treatment follow-up period
2. Withdraws consent during the after-treatment follow-up period
3. Lost-to-follow-up during the after-treatment follow-up period

Form 6. Adverse Event

- Complete the form if patient becomes pregnant during the treatment
    - Report Pregnancy in **SECTION 7. INFORMATION CONCERNING PREGNANCY**
    - Follow-up pregnant patient and report information concerning infant(s) in **SECTION 8. INFORMATION CONCERNING INFANT(S)**
- Complete the form if patient dies during the treatment

Form 6. Adverse Event

- If Form 6. Adverse Event is completed, then Form 3. Evaluation must be completed as well (only relevant sections) even at the ad hoc visit

- Even if ad hoc visit, check one of the following options:

  ☐ Treatment, Week _____

  ☐ End of treatment, Week _____

  ☐ Follow-up after treatment completion, Month _____

Questions?