Repeated records and misclassification of TB records

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Objectives

- To understand the value of identifying repeated records concerning the same patient in the TB routine notification system

- To understand how it is possible to correct the misclassified type of entry status of TB records

- To calculate the difference in the number of new notified cases of tuberculosis (TB) when repeated records are removed

- To identify possible reasons why duplicate or misclassified records may exist in the TB notification system of your country

- To discuss possible methods to assess the number of duplicate or misclassified TB records, in your country
Exercise

- TB notification – Excel spreadsheet: "Exercise 2 – repeated records"
- Revise repeated records to decide which pairs belong to the same people
  - Patient’s name
  - Patient mother’s name
  - Date of birth
- Classifying repeated records into six mutually exclusive categories (do not classify the first one, just from the second record onwards):
  - true duplicate
  - return after default
  - relapse after cure
  - transfer between health care units
  - inconclusive
  - impossible to classify due to missing data
- Action
  - first notifications, returns after default, relapses and records with inconclusive or missing data: kept in the database
  - transfers in/out: joined
  - true duplicates: removed from the database
Flow diagram – What to do in case of possible record duplication?

Possible repetition

WHICH TREATMENT?

- WHICH HEALTH CARE UNIT?

= True duplicate

≠ RE-TREATMENT: Return after default or Relapse after cure

- KEEP 1st RECORD, COMPLETING IT WITH DATA AVAILABLE AT 2nd RECORD
- EXCLUDE 2nd RECORD

≠ Transfer from health care units

KEEP both records

≠ Combine records

HOMONYMS
# Results – Brazilian study

<table>
<thead>
<tr>
<th>State</th>
<th>N repetitive records</th>
<th>N new cases</th>
<th>Incidence rate</th>
<th>Rate difference</th>
<th>Proportion cured New cases</th>
<th>Proportion difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
<td>Before</td>
<td>After</td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>19064</td>
<td>81330</td>
<td>74113</td>
<td>44.2</td>
<td>40.2</td>
<td>9.7</td>
</tr>
</tbody>
</table>