

Demonstration of how to configure the Numerator relations page of the Tool

1. While still in More-Administration, click on the tab labeled “Numerator relations”. This is where you will specify pairs of data elements which should be compared to each other. By default, the Tool may recommend some pairs.

In addition, there is a blue Add button in the lower right corner of the page that can be used to add new “Numerator relations”.

Administration

This module is used for configuring the Data Quality Tool, and mapping the proposed data quality indicators to data elements and indicators in the DHIS 2 database. This configuration is used as the basis for the Annua configuration is also used for the Dashboard.

Numerators		Numerator groups		Numerator relations		Numerator quality parameters		Denominators		Denominator relations		External data comparison	
Name		Numerator A	Numerator B	Type	Threshold (%)	Threshold explanation	Description						
ANC 1 - TT1 ratio				A ~ B	10	% difference between A and B.	A and B should be roughly equal.					Edit	Delete
ANC 1 - IPTp1 ratio				A ~ B	10	% difference between A and B.	A and B should be roughly equal.					Edit	Delete
DPT 1 to 3 dropout rate		Penta1 doses given	Penta3 doses given	Dropout rate		Should not be negative	Dropout rate. A should be greater than B.					Edit	Delete
PLHIV in care to PLHIV on ART				A ~ B	10	% difference between A and B.	A and B should be roughly equal.					Edit	Delete
Malaria cases tested to malaria cases treated				A ~ B	10	% difference between A and B.	A and B should be roughly equal.					Edit	Delete
TB cases notified to TB cases registered for treatment				A ~ B	10	% difference between A and B.	A and B should be roughly equal.					Edit	Delete
Confirmed malaria cases to confirmed malaria cases treated				A ~ B	10	% difference between A and B.	A and B should be roughly equal.					Edit	Delete
													Add

2. We have already mapped DPT1 and DPT3, so the Tool is able to automatically configure the relation of DPT 1 to DPT3. Numerator A (DPT 1) has been mapped to “Penta 1 doses given”. Numerator B (DPT 3) has been mapped to “Penta 3 doses given”. By default, this relation is set to Type = Dropout rate.

DPT 1 to 3 dropout rate	Penta1 doses given	Penta3 doses given	Dropout rate		Should not be negative	Dropout rate. A should be greater than B.	Edit
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3. To see how “Numerator relations” are configured, click on the Edit button to the right of “ANC 1 – IPTp 1 ratio”. A default relationship “Type” is suggested: $A = B$. And a default Threshold is suggested: 10%. The meaning of “Threshold” depends upon the relationship type. For relationship type of $A = B$, the threshold is defined as the maximum % that Numerator A can differ from Numerator B. For example, if ANC 1 and IPTp 1 differed by more than 10%, then this might suggest a possible data quality problem.

Edit relation

Name	ANC 1 - IPTp1 ratio
Type	$A \approx B$ ✕
Numerator A	ANC 1st visit ✕
Numerator B	Select numerator ▼
Threshold (+/-)	10 %

Threshold denotes the % difference from national figure that is accepted for a sub-national unit.

Cancel Save

4. ANC 1 is often significantly greater than IPTp 1¹. So we do not want to assess whether $A = B$. Instead, we want to assess whether the ratio of A to B for each sub-national unit (region or district) is the same as the ratio of A to B at national level. For this comparison, change “Type” to “Equal across orgunits”. For relationship type of “Equal across orgunits”, the threshold is defined as the maximum % that Numerator A can differ from Numerator B. For example, if ANC 1 and IPTp 1 differed by more than 10%, then this might suggest a possible data quality problem.

1 In practice, ANC 1 is frequently significantly greater than IPTp 1 due to missed opportunities for administering IPTp 1. Also, women who first visit antenatal clinic during their 1st 16 weeks of pregnancy are not eligible for IPTp with SP.

5. You cannot Save this relation until you have specified Numerator A and Numerator B. Numerator A is filled in by default because you have already mapped ANC 1.

Edit relation

Name	ANC 1 - IPTp1 ratio
Type	Dropout rate ✕
Numerator A	ANC 1st visit ✕
Numerator B	Select numerator ▼

Cancel Save

6. If you click on the down arrow to right of Numerator B, however, you will not find the numerator that you want. This is because the drop down list includes only numerators that you have already mapped. So, if you want to review the data using this relation, you must first go back and map the numerator “IPTp 1”. Click Cancel to abandon for now the attempt to configure this particular numerator relation.

Edit relation

Name	ANC 1 - IPTp1 ratio
Type	Dropout rate ✕
Numerator A	ANC 1st visit ✕
Numerator B	<div>Select numerator<ul style="list-style-type: none">ANC 1st visitDoctorPenta1 doses givenPenta3 doses given</div>

7. Next, let us click on the Add button at the bottom right of the “Numerator relations” page

Add relation

Name	<input type="text"/>
Type	Select type ▼
Numerator A	Select numerator ▼
Numerator B	Select numerator ▼
Threshold (+/-)	<input type="text" value="10"/> %

Threshold denotes the % difference from national figure that is accepted for a sub-national unit.

Again, all field must be filled before you will be permitted to Save the relation. You will do this as part of the next exercise.