



# dhis2 academy

## Min/Max values—the (lost) secret to DQ success

Data Quality Academy online

# Min/Max ranges (1) - revision

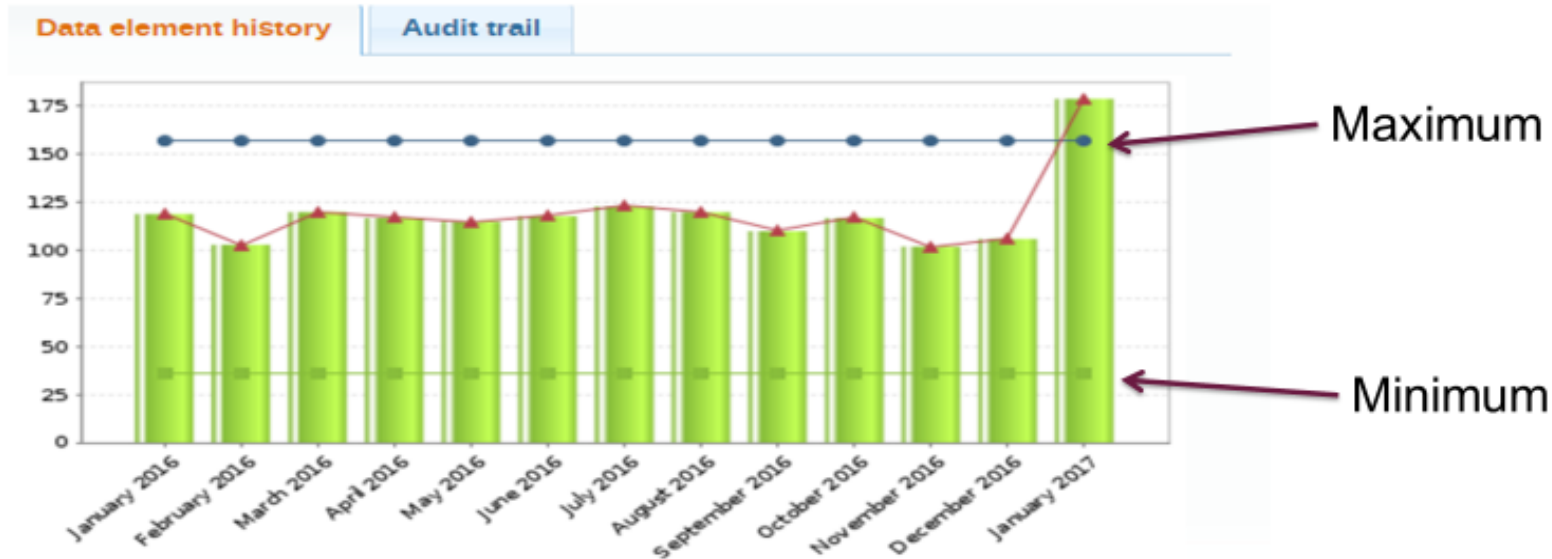
- Good quality routine health data is generally stable and consistent, and any large variations can and should be explained.
- The setting of minimum and maximum ranges is to provide a guide as to what the data should not exceed and if used correctly assists in preventing/limiting extreme outliers
- Therefore ranges should be wide enough to accept most values and narrow enough to trap values that are not likely.
- Min/Max ranges are NOT punishment
- In most cases with extreme outliers, there are no min/max values pre-set. Or if set- they are ignored

## Min/Max ranges (2) – considerations

- Used during data entry
- Some data elements may show a fair degree of fluctuation that could be considered normal, condoms and other family planning supplies are a good example without the data being considered problematic
- Can be used to catch disease/medical condition that is increasing
- Be careful when using this for **expected** seasonal increased
- Need access/rights to Data Entry screen – usually only granted to people who enter data based on User Role policy

# Min/Max values (3) – Data Entry – double click a value

- Setting of ranges promotes good data quality and potentially alerts to data that does not fit the norm
- View the last 12 months of data



# Min/Max (4) Review of Data Information Window

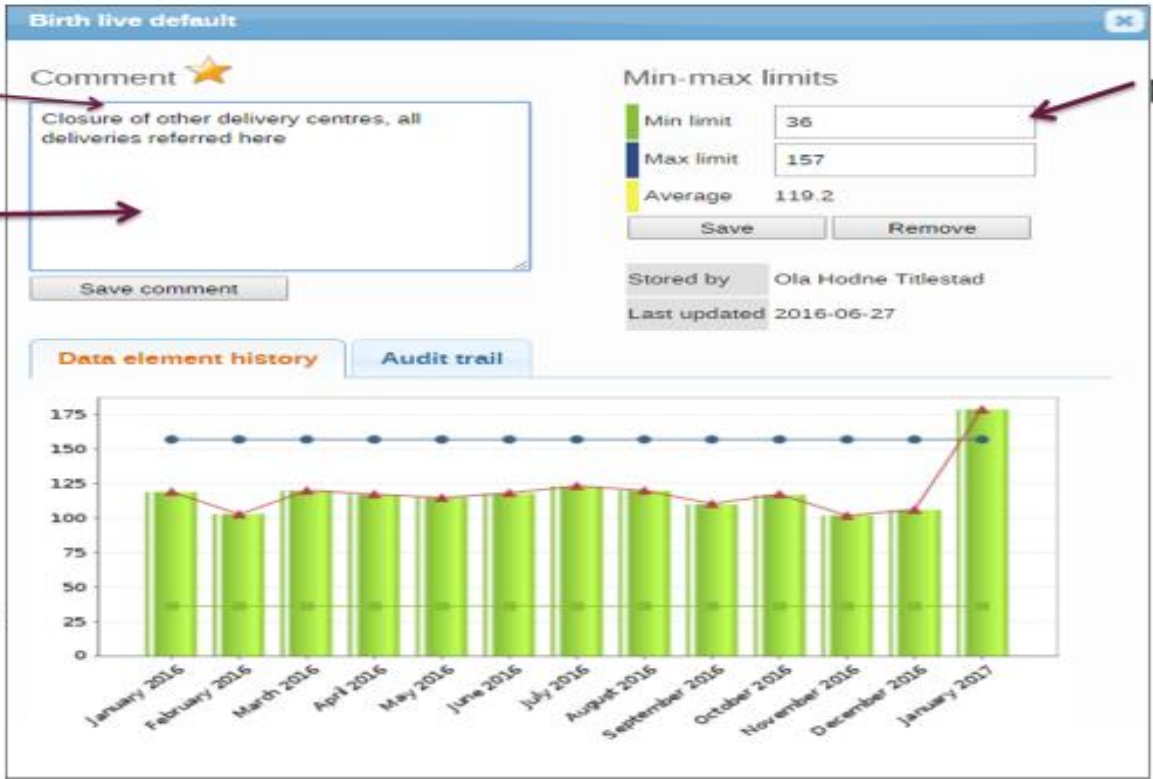
double click a value

Marked for comment

Comment field

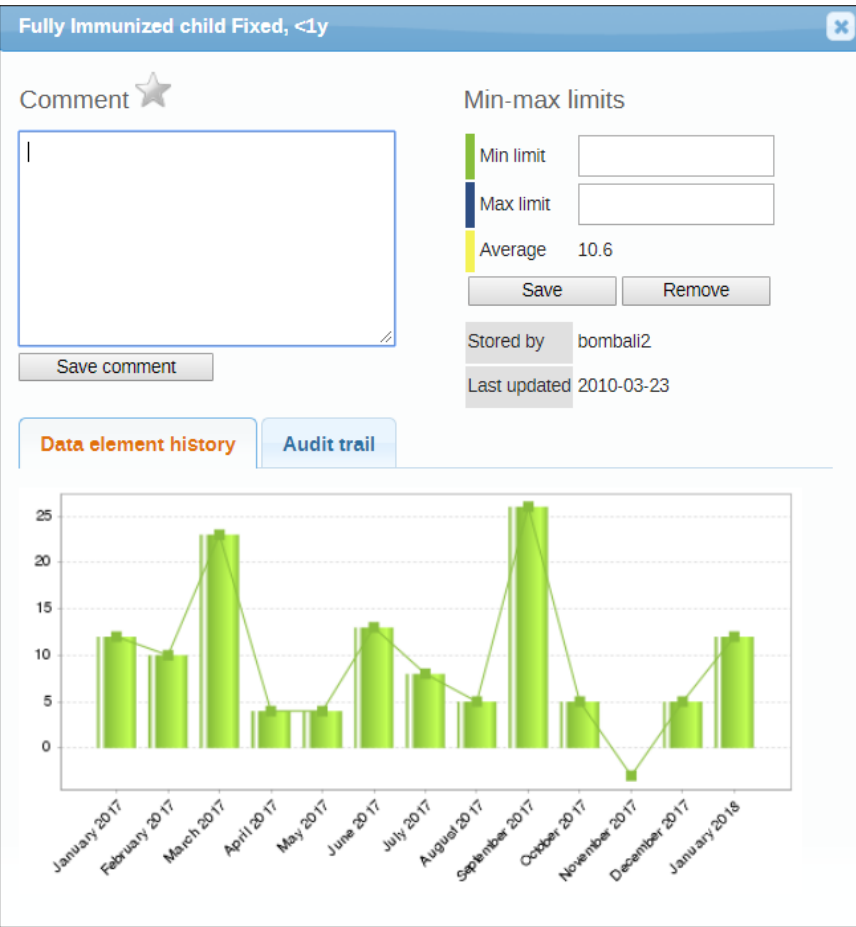
Why not used?

Data in graph format for the last 12 months



Min/Max range limits

# Min/Max (5) – thinking about ranges



- No ranges set
- Lots of variation
- Eyeball the values – what range for this specific Data Element – can be suggest?
- Min = 4
- Max = 18
- The range set here is only for this data element for this facility

## Min/Max (6) - Audit trail

Data element history		Audit trail	
On	Modified by	Value	Modification
2016-06-27 08:43	norah_stoops	181	Update
2016-06-27 08:43	norah_stoops	203	Update
2016-06-27 08:42	norah_stoops	179	Update
2016-06-27 08:41	norah_stoops	179	Update
2016-06-27 08:41	norah_stoops	179	Update
2016-06-27 08:33	norah_stoops	147	Update

# Min/Max (7) – Automatic range setting

## How to set ranges automatically in bulk

- Data Administration
- Min/Max generation
- Select Data Set
- Select OU level – restrict selection  
(select more than that and the system will crash)
- Generate

### Min-Max Value Generation ?

Data Set

ART monthly summary

Child Health

Clinical Monitoring Checklist

Emergency Response

EPI Stock

Facility Assessment

HIV Care Monthly

HIV Peadiatric monthly summary

IDSR Weekly

IDSR Weekly (Start Wednesday)

Inpatient Morbidity/Mortality Summary

Life-Saving Commodities

MNCH Quarterly Report

Morbidity

Organisation Unit Selection

☒ Sierra Leone

☐ Bo

☐ Bombali

☐ Bonthe

☐ Kailahun

☐ Kambia

☐ Kenema

☐ Koinadugu

☐ Kono

☐ Moyamba

☐ Port Loko

☐ Pujehun

☐ Tonkolili

☐ Western Area

GENERATE

REMOVE



## Access to own country DHIS2 OR DEMO database for this training

- Confirm if Min/Max ranges have been set for your country – Country DHIS2 instance
- On a Staging/testing instance
  - Generate Min/Max values for 1 dataset and limited OU level
  - If possible – open Data Entry screen and view Data Information Window
  - Run Min/Max violations for selected Data Set and OU level
  - Write a short report on violations
  - What is the action plan for this
- On Demo database – follow the same instructions