dhis2 academy

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

Data Quality Academy online
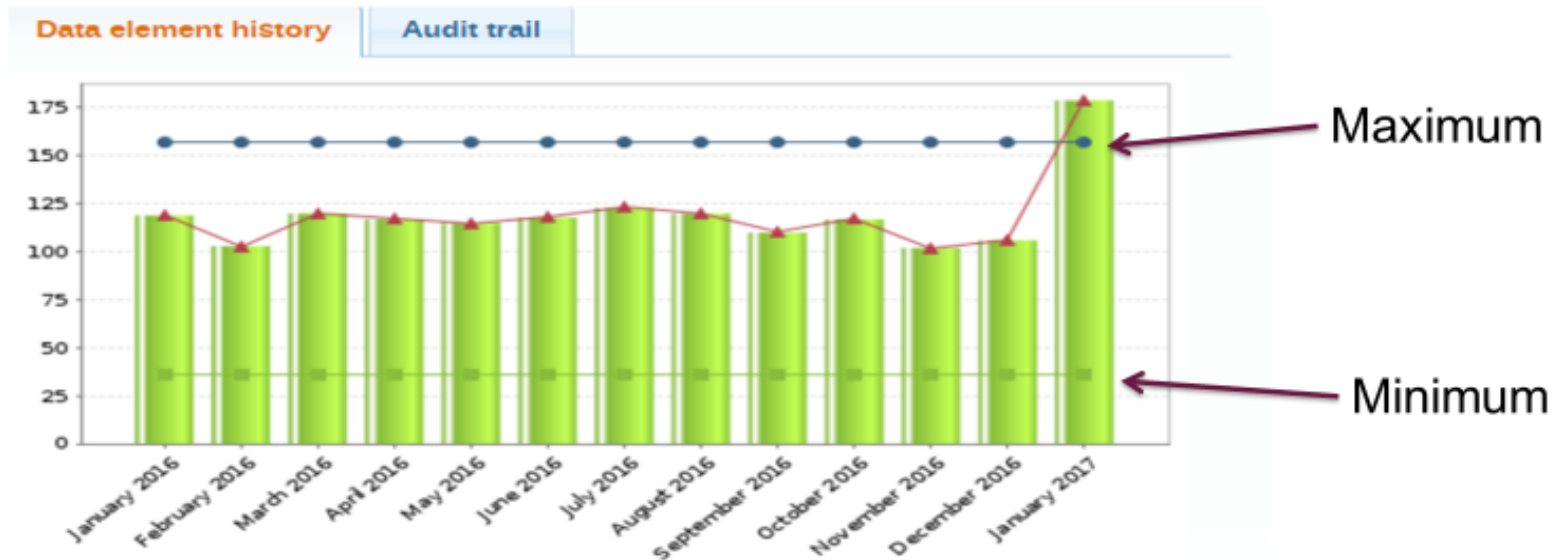
Min/Max ranges (1) - revision

- 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

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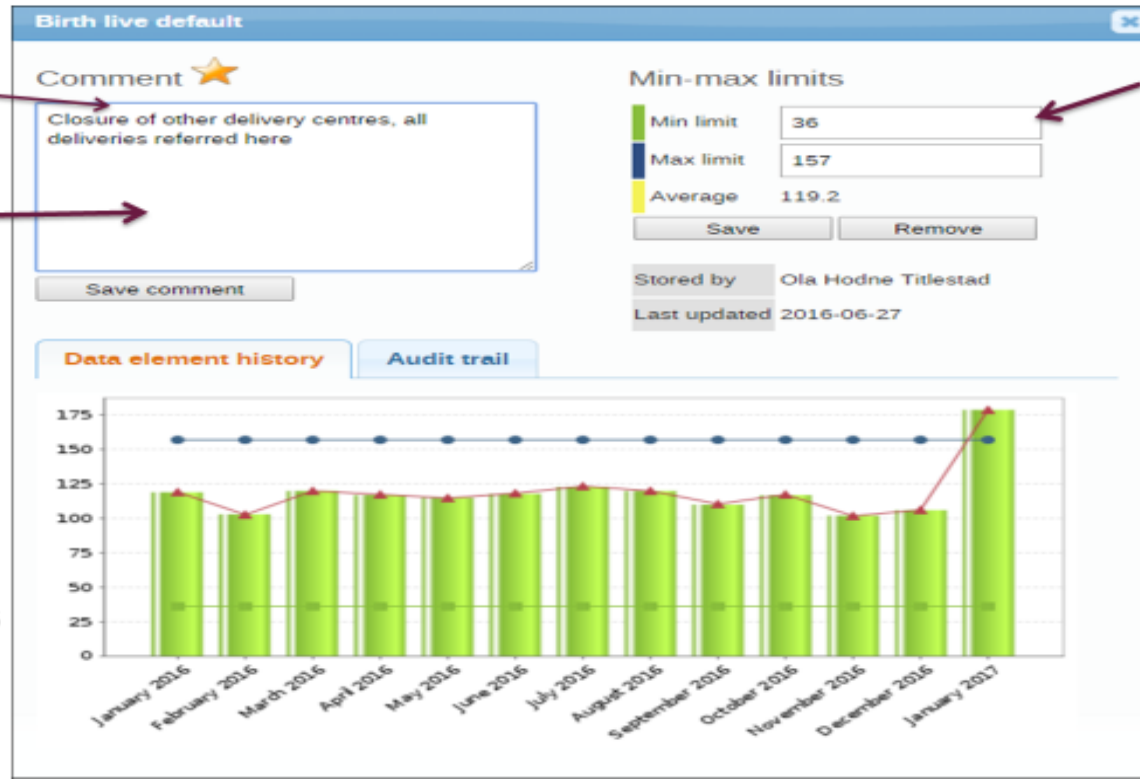- View the last 12 months of data

Min/Max (4) Review of Data Information Window
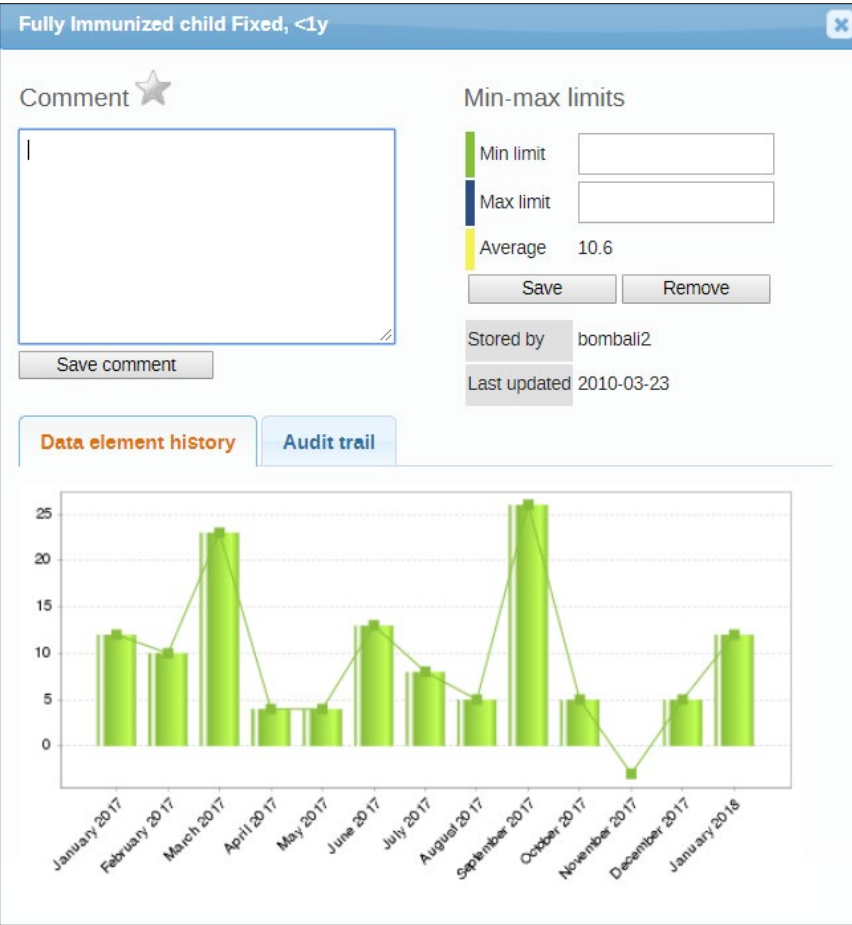## double click a value

Birth live default

Comment ⭐

Marked for comment →

Closure of other delivery centres, all deliveries referred here

Comment field →

Why not used?

Save comment

Min-max limits

	Min limit	36
	Max limit	157
	Average	119.2

Min/Max range limits

Save   Remove

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Data element history   **Audit trail**

Data in graph format for the last 12 months

Min/Max (5) – thinking about ranges

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- 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

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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**

Exercise

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