**Optional** Outlier Notification using Validation Rule Notification Exercise.

NOTE: *Completing this exercise is not required for the Level 2 data quality academy.* This exercise is just to give you practice on how to use predictors for outlier detection validation rules. The facilitators will check this to see if you have done it correctly and will provide you with feedback if you needed to change anything.

Please follow these steps using the presentations and guide as reference.

You can use the document **“How to use Predictor rules to visualize outliers”** for more details on how to create the predictor in this exercise.

https://academy.demos.dhis2.org/dq-config/

Self register.

1. Create a data element to store the predicted value for ANC1 Outlier Threshold. Call the data element ANC1 Outlier Threshold – YourName: Ex: ANC1 Outlier Threshold – Scott
2. Create a predictor that calculates the ANC outlier threshold. Call the predictor: ANC1 Outlier Threshold – YourName
3. Run your predictor according to the instructions that are available
4. Create a validation rule to check if ANC1 is greater than your ANC1 outlier threshold. Call the validation rule: ANC1 Outlier Threshold – YourName
5. Create a validation rule group including your ANC1 Outlier Threshold. Call the validation rule group: ANC1 Outlier Threshold – YourName
6. Create a validation rule notification for your Call the predictor: ANC1 Outlier Threshold validation rule
7. Check your rule and notification by running a validation rule analysis
   1. Run it at the national level
   2. Run it for the period January 1, 2021 – June 30, 2021
   3. Select the Validation rule group you have created
   4. Ensure “Send notifications” is selected. To receive the notification, you must have your email entered within your user profile.
   5. Select Validate to run the analysis. Check your result in DHIS2.
   6. Check your email, you should receive the notification as well.

Note for live systems

1. Schedule your predictors to run in the scheduler application. Call your job: ANC1 Outlier Threshold Predictor Calculation – YourName
2. Schedule your validation rule monitoring job. Call this job: ANC1 Outlier Threshold Alerts – YourName
3. Ensure that your predictor runs BEFORE your validation rule monitoring job, otherwise you may not have generated outliers to compare your actual value to when running your validation rule analysis