

# Training of health centres data managers on use of WHO outlier tool in Rwanda improves data quality

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**Key message:** Trained data managers on WHO data quality tool, easy way to spot and correct outliers at health centres

## I Background

- High reporting rate of monthly Health facilities 99%
- Annual data quality assessment reported issues:
  - 60% are data counting errors and
  - 40% typing errors
- These errors can be easily detected using WHO data quality tool

## III Objectives

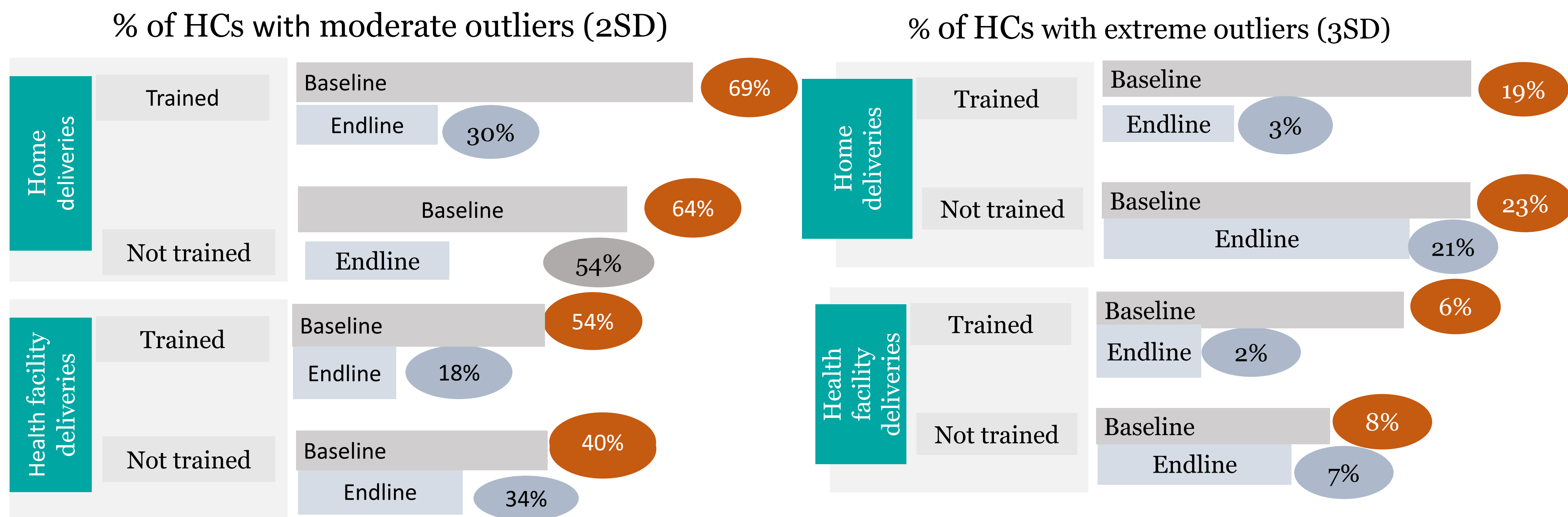
To evaluate the impact of training Health Centres' data managers on use of WHO data quality tool to identify outliers.

Specific objectives:

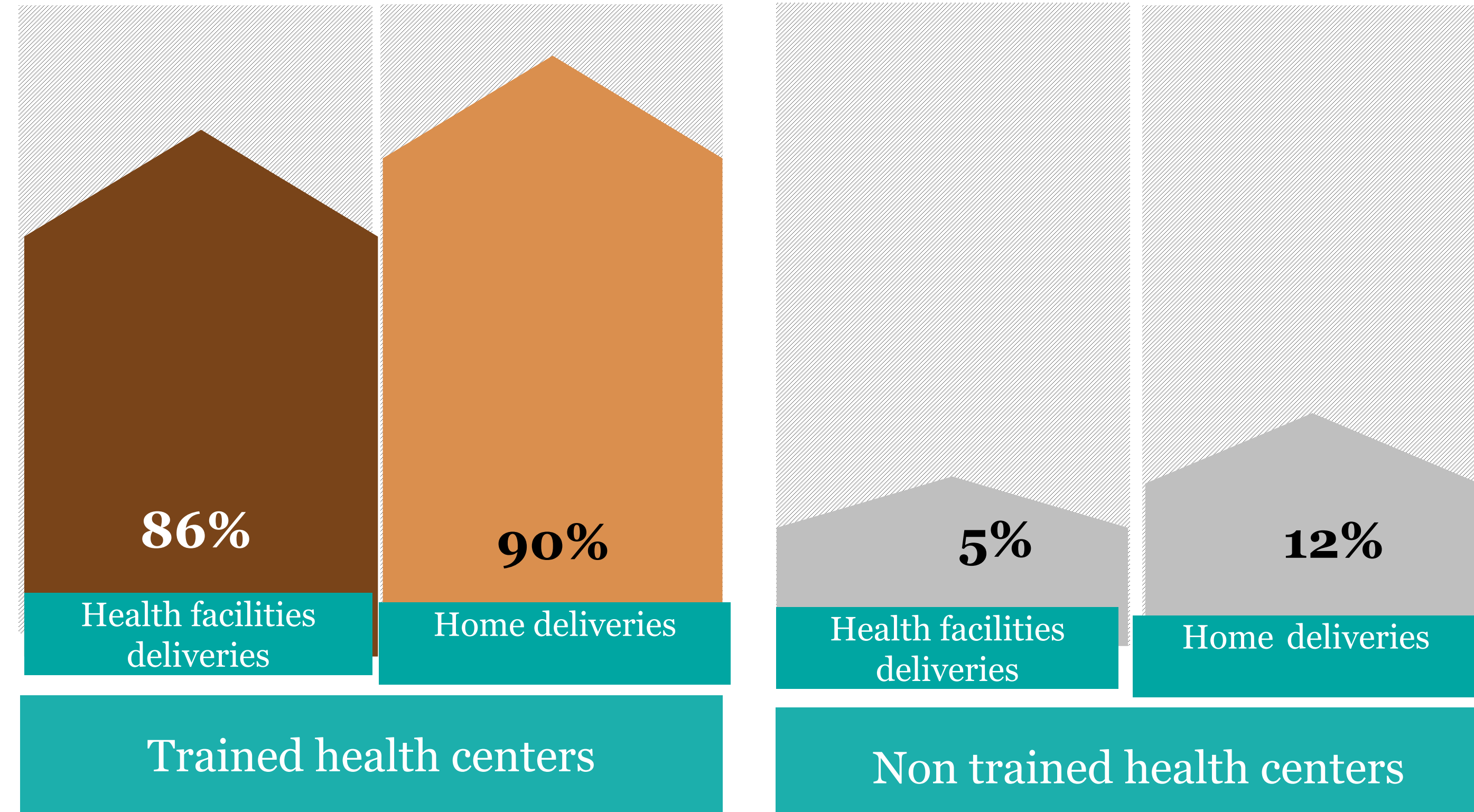
- To identify health centres that reported errors (outliers)
- To increase proportion of Health Centres that correct outliers

## IV Results

### 1. Proportion of Health centres that reported outliers



### 2. Proportion of Health Centres that corrected outliers



## Methods

**Selection of 2 indicators :** Health facility and home deliveries

**Training of data managers** from health centers of the 7 Districts on the WHO outlier component of the data quality tool

**Evaluation:**

- Compared **level (moderate and extreme)** highlighted in pink for easy quantification
- Compared trained and non trained health centres

Figure 3: Screenshot of the WHO Data Quality Tool interface. The table displays outliers identified for health facilities and home deliveries, comparing trained and non-trained groups across various districts and provinces.

| Province    | Unit                 | Data                          | Oct 22 | Nov 22 | Dec 22 | Jan 23 | Feb 23 | Mar 23 | Apr 23 | May 23 | Jun 23 | Jul 23 | Aug 23 | Sep 23 | Missing | Outlier | Total IF |
|-------------|----------------------|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|----------|
| Kigali City | Nyarugenge District  | Deliveries at health facility | 1539   | 1483   | 1450   | 1448   | 1223   | 1454   | 1486   | 1540   | 1501   | 1482   | 1516   | 1390   | 0       | 256     | 256      |
| East        | Ngoma District       | Deliveries at health facility | 908    | 816    | 831    | 783    | 749    | 859    | 842    | 883    | 888    | 816    | 829    | 1044   | 0       | 207     | 207      |
| East        | Bugesera District    | Deliveries at health facility | 1232   | 1194   | 1182   | 1147   | 1043   | 1233   | 1233   | 1327   | 1182   | 1239   | 1192   | 1136   | 0       | 166     | 166      |
| North       | Gakenke District     | Deliveries at health facility | 757    | 780    | 734    | 704    | 626    | 693    | 739    | 881    | 735    | 762    | 685    | 675    | 0       | 164     | 164      |
| West        | Nyamashenge District | Deliveries at health facility | 891    | 884    | 888    | 795    | 772    | 858    | 914    | 1017   | 853    | 888    | 856    | 882    | 0       | 155     | 155      |
| North       | Gicumbi District     | Deliveries at health facility | 950    | 996    | 1023   | 957    | 832    | 979    | 943    | 1016   | 1024   | 965    | 984    | 938    | 0       | 148     | 148      |
| South       | Huye District        | Deliveries at health facility | 890    | 908    | 918    | 890    | 829    | 922    | 969    | 1044   | 935    | 842    | 896    | 897    | 0       | 144     | 144      |
| East        | Gatsibo District     | Deliveries at health facility | 1194   | 1222   | 1208   | 1179   | 1076   | 1230   | 1276   | 1268   | 1220   | 1261   | 1160   | 1167   | 0       | 141     | 141      |
| North       | Burera District      | Deliveries at health facility | 701    | 709    | 787    | 661    | 625    | 685    | 662    | 673    | 631    | 607    | 570    | 589    | 0       | 140     | 140      |
| South       | Muhanga District     | Deliveries at health facility | 811    | 821    | 839    | 832    | 694    | 795    | 804    | 917    | 796    | 735    | 754    | 728    | 0       | 134     | 134      |
| East        | Kayanza District     | Deliveries at health facility | 1051   | 927    | 998    | 1020   | 910    | 1020   | 1024   | 1122   | 989    | 985    | 955    | 1040   | 0       | 129     | 129      |
| South       | Nyanza District      | Deliveries at health facility | 736    | 740    | 766    | 662    | 595    | 763    | 721    | 726    | 737    | 714    | 667    | 714    | 0       | 127     | 127      |
| Kigali City | Kicukiro District    | Deliveries at health facility | 1237   | 1160   | 1169   | 1104   | 1036   | 1130   | 1143   | 1195   | 1184   | 1170   | 1133   | 1148   | 0       | 125     | 125      |
| North       | Musanze District     | Deliveries at health facility | 1148   | 1132   | 1168   | 1149   | 1043   | 1107   | 1097   | 1202   | 1105   | 1116   | 1185   | 1157   | 0       | 99      | 99       |

## V Conclusion and Recommendations:

- Training on WHO data quality tool reduced errors in health centres compared to non trained health centres
- We recommend all Data managers working in Health Centres in Rwanda are trained on the WHO outlier component of the data quality tool in DHIS2.

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