

Variance analysis SOP

A: TX_CURR VARIANCE:

1. *TX_CURR greater than expected TX_CURR.*

- 1.1 Flag when % difference between TX_CURR and expected TX_CURR is > 5.
- 1.2 Select if the crude number is greater than 5.

2. *TX_CURR less than expected TX_CURR.*

- 2.1 Flag when % difference between TX_CURR and expected TX_CURR is < -10
- 2.2 Select if the crude number is greater than 5.

Notes:

- When several facilities flagged are too many, priority should be on Tier 1 and 2 facilities.
- Lower Tier (T3-5) facilities will be considered with T1 and 2 if their TX_CURR are higher, hence they can impact the overall quality of data. (TX_CURR > 200)
- Leave facility flagged if their absolute numbers are low (. i.e., a small change in numbers could change the direction of the flag.
- **Expected TX_CURR = TX_CURR (previous quarter) + TX_NEW (current quarter)+TX_RTT(current quarter)-TX_ML(current quarter)**

B: TX_NET_NEW

1. For all tiers flag all facilities with **Negative TX_NET_NEW**

Note: if facilities flagged are many, include for review by IP only facilities with **TX_NET_NEW <-3**

C: TV PVLS

1. *Low VLS*

Flag if Viral Load Suppression is less than 80%

Note: VLS suppression = PVLS numerator current quarter / PVLS Denominator of the current quarter.

2. *Low VLS*

Flag if Viral loads coverage is less than 80%

Note: Viral Load Coverage = PVLS denominator of current quarter / TX_CURR of Quarter before last quarter.

D: HTS_TST VARIANCE:

1. **Change in in HTS_TST:** Flag if change in HTS_TST from the previous > 50% OR <- 25%

Notes:

For a flagged facility to be part of sites for review by IP, the following criteria should have been met:

- The facility should be Tier 1 or 2 and if the change in HTS_TST is. **(n>50)**
- Lower Tiers (3 to 5) will be included in the change in HTS_TST between quarters is **(n>200)**
- HTS_TST change is the difference between the HTS_TST of the current quarter and HTS_TST of the previous quarter.
Eg. HTS_TST change = **HTS_TST Q2 – HTS_TST Q1**
- HTS_TST percentage Change = **(HTS_TST Q2 – HTS_TST Q1)/HTS_TST Q1**

3. Low/High HTS Positivity: Flag if % HTS_POS of the analyzed quarter **> 20% OR <3%**

Notes:

For a flagged facility to be part of sites for review by IP, the following criteria should have been met:

- The facility should be Tier 1 or 2 and they are not too small. **(N>50)**
- Lower Tiers (3 to 5) will be included if they have a relatively higher number **(N>200)** in one of the comparisons quarters.
- HTS Positivity is the percentage of clients who tested positive in that particular quarter.
Eg. HTS Positivity = $\text{HTS_POS Q2} / \text{HTS_TST Q2}$

4. Change in HTS_POS: Flag if a change in positivity from the previous quarter **<-5% OR > 10%**

Notes:

For a flagged facility to be part of sites for review by IP, the following criteria should have been met:

- The facility should be Tier 1 or 2 and the quarterly numbers tested in both quarters are not too small. **(N>50)**
- Lower Tiers (3 to 5) will be included if they have a relatively higher number **(N>200)** in one of the comparisons quarters.
- Change in HTS_POS = $\text{HTS Positivity Q2} - \text{HTS Positivity Q1}$

E: INDEX_TST VARIANCE:

5. Change in INDEX_TST: Flag if change in INDEX_TST **> 50% OR <- 25%**

Notes:

For a flagged facility to be part of sites for review by IP, the following criteria should have been met:

- The facility should be Tier 1 or 2 and the quarterly numbers tested in both quarters are not too small. **(N>50)**
- Lower Tiers (3 to 5) will be included if they have a relatively higher number **(N>50)** in one of the comparisons quarters.
- INDEX_TST change is the difference between the INDEX_TST of the current quarter and INDEX_TST of the previous quarter.
Eg. INDEX_TST change = $\text{INDEX_TST Q2} - \text{INDEX_TST Q1}$
- INDEX_TST percentage Change = $(\text{INDEX_TST Q2} - \text{INDEX_TST Q1}) / \text{INDEX_TST Q1}$

6. Low/High INDEX_POS: Flag if % HTS_POS **> 50% OR <10%**

Notes:

For a flagged facility to be part of sites for review IP, the following criteria should have been met:

- All facilities that have tested a large number of clients and they are not too small. **(N>10)**
- INDEX Positivity is the percentage of clients who tested positive in that particular quarter.
Eg. INDEX Positivity = $\text{INDEX_POS Q2} / (\text{INDEX_TST} - \text{INDEX_KNOWNPOS}) \text{ Q2}$

7. Change in INDEX_POS: Flag if change in positivity **<-25% OR > 5%**

Notes:

For a flagged facility to be part of sites for review by IP, the percentage change between two quarters should meet the flag category.

- All facilities that have tested a large number of clients and they are not too small. **(N>50)**
- Change in INDEX_POS = $\text{INDEX Positivity Q2} - \text{INDEX Positivity Q1}$