Delivering High-Quality DSD Services at Scale

A CQUIN Learning Network Workshop

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Improving VL coverage and utilization for adolescents on ART in Kenya

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HIV Learning Network

The CQUIN Project for Differentiated Service Delivery

Background

- According to the 2018 Kenya AIDS Response Progress Report
  - 12% (1,493,400) of PLHIV in Kenya are 15-24 years old
  - Adolescents and young people (ADYP) 15-24 years contribute 33% of new HIV infection and 10% of HIV/AIDS-related deaths
  - 77% of PLHIV on ART achieved viral suppression

- A situational analysis report on factors affecting viral load suppression among children and adolescents by NASCOP, showed **approx. 54% viral load suppression among ADYP aged 10-19** year

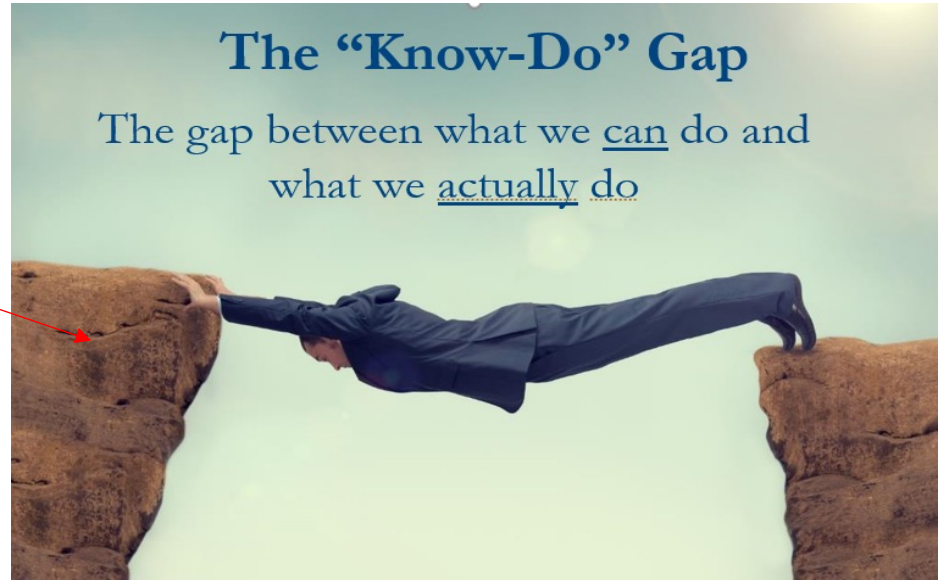
Reference: KARPR 2018 and Factors Affecting Viral Suppression in CALHIV in Kenya, 2018 –NASCOP

NASCOP 2018 ART Guidelines

- NASCOP in Kenya launched new ART guidelines in 2018 which includes VL and ADYP focus areas
- VL testing coverage is expanding rapidly, but utilization of test results for ADYP remains a major challenge
- **NASCOP 2018 ART guidelines recommend:**
  - Routine VL monitoring every 6 months for under age 24
  - Swift identification of ADYP with unsuppressed VL (≥ 401cps/mL)
  - Provision of 3 enhanced adherence counseling (EAC) sessions, the first within one month of unsuppressed VL test
  - Repeat VL within three months
  - Action based of repeat VL results, such as
    - switching to 2nd line therapy (≥ 1000cps/mL)
    - managing as general population (≤ 400 cps/mL)
    - consulting the Regional or National HIV Clinical TWG (401 – 999 cps/mL)

Quality Challenge Selection

- Key criteria for the quality challenge included:
  - Existence of a “know-do” gap in HIV programs
  - Focus on priority topic for stakeholders
  - Direct link to then 90:90:90 and now 95:95:95 targets
- Project stakeholders agreed to improve viral load coverage and utilization of results for ADYP using the QIC approach at 22 high priority facilities in Eastern region in three counties (Machakos, Kitui, and Makueni)



What is the QI Collaborative Approach?

- An organized network of sites (districts, facilities or communities) working together on a focused program topic using QI methods and tools
  - For a limited time, typically 12 to 18 months
  - Baseline data collection, analysis and dissemination of results
  - Share aim statements, indicators, and measurement processes
  - Regular (quarterly) forums for data review, shared learning and spreading successful changes
  - Final “harvest” meeting of successful interventions, tools and resources

The QI Collaborative Approach

Adapted from IHI Breakthrough Series

Select Improvement Aim

Convene expert meeting
Identify best practices, baseline data collection, develop and define aim statement, Indicators, data SOPs

Select/prepare sites

Learning Session 1

Action Period 1

Learning Session 2

Action Period 2

Learning Session 3

Action Period 3

Learning Session 4

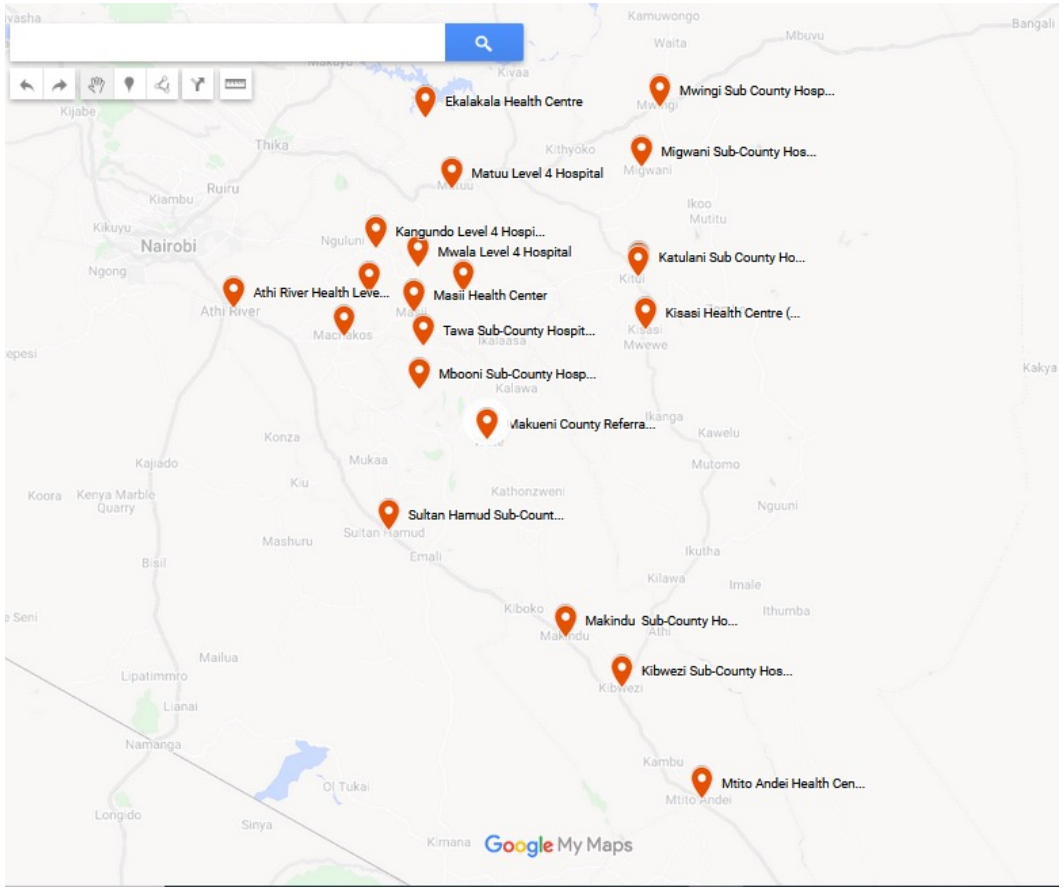
Learning Session 5

"Harvest" of successful interventions, tools, resources

Scale up and spread

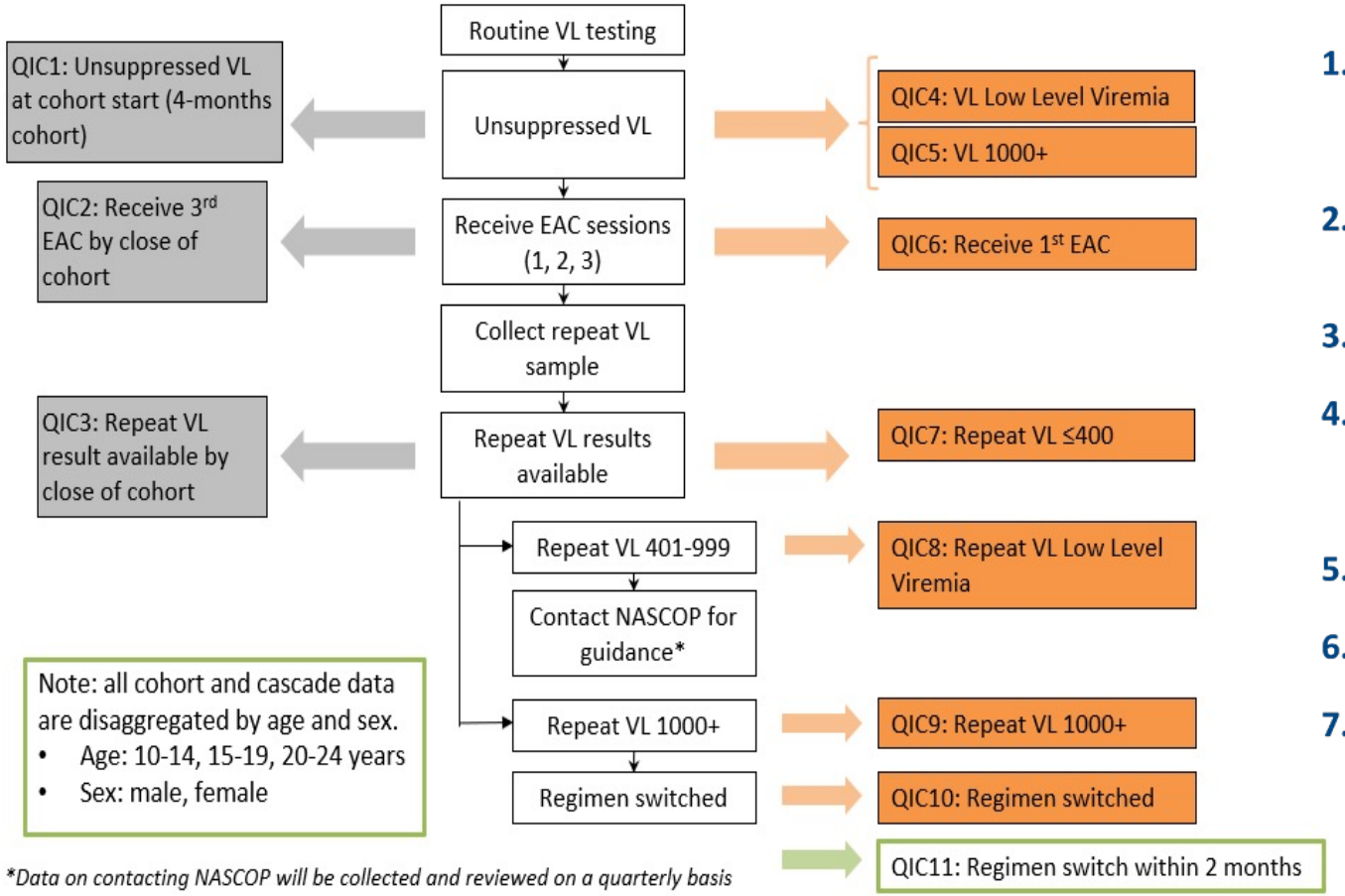
QIC Site Selection

- Stakeholders agreed to prioritize 22 HF based on:
  - **PEPFAR Priority Status**: Sites with high patient volume, defined as greater than 50 non-pregnant ADYP patients currently on ART for at least 6 months
  - **Know-do gap**: Sites that had previously received VL and ADYP training, had VL and ADYP systems in place but, consistent and high-quality implementation was lacking with potential for improvement noted during assessment
  - **Implementing partner**: Sites supported by Centre for Health Solutions (CHS) who had also partnered with previous QIC in Kisumu



Indicator Development

Process map



*Data on contacting NASCOP will be collected and reviewed on a quarterly basis

Indicators

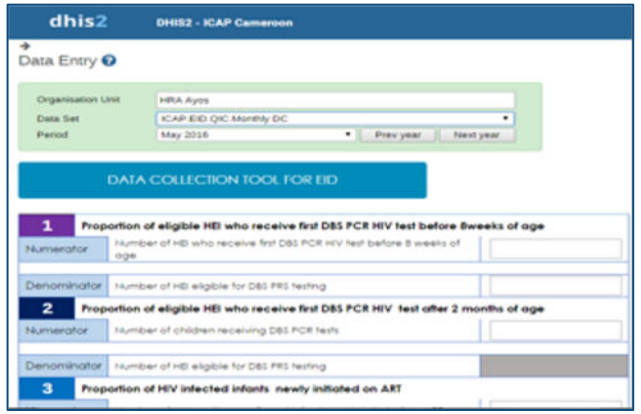
1. **Proportion of non-pregnant ADYP with UVL who received three enhanced adherence counselling sessions (EAC) within four months of the VL results being recorded in the register**
2. **Proportion of non-pregnant ADYP with UVL who received three EAC sessions and a repeat VL within four months of the results being recorded in the register**
3. **Proportion of non pregnant ADYP who are virally suppressed at repeat VL test**
4. **Proportion of non-pregnant ADYP on first-line ART regimen whose ART regimens are switched within two months of the results being recorded in the register**
5. **Number of UVL results received this month**
6. **Number of first EAC sessions conducted this month**
7. **Number of days of second-line ART stock-outs**

Data Management System: DHIS2

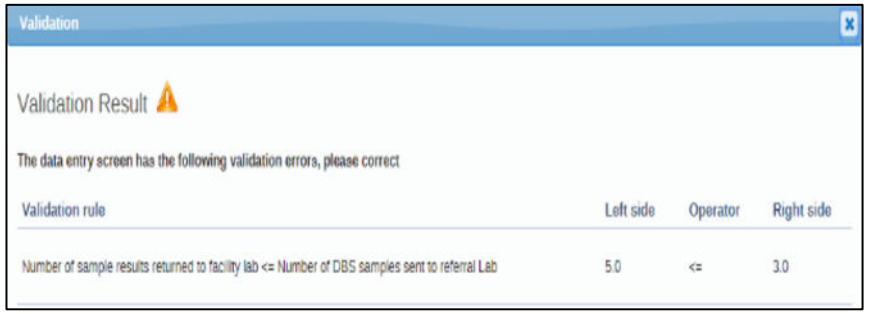
Site-level Monthly Report template

Source document: High VL register

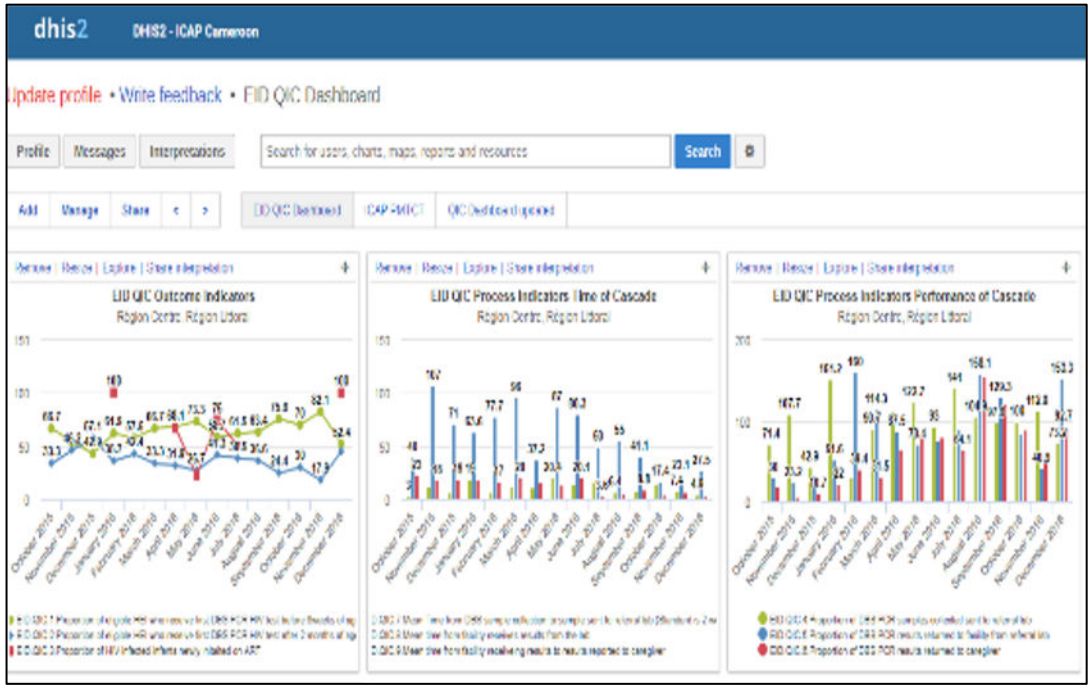
Data entry



Automated Validation



Automated Dashboards: Aggregate and facility-level



Baseline Assessment

- Baseline data collection was conducted in March 2019 with data from March 2018 to February 2019
  - Median of **16%** of ADYP received 3 EACs and repeat VL test within four months of receiving unsuppressed VL result.
- Site level data quality and service delivery assessments revealed multiple missed opportunities to provide recommended services to ADYP with unsuppressed VL
- Baseline stakeholder meeting was held in April 2019
  - 75 participants from ICAP, CHS, CDC Kenya, MOH NASCOP and CHMT and health facilities

Kenya ADYP QI Collaborative AIM statement

From April 2019 to July 2020, 22 HF in Machakos, Makueni and Kitui Counties will increase the proportion of adolescents and young people on ART with UVL who receive three EAC sessions and a repeat viral load test within 4 months from **16%*** to **95%**

Learning Sessions

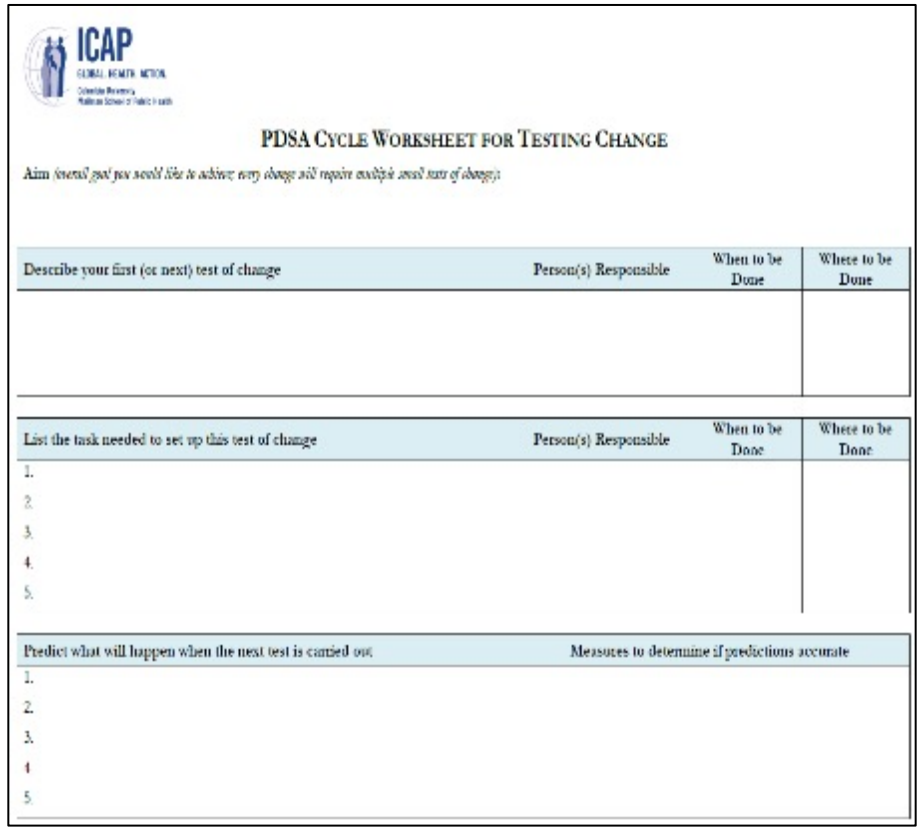
Learning Session 1 April 2019	• 79 participants from CDC, CHS, MOH and health facilities • Average scores in pre-test and post-test were 54% and 75% respectively • **98% of the participants were confident of starting QI activities in their health facilities as prescribed in the training**
Learning Session 2 August 2019	• 79 participants from CHS ,NHRL, KEMRI, MOH and health facilities • **53% highlighted "stigma assessment" and "pairing of ADYP – HVL vs LDL" as new change ideas**
Learning Session 3 December 2019	• 61 participants from CHS ,NHRL, KEMRI, MOH and health facilities • **43% felt they'd be trying out "transition assessment and preparation" and "pairing of ADYP HVL vs LDL" as new change ideas**
Learning Session 4 Via zoom in April 2020	• 62 participants CHS ,NHRL, KEMRI, MOH and health facilities • **84% were confident that given support, they can continue QI activities as planned for their locations**
Learning Session 5 August 2020	• 62 participants CHS ,NHRL, KEMRI, MOH and health facilities • **Participants from health facilities shared list of change interventions that worked and plans post QIC collaborative**

Monthly Supportive Supervision

Between April 2019 and July 2020, ICAP performed a total of **722** site support with **498** site visits and **224** virtual site support to staff on implementing change ideas and reviewing performance progress

Visits were made together with County Health Management Team, Sub-County Health Management Team and CHS local implementing partners supporting each facility

- PDSA WORK SHEET



ICAP

PDSA CYCLE WORKSHEET FOR TESTING CHANGE

Aim *(overall goal you would like to achieve; may require multiple small tests of change):*

Describe your first (or next) test of change	Person(s) Responsible	When to be Done	Where to be Done

List the task needed to set up this test of change	Person(s) Responsible	When to be Done	Where to be Done
1.			
2.			
3.			
4.			
5.			

Predict what will happen when the next test is carried out	Measures to determine if predictions accurate
1.	
2.	
3.	
4	
5.	

Successful Change Interventions

Clinic workflow and process modifications

- QI teams holding weekly multi-disciplinary team meetings to discuss all new high VL clients, those due for repeat VL and those to be switched to second line treatment
- Merging adolescent clinics with support groups on the same day to reduce hospital visits
- Customized phone reminders via SMS texts sent a day before appointment to reduce defaulters
- Clinic appointments restructured to have separate clinic days for the various patient cohorts like children, adolescents, discordant couples, adolescents and young people and high viral load clinics
- Synchronizing appointment dates between clinicians and adherence counsellors to reduce confusion
- Procure wrist watches for ADYP with UVL and set daily reminder alarm for taking medication

Successful Change Interventions

Community engagement

- QIC teams conduct school mapping for adolescents with high VL
- Updating locator information among adolescents at every clinic visit
- Encourage ADYP to pick drugs from nearest facilities
- Transition preparation and support from one age band to next
- Hold virtual PSSG sessions for ADYPs via WhatsApp

Healthcare work modification and capacity building

- Case managers conduct home visits to selected high VL clients to identify and address barriers
- Use of ADYP peer mentors to support adherence

Successful Change Interventions

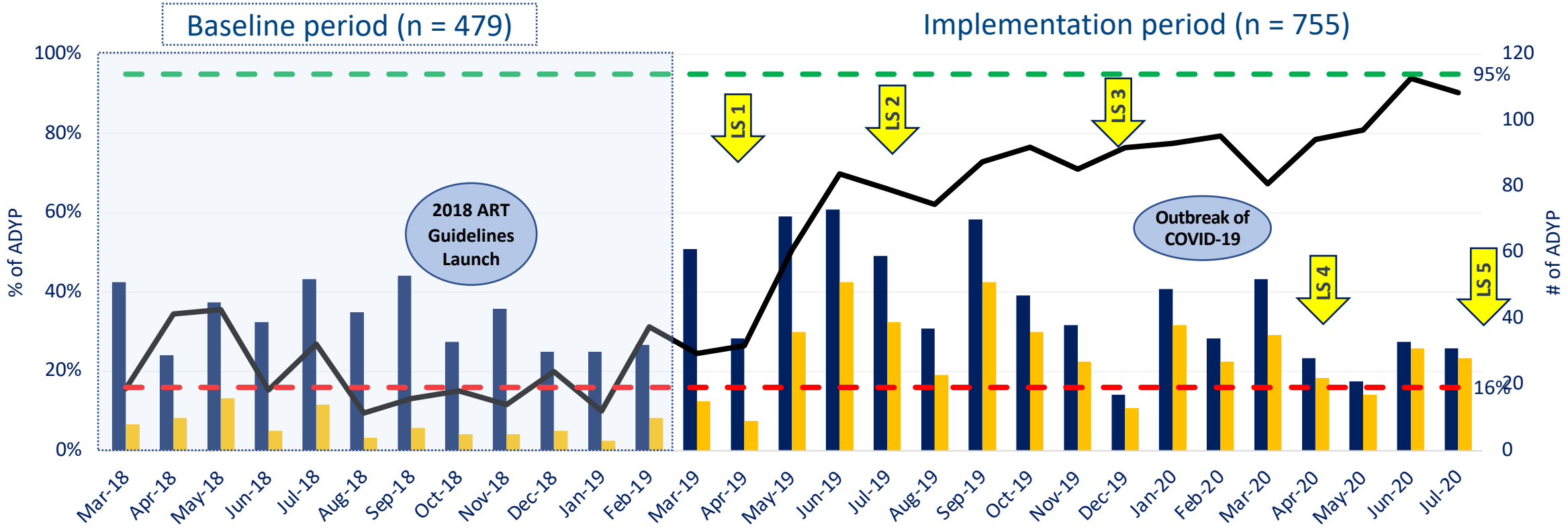
Client and family education and engagement

- Involvement of caregivers during EACs sessions
- Pair ADYP with high VL and peers who have achieved viral suppression
- Conduct structured health education for ADYP and caregivers on key HIV care topics

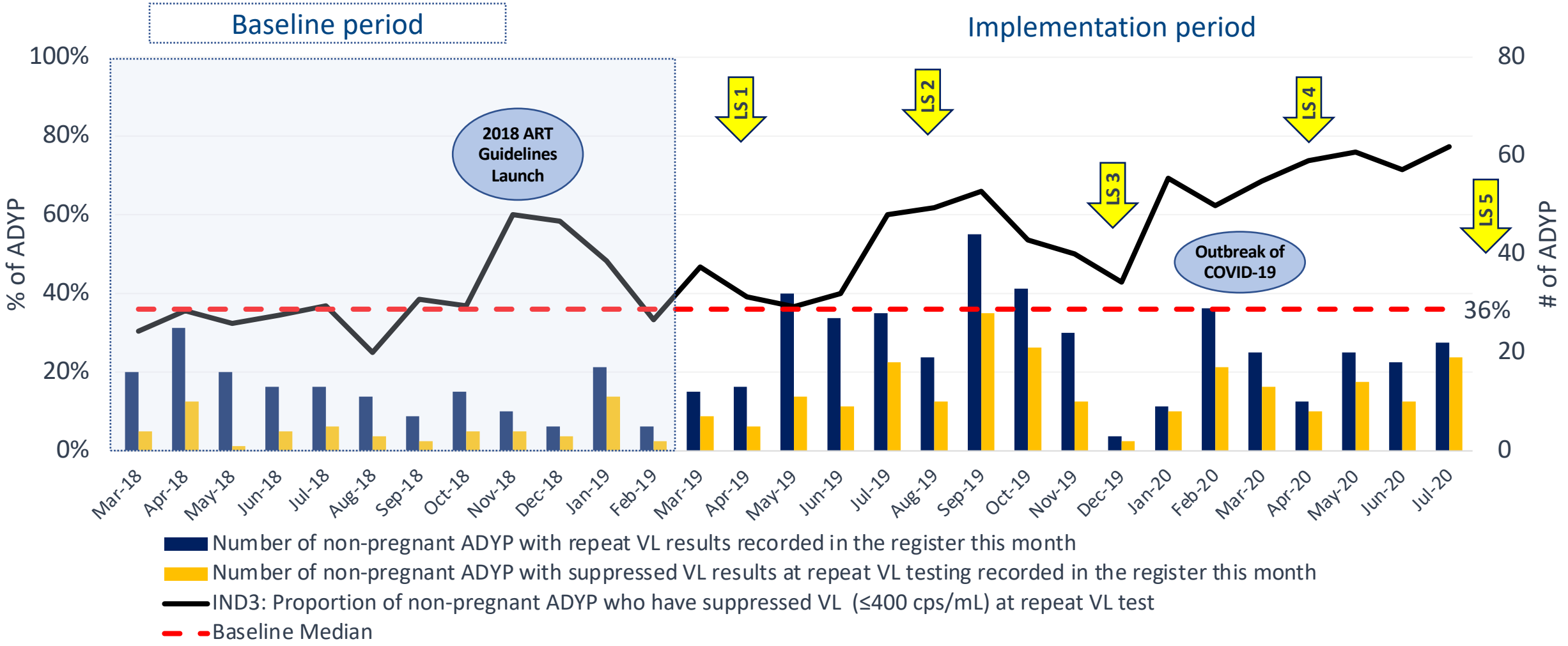
Results management, documentation and data quality

- Conduct weekly/monthly register verification for completeness and accuracy
- Appoint a VL focal persons to oversee results tracking and documentation
- Remote logging of samples and onsite printing of VL results

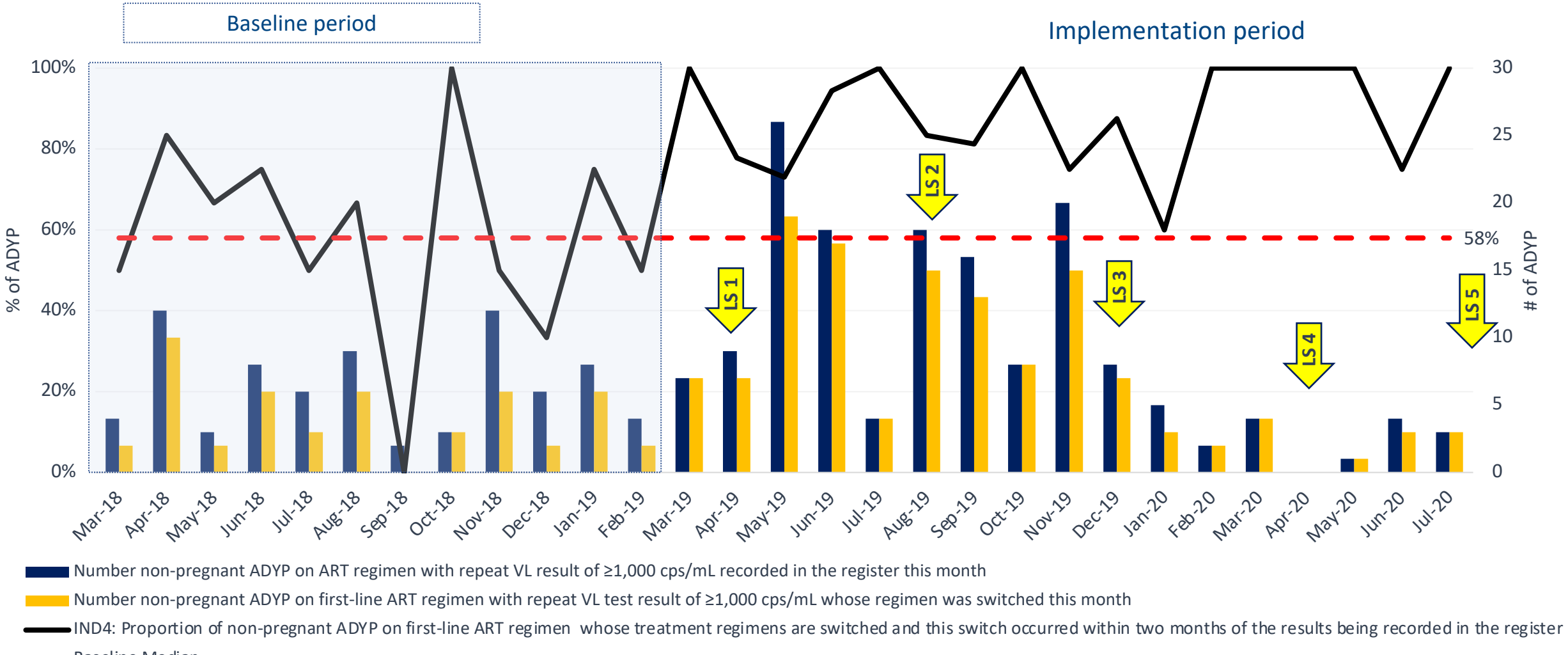
Progress to the aim: Completion of 3 EAC sessions *and* a repeat VL test in 4 months



Suppression at Repeat VL Testing



Changing to 2nd line therapy within 2 months of test



Evaluation of Progress to Aim

Speed of Improvement

- It took an average of **1.9 months** for QIC sites to reach the aim
- *(Median 1, Range 0-7)*

Magnitude of Improvement

- On average, QIC sites achieved the aim for **10.7 out of 17 months of implementation** (63% of the time) *(Median 11, Range 5 to 16)*

Sustainability of Improvement

- The longest average run of months where QIC sites maintained the aim was **5.5 months**
- *(Median 4.5, Range 1-14)*

Acknowledgements

We acknowledge the following stakeholders for their consistent support - Ministry of Health, NASCOP, CDC in Kenya, Machakos CHMT, Makueni CHMT and Kitui CHMT, NHRL, and CHS and sub-county management teams, facility in-charges and MOST IMPORTANTLY the facility staff.

MINISTRY OF HEALTH

NASCOP

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

icap Global Health

chs
Centre for Health Solutions - Kenya