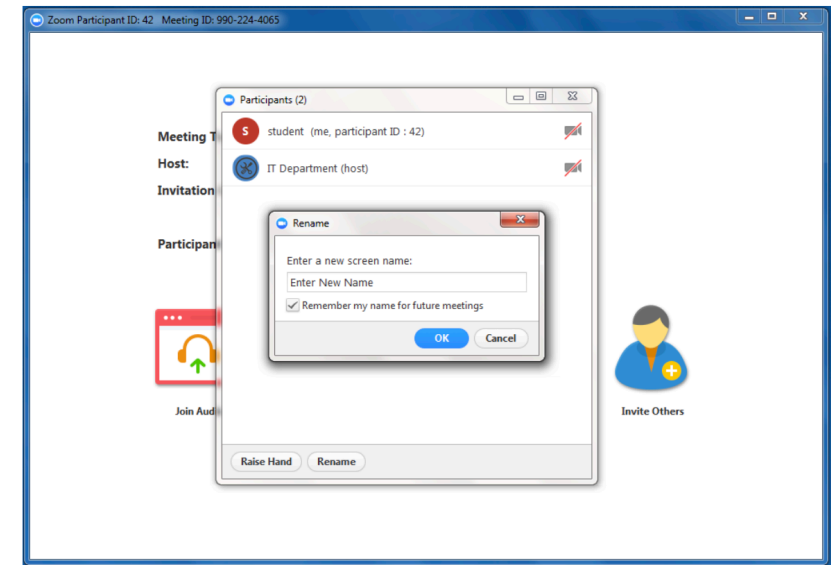# *Welcome to the LARC* Webinar

Please sign-in in the "Chat Box", include:
- Your Name
- Organization
- Site/s where you work or coach

Please rename yourself with your actual name or facility name

PAGER

Purpose:
- **To use QI cases to learn to "do" improvement, emphasizing peer-to-peer learning**
- **To share an example case presentation**

Agenda:
- Ice Breaker – Dr. Barbara (Record Meeting)
- Survey Monkey Results – Dr. Katy
- Knowledge Burst - Case Presentation Example – Dr. Barbara
- Team Presentations (10 minutes each, followed by 10 min Q & A) – Hatcliffe, NMRL, Budiriro
- Q & A (10 minutes) – Dr. Barbara / Dr. Katy

Ground Rules:
- Begin & end on time
- Respect for all persons & all thoughts
- Encourage engagement & participation
- Keep audio on mute unless speaking / Raise hand to share or put question in chat box

Expected Outcomes:
- **Reach LARC Project Goals - by learning from peers**
- **Make succinct presentations that get to the "heart" of the project**

Roles:
- Host – Dr. Barbara
- Facilitator – Dr. Barbara / Dr. Katy

LARC Webinars – July & August

Date	Time	Activity	Presentations
June 24	1-2:30 PM	LARC Webinar	Kuwadzana, BRIDH, Mbare
July 8	1-2:30 PM	LARC Webinar	Hatcliffe, NMRL, Budiriro
July 29	1-2:30 PM	LARC Webinar	Overspill/Epworth/Chitungwiza Central Hospital
August 5	1-2:30 PM	LARC Webinar	St Mary's/PSI lab/ Parirenyatwa Hosp
August 19	1-2:30 PM	LARC Webinar	Zengeza, Hopley, Seke North

Wakanda Clinic

Viral Load Results Interpretation and Patient Management

Country Team

Role	Name
Champion/Sponsor	
Team-Leader	
QI-Expert/Coach	
Data manager	
Frontline:	
Others	

Facility Information / Background

Facility Information	
# active patients on ART =	3337
# patients eligible for viral load =	2469
# viral samples collected / month =	300
% viral load coverage in 2017 =	83%
% viral load suppression in 2017 =	90%

The Story of Our Project

The Story of Our Project

Before

Upon receiving results:

- Poor communication of results from lab.
- Clinicians giving longer appointments (ranging between 30- 90 days).
- There would sometimes be no communication between clinician's and adherence team, hence patients would miss EAC, there was no timeline for SI to update the results in the EMR.

After

- Improved result & patient management process
  - Upon receiving results, the lab personnel prints in three copies and shares one copy with SI, the other with adherence then flags the High VL results and share with viremia clinic lead. Lab updates the VL log, SI updates EMR and adherence updates the EAC register.
  - Adherence lead calls all HVL patients immediately.
  - Viremia clinic lead updates viremia register and confirms the same (HVL line list) with adherence lead.
  - When patient reports to the clinic the adherence team and clinician informs him/her of their results and what it means, and EAC is commenced.
  - For those whose phones go unanswered physical tracing is done.

Project Summary

What are we trying to accomplish?	How will we know if a change is an improvement?	What change will we make that will result in an improvement?
Overarching Goal Patients with high VL attending EAC timely	**AIM Statement** Decrease percentage of patients with high VL not attending EAC within 30 days of receiving results from 49%, to 5% by March 2019. Metric $$\frac{\textit{of patients with HVL not attending EAC within 30 days of receiving results}}{\textit{Total \# of patients with HVL results}} * 100$$	**Intervention** **Restructure the patient notification process** 1. Shorten TCA to within 30 days for all VL patients 2. Call patients same day upon receipt of HVL results 3. Physical tracing for those whose phone calls don't go through after three attempts in a week.

Elevator Speech

This project is about:
- Improving follow up of patients with HVL not attending EAC within 30 days
- As a result of these efforts, we will achieve timely attendance of EAC for clients with HVL

It's important because we are concerned about:
- Patients with HVL missing timely EAC will impact on our suppression rate

Success will be measured by showing improvement in:
- % of patients with HVL attending EAC within 30 days

What we need from you (Addressed to other clinics within the facility)
- We would like to cascade lessons learnt to include other departments i.e. our TB program and your collaboration and ownership of the process to make part of our QI activity.

Process Mapping
## The First Step Towards Improvement

| Process Step	What Happens?	Who is Responsible	Duration	Forms/ Logs	Opportunity for Improvement
1. Viral load testing appointments booked	Make appointments in EMR for eligible clients per country guidelines	Clinicians	5 min	EMR	Reduce missed appointments
2. Client arrival at clinic	Clients are grouped, confirmed for VL bookings, and escorted to lab	Triage staff	1 hour	VL Request form, VL diary	Ensure MFL code client ID are entered in the order forms
3. Sample collection, processing, and storage	Lab collects, label, process, and package samples; store samples in freezer; complete lab requisition form and shipping manifest	Lab staff	3 hours	VL Request form, VL shipping log	
4. Sample transport	Currier picks up samples and deliver to testing labs every Monday	Currier	30 min	VL request forms, shipping manifest	Increase sample collection frequency to 2X a week

Process Step	What Happens?	Who is Responsible	Duration	Forms/ Logs	Opportunity for Improvement
5. Viral Load testing	Testing lab receives samples, verifies sample quality, accepts/rejects samples, signs/stamps sample manifest, returns one copy to clinic Testing lab analyzes samples	NHRL	10 working days	shipping manifest, receiving log, result dispatch log	Improve communication with clinic for reasons for no results or delayed results
6. Result reporting	Testing lab releases results to clinic (via LIMS)	NHRL	30 min	LIMS	Improve TAT
7. Result receiving at clinic	Clinic receives/verifies results; flags HVL and communicates to EAC team; enter results in VL tracking log	Lab staff	30 min	HVL register, batch summary form, VL tracking log	Improve LIMS server availability No designated person to print results, so sometimes results don't get printed

LINK

Process Step	What Happens?	Who is Responsible	Duration	Forms/ Logs	Opportunity for Improvement
8. Result documentation in EMR	Data entry clerk (DEC) enters results (printed from LIMS) into EMR	DEC	30 min	Printed results, EMR	Result entry into EMR sometimes not done timely
9. Notification of HVL clients	Enter HVL results into HVL register; notifies HVL focal person, calls patients re: results and book EAC appointment	Adherence Counselor	30 min (on the date HVL results are received)	EAC register, HVL register	Clients have enough refills and often decline to visit the clinic soon. Need to shorten TCA and develop SOP for calling clients back for EAC.

LINK
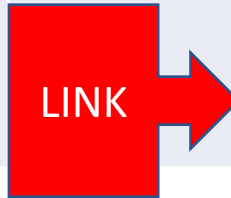
TCA=To Come Back for Appointment

Define **Measure** **Analyze** **Improve** **Control**
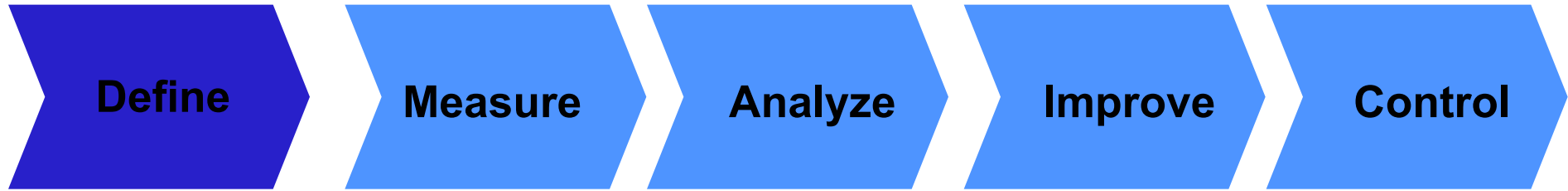
- **Gap (Problem Statement):**

"Clients with high VL not attending EAC timely, within 30 days".

Define → Measure → Analyze → Improve → Control

Voice of Customer (VOC)

- Who is your customer? = Clients on ART
- Tool used = Questionnaire
- Collection Process
  - Sample size = 146
  - Distributed over 30 days
  - Anonymously dropped by individual patient at a designated box at the reception

What did you learn? How did you apply what you learned in your intervention?

QUESTIONAIRE OF VOICE OF CUSTOMER

Unaonaje Huduma Zetu Ki jumla
- ☐ Mbaya sana
- ☐ Mbaya
- ☑ Nzuri ✓
- ☐ Nzuri sana
- ☐ bora

Ni sehemu gani ya huduma inachukua muda wako sana
- ☑ Kwa meza ✓
- ☐ Kwa pressure/Nurse
- ☐ Kwa daktari
- ☐ Kwa laboratory
- ☐ Kwa dawa
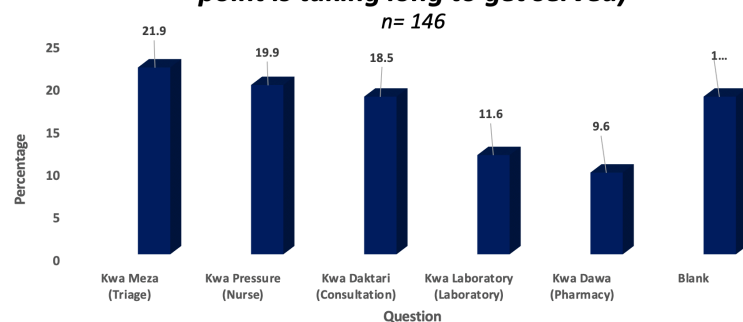
Unajua umuhimu wa kupima kiwango cha virusi mwililni?
- ☑ Ndio ✓
- ☐ Hapana

Ungependelea wakati wa kutolewa damu ya kupima kiwango cha virusi iwe wakati gani?
- ☑ Saa mbili asubuhi ✓
- ☐ Saa nane

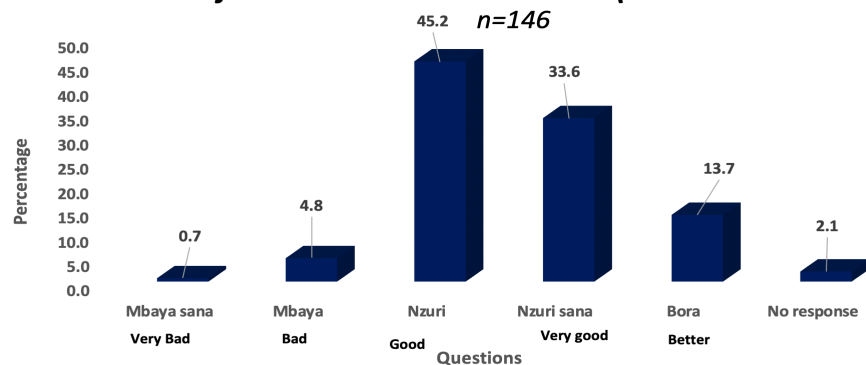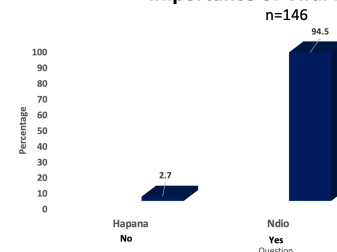Ni wapi ungependa turekebishe?   KWA MEZA

Define | Measure | Analyze | Improve | Control
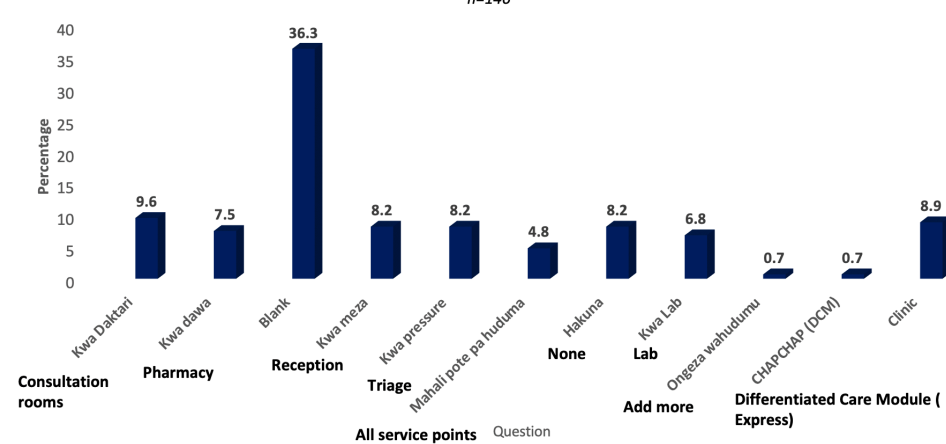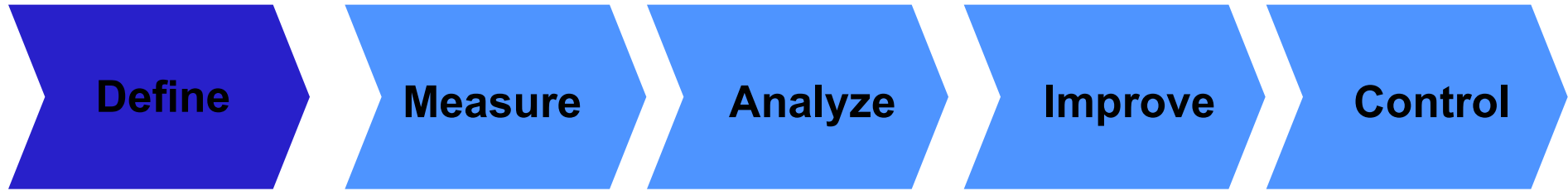
Voice of Customer (VOC)

What did you learn? How did you apply what you learned in your intervention?

- **Patients were not coming to clinic for appointments because they felt like the time spent in clinic was too long**
- **The patients identified the pharmacy as the service needing most improvement**

Define Measure Analyze Improve Control
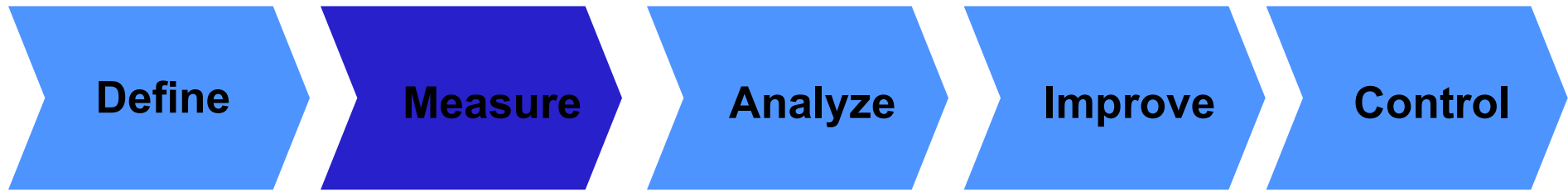
- Metric Selected

$$\frac{of\ patients\ with\ HVL\ not\ attending\ EAC\ (within\ 30\ days)of\ receiving\ \ results}{Total\ \#\ ofpatients\ \ HVL\ results\ received} * 100$$

- Baseline Data
  - 47.7% (were not attending EAC within 30 days)

Unaware of dispensing guidelines for VL clients

People

Results not shared within departments consistently

Delay in notifying clients w/ HVL

Prescribing TCAs > 30 days for VL clients

No timely result entry into EMR

EAC was not enhanced

Inefficient clinic / pharmacy visits

Process

Stationery

Materials / Supplies

Problem = High VL clients not attending EAC within 30 days of result release

Environment

Political instability
Unscheduled visits

Policy / Procedure

No SOPs on VL result reporting and patient management

Equipment

Printers
Internet
Computers
Power surge/ failure

Define | **Measure** | **Analyze** | **Improve** | **Control**

5 WHY on PROCESS

- **Results not shared within departments consistently**
  - **WHY**-Anyone could print results and update their own log, register, and EMR
  - **WHY**-There was **no focal person**
  - **WHY**-There was **no SOP** on results sharing
- **Delay in notifying clients with high viral load results**
  - **WHY**-Clinicians never used to sensitize clients to come for VL results within 30 days
  - **WHY**- There was **no focal person** to make follow up
  - **WHY**- Result management was **not standardized**
  - **WHY**- **Guidelines were not followed**
- **Prescribing longer TCA's even for VL patients**
  - **WHY**- **Clinicians had not been sensitized** on shortening TCA's for VL patients
  - **WHY**- There was **no SOP** on VL patient bookings

Define → **Measure** → **Analyze** → **Improve** → **Control**
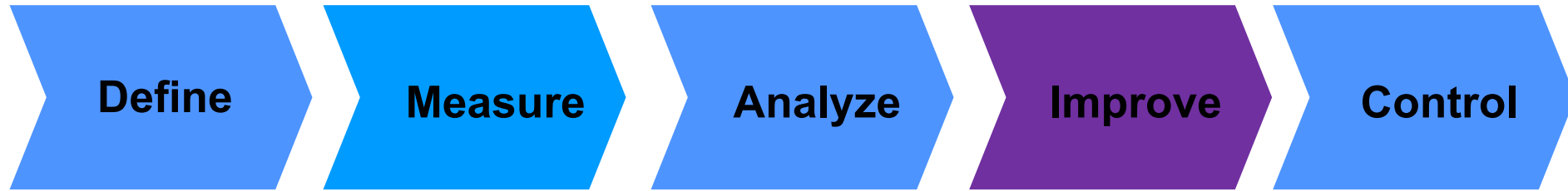
IMPACT / EFFORT GRID A Tool for Prioritizing Opportunities

IMPACT

Major Improvement

Just Do It

Avoid use of white out in the EAC diary
Print out legible results from LIMS
Use of the MFL in the lab order forms

Projects - Detailed planning and work
Categorized into three:
a) Too many writing to be done (Log books)
b) Follow up of patients with (HVL and those need a redraw)
c) Tracking of missing results (Lab and NHRL), deficient sample referred process (Mismatch)
We settled for B, Follow up of patients

Minor Improvement

Just Do It if Impactful

Maybe some day

Easy to Do **EFFORT** **Difficult to Do**

Define Measure Analyze Improve Control

5S

Before   **After**

Define → Measure → Analyze → Improve → Control

5S - BEFORE

5s Audit Score

5S - AFTER

5s Audit Score

Define → Measure → Analyze → Improve → Control

Visual Management

Unaware of dispensing guidelines for VL clients

People

Results not shared within departments consistently

Delay in notifying clients w/ HVL

Prescribing TCAs > 30 days for VL clients

No timely result entry into EMR

EAC was not enhanced

Inefficient clinic / pharmacy visits

Process

Stationery

Materials / Supplies

Problem = High VL clients not attending EAC within 30 days of result release

Environment

Political instability
Unscheduled visits

Policy / Procedure

No SOPs on VL result reporting and patient management

Equipment

Printers
Internet
Computers
Power surge/ failure

PDSA Cycle #1 (September) – *Shortened TCA*

ACT
Adopted the shortened TCA to 30 days for all VL clients

PLAN
LARC team lead to sensitize clinicians and VL patients on shortened TCA to 30 days

STUDY
Missed EAC appointments reduced from 20% to 9% in September

DO
Clinicians prescribed 30 days drugs for VL patients throughout August

PDSA Cycle #2 - October *Patient / Client Notification*

Adapted calling HLV clients with a call script; add physical tracing if unable to reach clients via phone

ACT

PLAN

The adherence nurse to notify patients on the same day upon receipt of HVL results

Missed EAC appointments increased from 9% to 11% in October

STUDY

DO

The adherence nurse called all the clients with HVL immediately in October
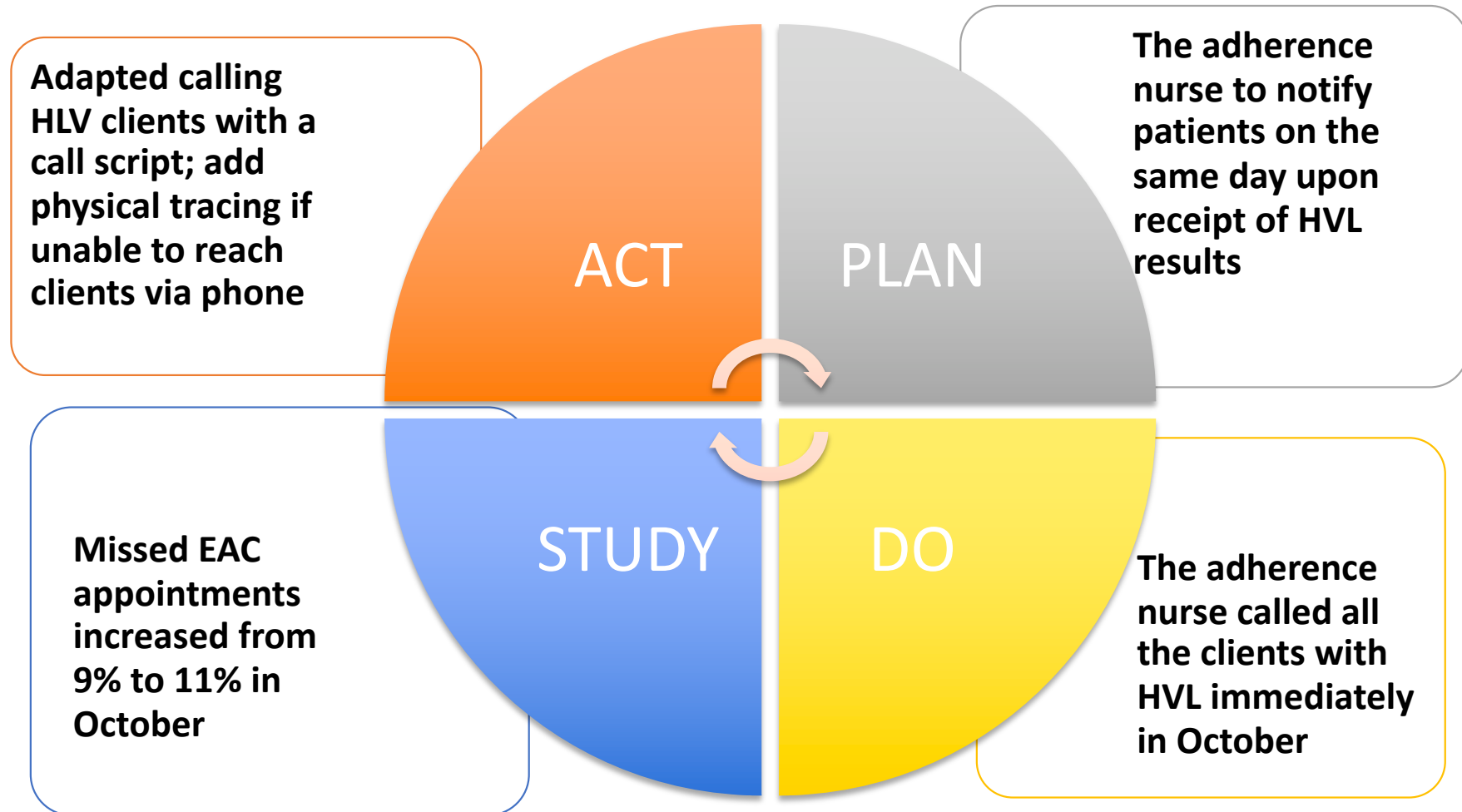
PDSA Cycle #3 – November – *Call Script*

Adopted calling HVL clients with script

Call script prepared and adherence nurses trained

ACT

PLAN

STUDY

DO

Missed EAC appointments reduced from 11% to 4%

The adherence nurse called HVL clients using a script
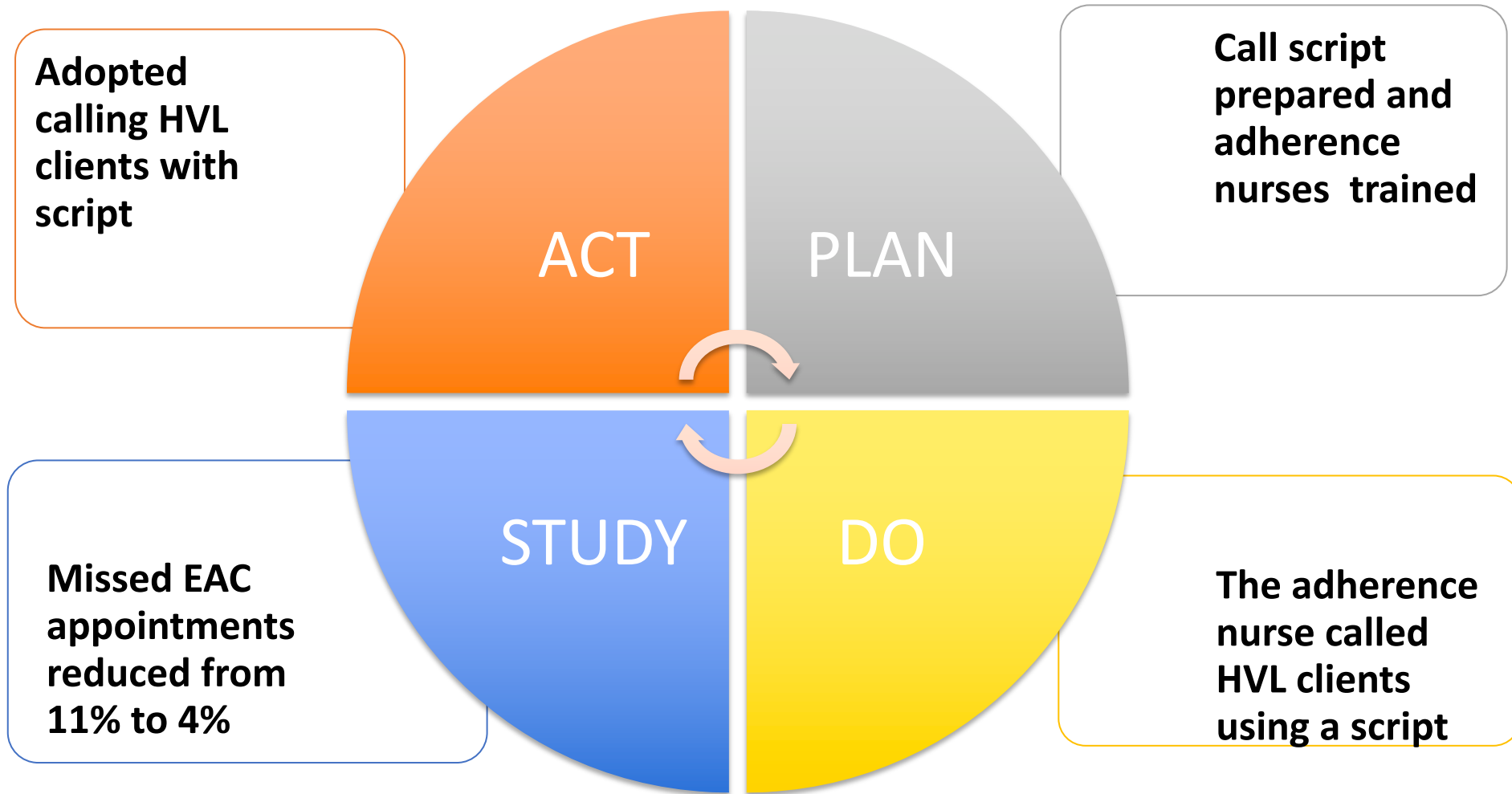
PDSA Cycle #4 – November – *Physical Tracing*

Adopted physical tracing with community visits

Bus fare approved for expert clients to conduct community visits

ACT

PLAN

STUDY

DO

Missed EAC appointments reduced from 11% to 4%

Expert clients conducted community visits for hard-to-reach clients

| Define | Measure | Analyze | Improve | Control |
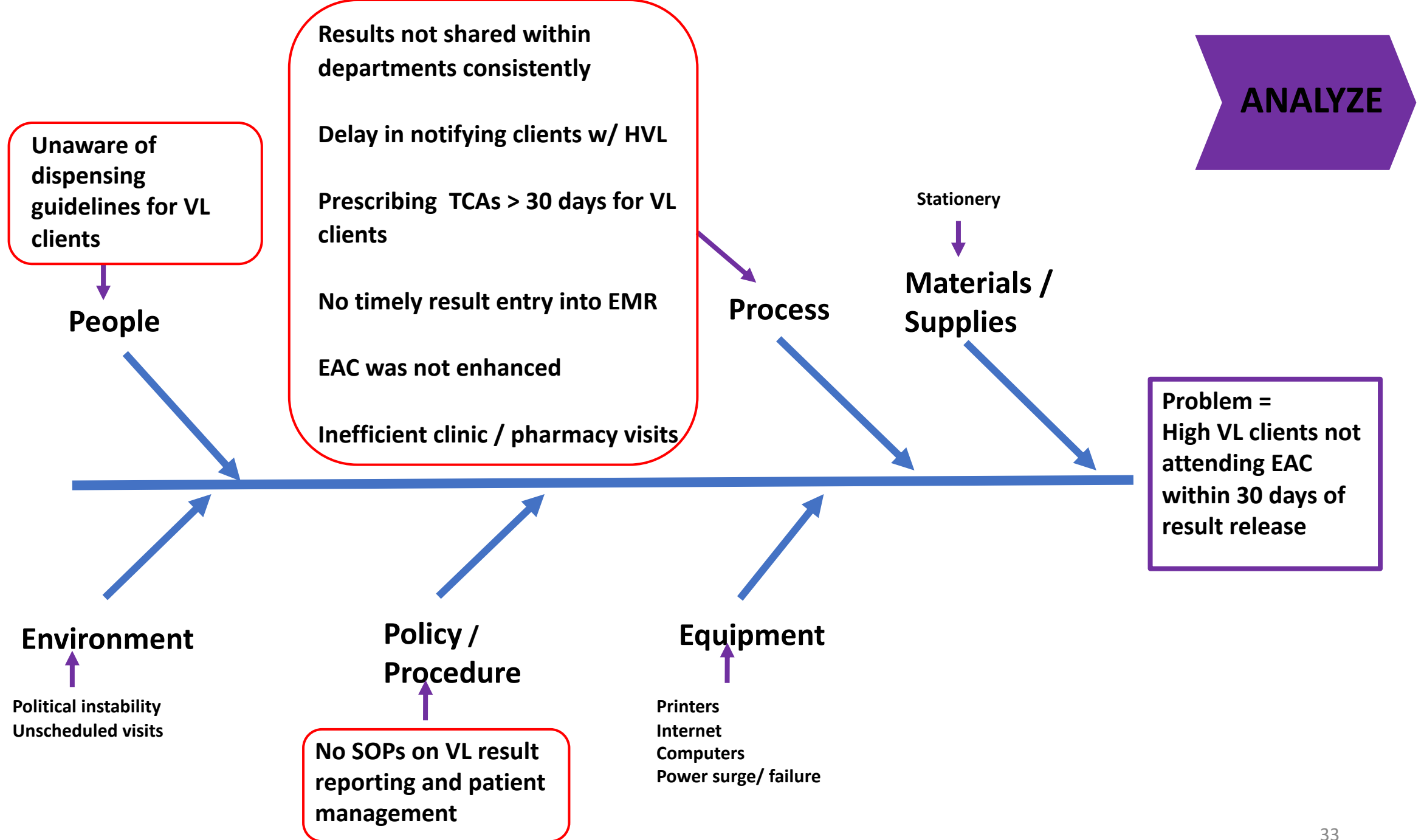
Also, as part of new process:

Appoint VL Focal Person
Job description
Training
Competency

Create or procure SOPs / Guidelines
Customize SOPs, if needed
Training
Competency

BEFORE PROCESS

VL appoint-ments booked → Client arrival at clinic → Sample collection, processing and storage → Sample Transport → Viral Load testing → Result reporting → Result receiving at clinic → Result document-tation in EMR → Notification of HVL clients →

HVL clients return to clinic for EAC within 30 days

IMPROVED PROCESS

VL appoint-ments booked → Client arrival at clinic → Sample collection, processing and storage → Sample Transport → Viral Load testing → Result reporting → Lab receives/prints results in triplicates and flags HVL; sends to DEC, EAC, HVL focal person → Result document-tation in EMR → New Client Notification Process →

New Client Notification Process

Clients given shortened TCA (30 days medication) → EAC team calls clients upon receipt of HVL results (using script) to book EAC appointments → Expert clients conduct physical tracing (community visit) if unable to reach clients → Clients presents to clinic for EAC appointments

- **Data Display**

Missed EAC Appointments*

PDSA 1

PDSA 2

PDSA 3 & 4

	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
# Missed Appooitments*	18	12	13	17	15	8	10	5	3	3	1	0	1	1	0
# HVL Patients	25	25	25	25	25	25	25	25	35	28	23	21	24	32	29
Indicator	72%	48%	52%	68%	60%	32%	40%	20%	9%	11%	4%	0%	4%	3%	0%

Missed Appooitments*   # HVL Patients   ◆ Indicator
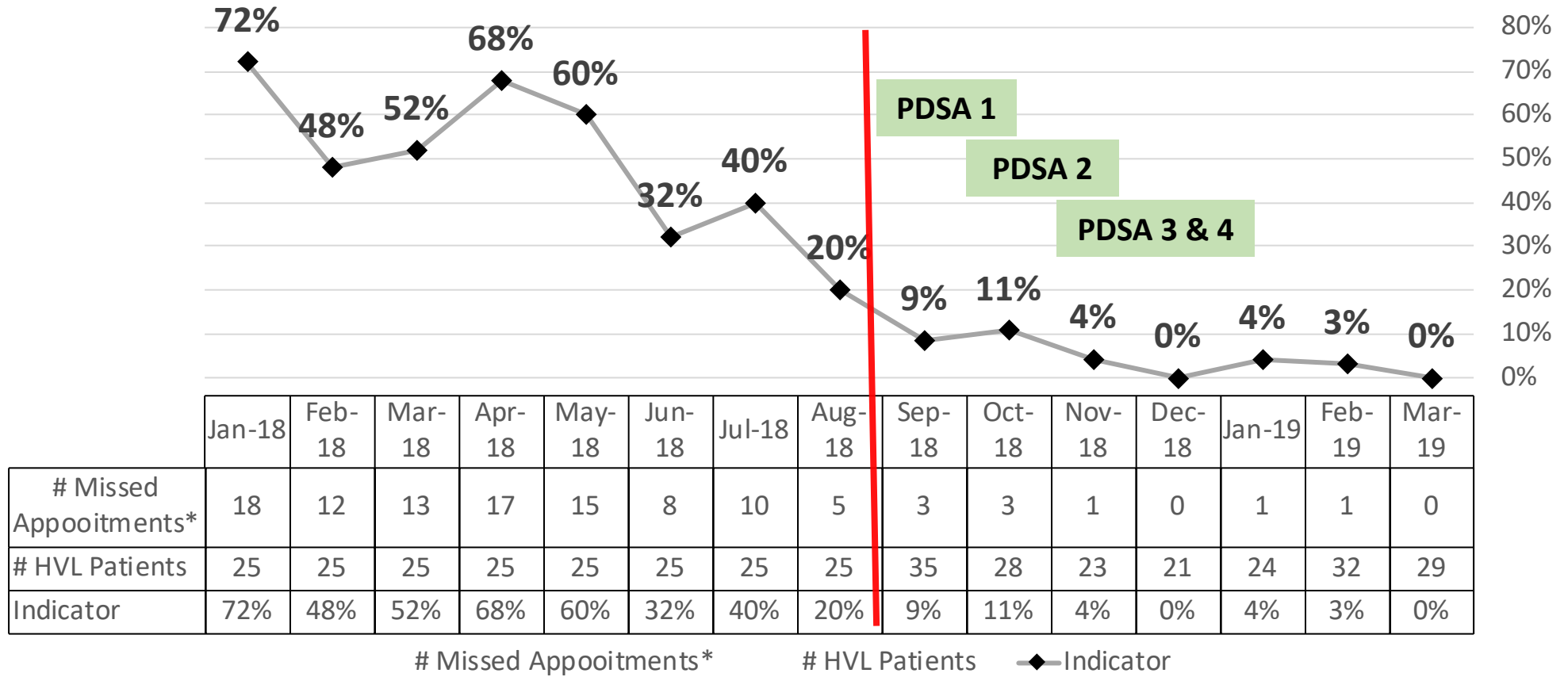
Project Successes, Challenges and Solutions

Successes

Just do it completed

Full support by the management.

Good Teamwork

Completed voice of customer

Communication platform.

Sensitization to entire facility team .

Challenges/Solutions

- Holding meetings on time
  - *Prepared a meeting rotation*
- Having every team member attending meeting was a challenge
  - *Ensured that the timing was appropriate for every member*
- Developing Aim statement.
  - *We brainstormed and consulted faculty member and TA*
- No funds for the project
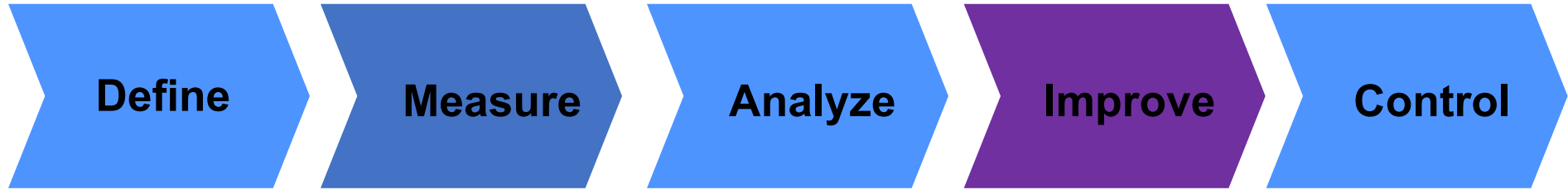 - *We got support from our management*

Lessons Learned

- **Inter departmental communication and collaboration is very important.**

- **Meetings are vital and social media came in handy as a means of dispersing information and updating each team member.**

- **The use of the learning board kept us informed and also helped educate the rest of the staff members and visitors too.**

- **It is scalable to other departments.**

- **Use of tools makes it easy to implement the project.**

- **QI is iterative**

Thank you! Asante Sana!

Stakeholder Analysis

Name	Level of Support					Key Interests / Issues	Assessment of Impact (H, M or L)	Action Items / Strategy to Influence	Key Communication Points
	R	SK	N	SP	E				
					E	Funds and policies	H	Funds	Through presentations & narrative reports
			N			Policies	H	Policies	Reports
					E	Funds and technical assistance	H	Funds and TA	Project progress and emails
					E	Health services	H	Clinic attendance	Logs and calls
					E	Development and implementation of SOP's and guidelines	H	Implementation of SOP and guidelines	CME and reports
					E	Timely feedback of results	H	Feedback	Emails and portal log in
			N			Collaboration and being part of the team	M	Disseminating information	Meetings
				SP		Quality improvement	M	Assessment	reports
				SP		Ensuring that commodities are available	H	Timely supply of commodities	Calls and emails
				SP		Infection prevention and waste management	H	Waste management	Physical collection of waste
R = Resistant, SK = Skeptical, N = Neutral, SP = Supportive, E = Enthusiastic							H = High M = Moderate L = Low		

41

- **Data Display**

EAC attendance beyond 30 days

The project baseline of 47.7% was for a 6 months period

Intervention began with PDSA 1

PDSA 2

As at now there has been delay in TAT and EAC for January patients began in Feb end this is due to transitioning to new regimen