

Remote Assistance Facility C

Results Management and Patient Care

Team Members

Responsibility	Team member
Champion/sponsor	
Team leader	
QI expert/coach	
Data Manager	
Frontline Members	
Other team members	

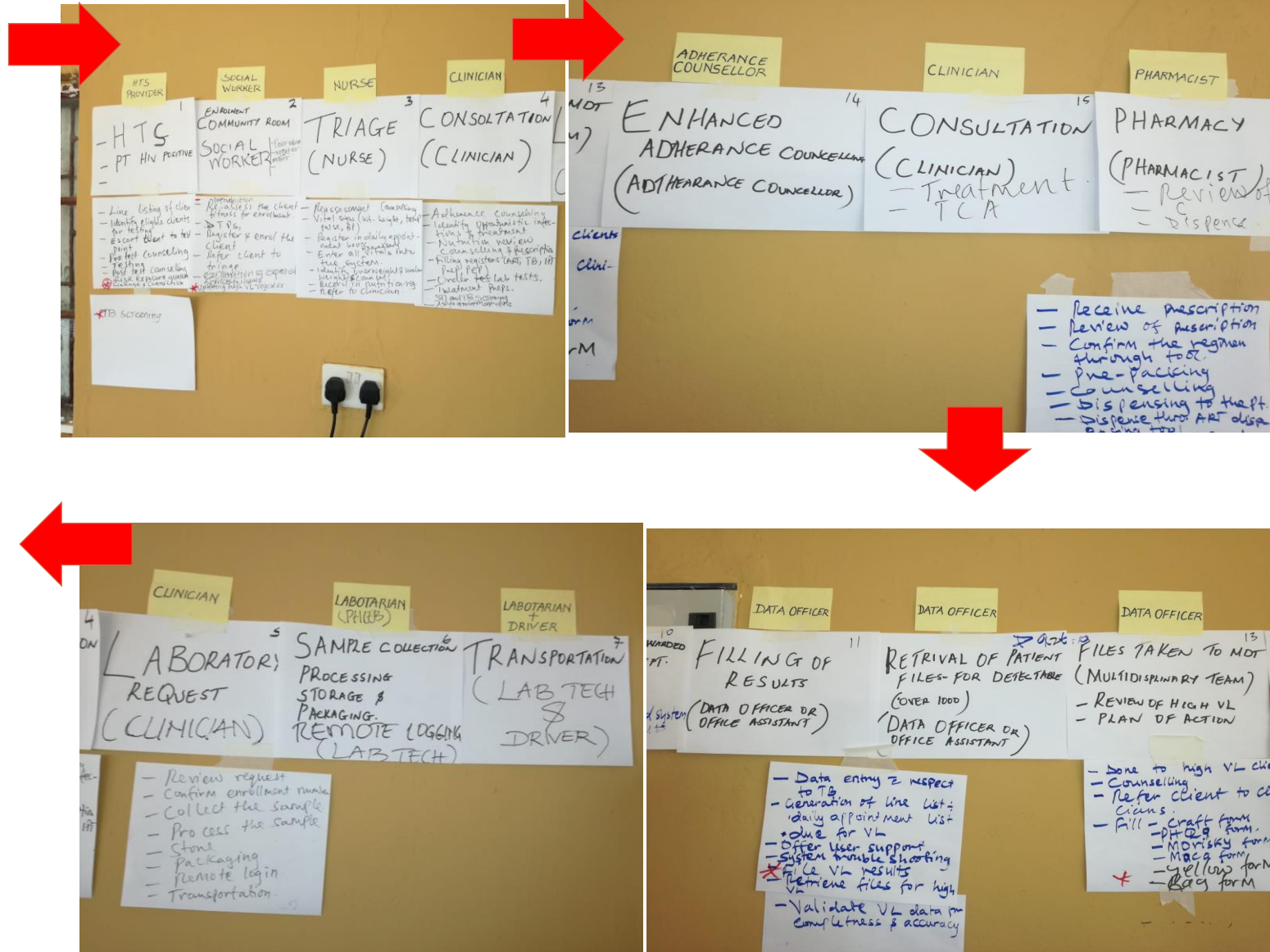
BACKGROUND INFORMATION

- A level 4 hospital
- Our CCC has a total number of 3580 patients actively on care with an average of 100 clients seen per day.
- Our current suppression rate is 97%.

Stakeholder Analysis

NAME	LEVEL OF SUPPORT					KEY INTERESTS / ISSUES	ASSESSMENT IMPACT (H,M OR L)	ACTIONS ITEMS / STRATEGY TO INFLUENCE	KEY COMMUNICATION POINTS	DATE	EFFECTIVE YES/NO
	R	SK	N	SP	E						
KARP				✓		Implementation of changes	H	Assist in sustaining the change	Ensure complete filling of viral load results in patients files	30 th November	YES
STJMH Management				✓		Strengthening of the system	H	Providing resources	-provide stationaries	15 th October	YES
MOH		✓				Monitoring	M	Conduct supervisions	Feedback	5 th December	To leave supervision reports behind
Ampath				✓		Testing & results availability	H	Results accuracy/timely testing	Ensure accurate results to right patients	5 th January	YES
GIS				✓		Implementation	H	Sustain change	Frequent trainings & updates	23 rd November	YES
Clients KEY Sp- supportive Sk- skeptical H- high M-moderate R-Resistant E-Enthusiastic L-low N-Neutral					✓	Service quality	H	To give feedback on service quality	Inform		

The Story of Our Project



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?
<p>To have proper documentation and filing of HIV viral load hard copy results in the patients file in order to give consistent, satisfactory care to patients hence viral load suppression</p>	<p>AIM Statement</p> <p>To increase the number of hard copy viral load results in the patients file from a base line of 23% in August 2018 to 95% by March 2019.</p> <p>Metric:</p> <p>Numerator: Number of patient files with hard copy viral Load results</p> <p>Denominator: Number of viral load results received from the testing laboratory</p>	<p>Intervention</p> <ul style="list-style-type: none"> •Establish SOP for result management •Task assignment to data officers/clerks to ensure filing of hard copy results •Train healthcare workers on the importance of hard copy viral load result in patient management •Avail SOP circular on result management

Elevator Speech

This project is about consistent filing of hard copy viral load results as a result of these efforts, there will be consistent and satisfactory patient care hence viral load suppression.

It is important because we are concerned about

1. Loss to follow up of high viral load patient cases due lack of hard copy results
2. Lack of traceability of transcriptional errors from the testing lab portal to the EMR

Success will be measured by showing improvement in presence of viral load hard copy results in the patients files and improved patient care. What we need from you is consistent supply of stationary

Process Mapping

The First Step Towards Improvement

HTS PROVIDER 1

- HTS
- PT HIV POSITIVE

SOCIAL WORKER 2

ENROLLMENT COMMUNITY ROOM

NURSE 3

TRIAGE (NURSE)

CLINICIAN 4

CONSULTATION (CLINICIAN)

- Line listing of clients
- Identify eligible clients for testing
- Escort client to test point
- Pre test counseling
- Post test counseling
- TB exposure screen
- TB screening

- Introduction of client to facility for enrollment
- TDS
- Register & enrol the client
- Refer client to triage
- Registration of expired test kit
- Update TB register

- Reassessment
- Vital signs (wt, height, temp, pulse, BP)
- Register in daily appointment book
- Enter all vital & intake into the system
- Identify overweight & underweight clients
- Record TB notification reg.
- Refer to clinician

- Adherence counseling
- Identify opportunistic infections & treatment
- Nutrition review
- Counseling & prescription
- Filling registers (ART, TB, IPT)
- Prep PEP
- Order test lab tests
- Treatment prep.
- Send TB screening
- TB screening

ADHERANCE COUNSELLOR 13

ENHANCED ADHERANCE COUNSELLOR (ADHERANCE COUNSELLOR)

CLINICIAN 14

CONSULTATION (CLINICIAN)

PHARMACIST 15

PHARMACY (PHARMACIST)

- Treatment
- TCA

- Review of
- Dispense

- Receive prescription
- Review of prescription
- Confirm the regimen through tool
- Pre-packing
- Counseling
- Dispensing to the pt.
- Dispense thru ART dispensing tool

DATA OFFICER 10

DATA OFFICER 11

DATA OFFICER 13

FILLING OF RESULTS (DATA OFFICER OR OFFICE ASSISTANT)

RETRIVAL OF PATIENT FILES - FOR DETECTABLE (COVER 1000) (DATA OFFICER OR OFFICE ASSISTANT)

FILES TAKEN TO MDT (MULTIDISPLINARY TEAM)

- Review of HIGH VL
- PLAN OF ACTION

- Done to high VL clients
- Counseling
- Refer client to clinician
- Fill -
 - Draft form
 - PHO form
 - MD risky form
 - MACG form
 - Yellow form
 - Bag form

- Data entry respect to TB
- Generation of line list & daily appointment list
- Done for VL
- Offer user support
- System trouble shooting
- File VL results
- Retrieve files for high VL
- Validate VL data for completeness & accuracy

CLINICIAN 4

LABORATORY REQUEST (CLINICIAN)

LABOTARIAN (PHLEB) 5

SAMPLE COLLECTION PROCESSING STORAGE & PACKAGING REMOTE LOGGING (LAB TECH)

LABOTARIAN DRIVER 7

TRANSPORTATION (LAB TECH DRIVER)

- Review request
- Confirm enrollment number
- Collect the sample
- Process the sample
- Store
- Packaging
- Remote login
- Transportation

Process Mapping

The First Step Towards Improvement

Process Step	What Happens?	Who is responsible?	Duration	Forms/logs	Opportunity for Improvement
HTS ROOM	Eligibility criteria assessment Testing of eligible clients Positive clients are referred to the enrolment desk	HTS provider	30 minutes	Line listing book MOH 362 ICF form Referral form Linkage book	-Improve on Privacy at screening desk -Label the line listing desk -Improve on documentation in the registers
SOCIAL WORK DEPARTMENT	Reassessment Counseling Enrollment Treatment preparation 1	Social worker Client mentor Adolescent champion	45 minutes	Pre ART register ART register Defaulter register Hei forms	-Add more registers to reduce the spaghetti movement -The registration room needs to be expanded -Need for adherence register
TRIAGE	Reassessment and counseling Taking vitals Treatment preparation 2 Nutrition assessment and education Enter vitals in IQ care Refer to the clinician	Triage nurse	15 minutes	Daily attendance book Daily attendance list -Green card -Nutritional register -Defaulter register(for both new and old clients)	- Need for privacy at the triage area for client confidentiality

Process Step	What Happens?	Who is responsible?	Duration	Forms/logs	Opportunity for Improvement
CONSULTATION ROOM	<ul style="list-style-type: none"> Counseling -patient review -Treatment preparation 3 -TB screening and treatment of other opportunistic infections -Nutritional assessment and prescription -VL and other lab requests -Prescription -Family planning information and referral -TCA 	RCOs	15 minutes	<ul style="list-style-type: none"> -green card -ICF -ART register -prep/pep register -pharmacy order form -IPT register -Presumptive TB register -HVL tracking register 	<ul style="list-style-type: none"> add more registers to reduce spaghetti movement -need to expand clinician rooms -need to secure data to avoid possible data alteration
PHLEBOTOMY	<ul style="list-style-type: none"> review requisition form -sample collection -transportation to the laboratory 	Lab officer	15 minutes	<ul style="list-style-type: none"> VL request form VL register 	Proper labelling of the phlebotomy room
LABORATORY	<ul style="list-style-type: none"> Centrifuging -sample storage -Sample package -Remote logging Transportation to testing laboratory 	Laboratory officer	45 minutes	<ul style="list-style-type: none"> VL request form VL tracking logs 	Have thermometers in cooler boxes
LABORATORY	<ul style="list-style-type: none"> Downloading/printing and recording of Viral load results -flagging of High viral load results Dispatch of high VLs to clinician and suppressed to the data officer 	Laboratory officer	30 minutes	<ul style="list-style-type: none"> Hard copy of VL results Viral load register 	-Introduce results release log register

Process Step	What Happens?	Who is responsible?	Duration	Forms/logs	Opportunity for Improvement
PHARMACY	Confirmation of the regimen from the system -packaging of drugs -counseling(both pre and post) -dispensing	Pharmacist	15 minutes	Daily activity register -differentiated care registers -nutrition register -PEP register -PEP files	Introduce an Inventory book for recording the drugs dispensed
DATA ROOM	Verifying and validation of the results of the hard copy against the soft copy -retrieving of the files -filling of hard copy results -data backup -line listing for daily appointments.	Data officer	One day	Hard copy VL results VL hard copy summary -IQcare	-Verification of hard copy results against the results entered in IQcare. -Ensuring all hard copy VL results are in the patient files

Process Step	What Happens?	Who is responsible?	Duration	Forms/logs	Opportunity for Improvement
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New process map

Process Step	What Happens?
Data Room	<p>Verifying and validation of the results of the hard copy against the soft copy and signing the results summary</p> <ul style="list-style-type: none">-results release log being signed by both laboratory staff and data staff-filling of hard copy results and the summary by data staffs assisted by 2 more staffs.-data backup-line listing for daily appointments.



Problem Statement:

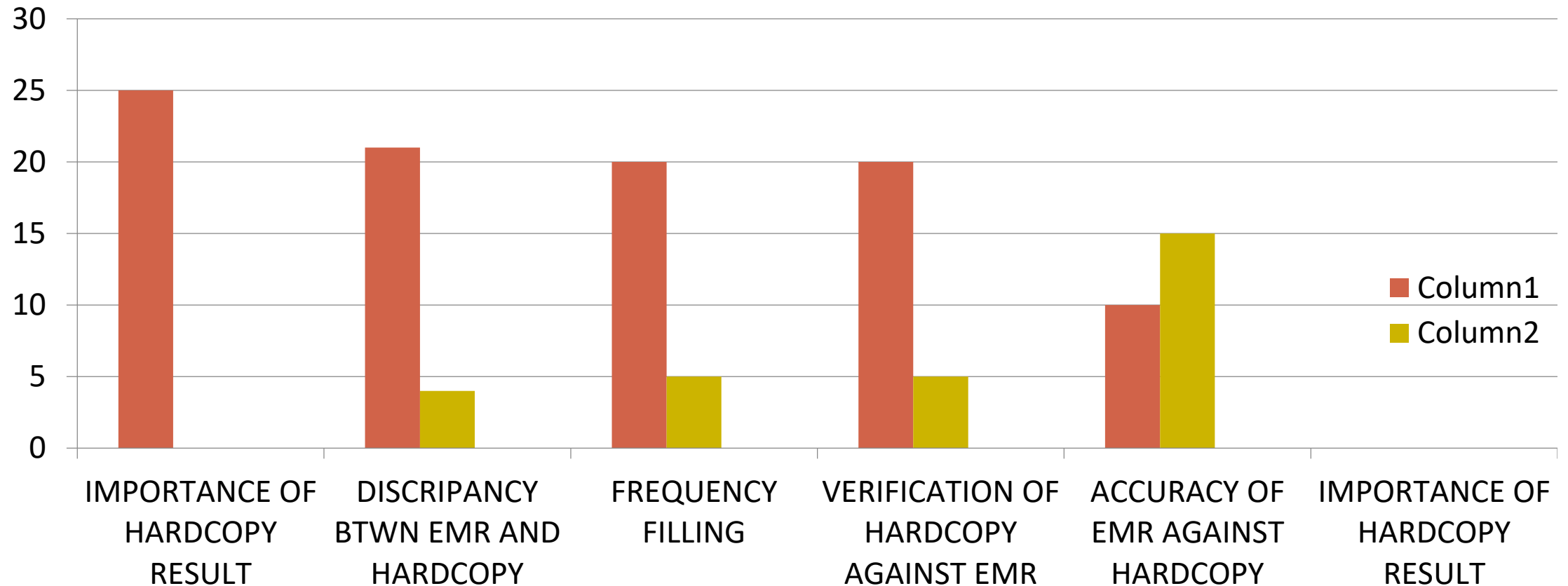
From baseline study done in August 2018, 77% of CCC patients' files did not have hardcopy viral load results, this affects progressive patients' viral suppression monitoring.



- **Voice of Customer for healthcare workers – Survey Findings**

	VOICE OF CUSTOMER QUESTIONS	YES RESPONSE	No response
1	Is it relevant to file hard copy of VL results in patient files?	25	0
2	are there any discrepancies between the EMR and the hardcopy results?	21	4
3	Are the hardcopy results filed frequently?	20	5
4	Is EMR verification done against hardcopy results?	20	5
5	Are the EMR VL results accurate as compared to hardcopy results?	10	15

DATA ANALYSIS



LESSONS LEARNT

1. Discrepancy between hardcopy VL result and EMR
2. Filling was not being done as frequent as it should be
3. All healthcare workers agreed that hardcopy results should be present in the patient file regardless of the EMR.

Voice of the Customer Survey

CUSTOMER – Patients

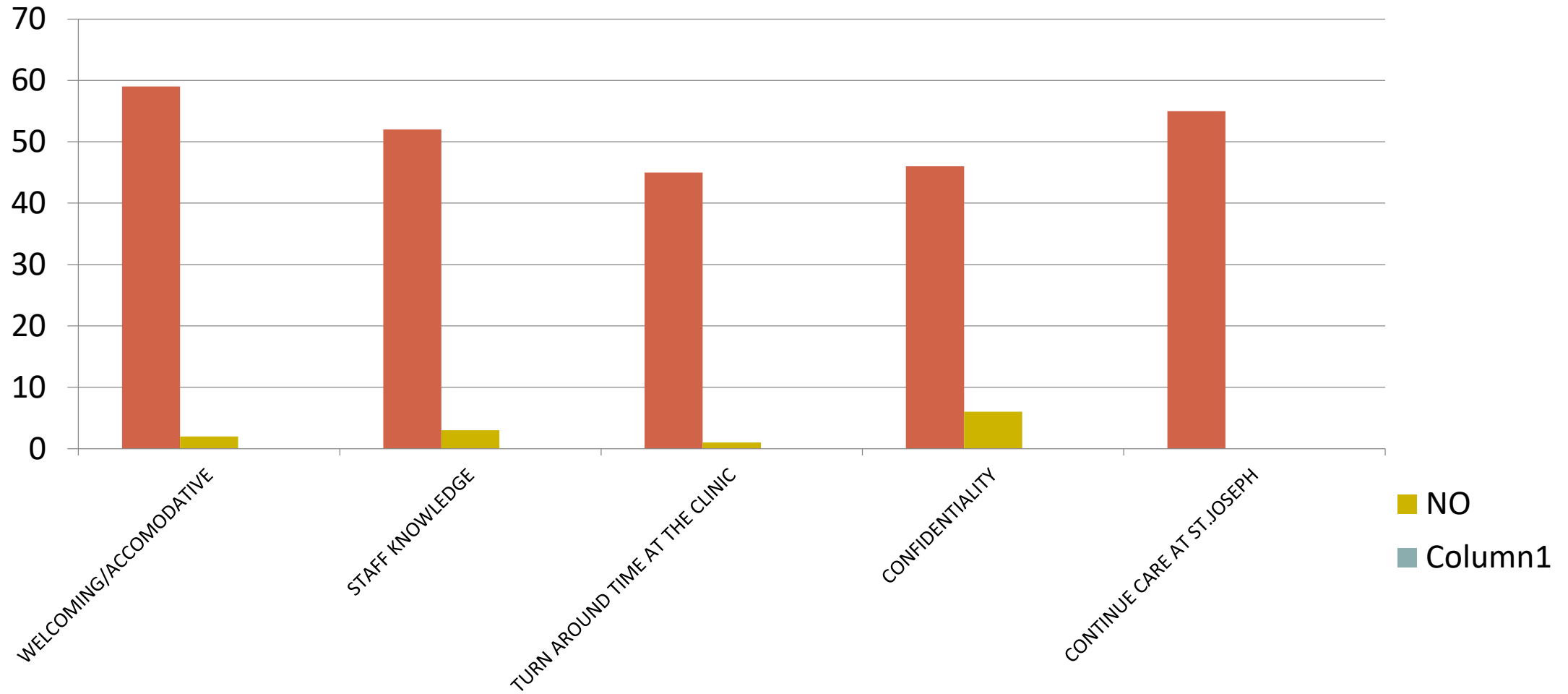
Voice of customer survey 17th -21st January 2019

Questions

1. Are the facility staff welcoming
2. Are you able to get satisfactory response from the staffs
3. Do you normally spend minimum time required at the clinic
4. Is confidentiality observed by staff
5. Do you wish to continue getting care from St. Joseph mission hospital CCC?

METHOD –80 questionnaires were issued out and 59 responded

VOC RESULTS DISPLAY-FOR CLIENT



LESSONS LEARNT

1. Confidentiality and TAT are the major patients' concern at below 50%
2. There are some delays in the clinic making clients stay longer than they should
3. All CCC staff orientation on the complete process is key

After the outcome the voice of customer assisted in the following areas:

- ❖ staffs to keep client information confidential Improving confidentiality by training
- ❖ More staffs allocated to areas with high workload i.e at the triage to help improve TAT.

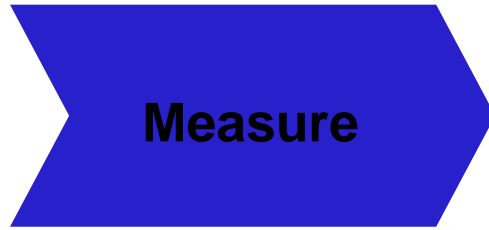


- Metric Selected

Number of patients' files with recent hard copy viral load results over number of patients whose VL results have been received from the testing laboratory

- Baseline Data

Three months (June, July and August) data abstraction was done. 23% of patient files had the latest hard copy viral load results

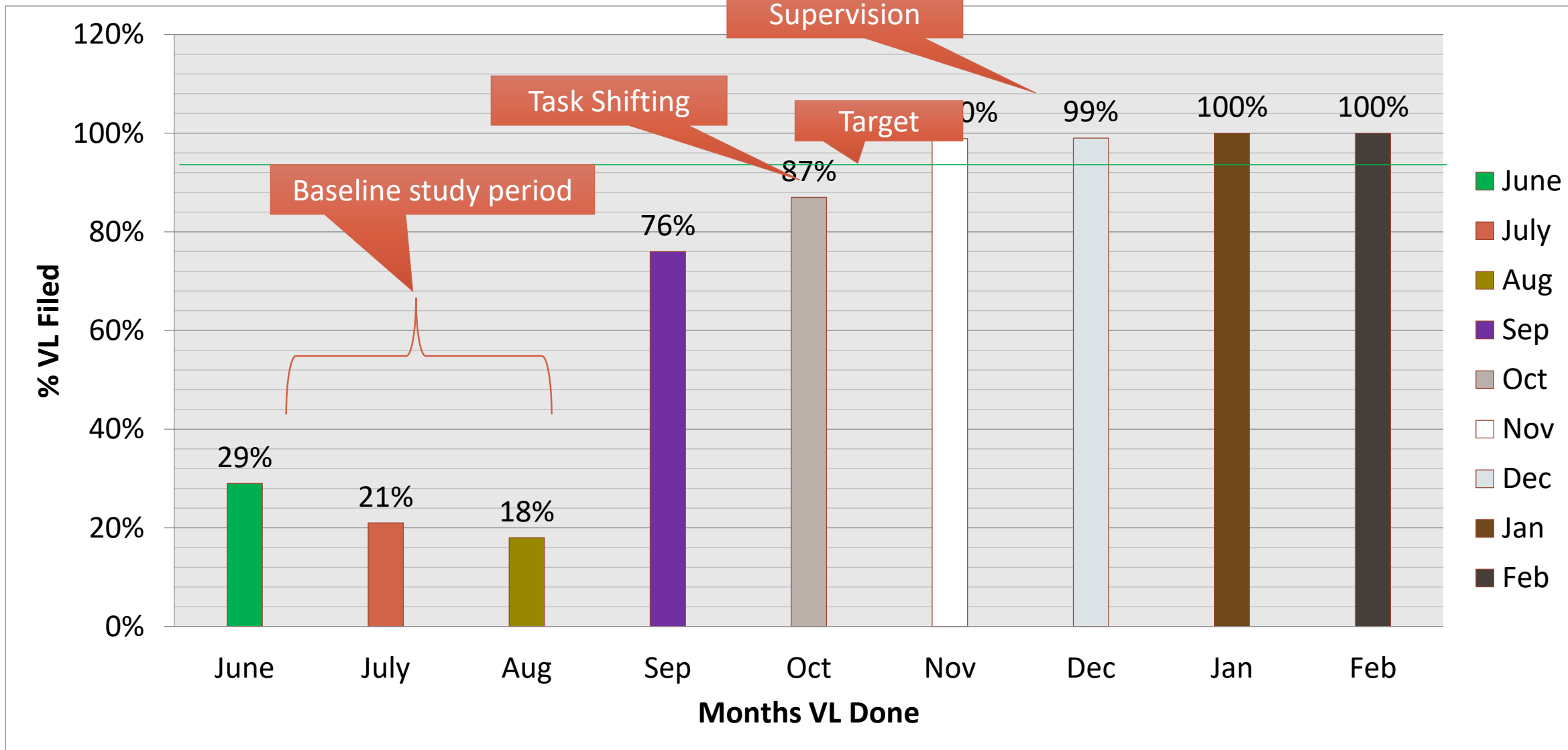


- Data Collection Process
 - Data Collection Tool

The image shows a handwritten data collection tool. At the top, there is a process flow diagram with five steps: Define, Measure, Analyze, Improve, and Control. Below the diagram is a table with the following columns: CCC No., Age, Sex, VL Results, Date VL results received, HVL(YES/NO), and Presence in the file(YES/NO). The table contains six rows of handwritten data.

CCC No.	Age	Sex	VL Results	Date VL results received	HVL(YES/NO)	Presence in the file(YES/NO)
10756	23	F	LDL	30-11-17	N	Yes
10719	22	F	LDL	08-10-17	N	Yes
11043	71	M	NOT	-	-	no results
11013	50	M	-	NOT done	-	no results
10981	30	F	NO results	NOT done	-	NO results
10091	10	M	LDL	21-2-2017	N	Yes

HARDCOPY VL RESULTS FILED



The five why's

1. Why was filling not done weekly

- ❖ Oversight by the data clerk to file hardcopy viral load results

2. Why

- ❖ No task assignment at the data office

3. Why

- ❖ There was no Standard Operating Procedure for filling of the hard copy viral load results

4. Why

- ❖ Lack of sensitization on the need for the standard operating procedure

5. Why

- ❖ No circular on management of results and lack of knowledge of this requirement by NASCOP



- Data Collection Process - [Data Analysis & Interpretation](#)

From the data, we learnt that there is an improvement in filing from baseline data of 23% in August to 100% in January 2019 attributed to:

1. Having a procedure in place for HIV viral load result management
2. Task assignment among data clerks which included daily filing of hardcopy VL results
3. Training the healthcare worker on the importance of viral load hardcopy results and this practice is a requirement by NASCOP.

MAGNITUDE OF THE PROBLEM

Failure to file the VL hard copy results is violation of NASCOP requirement

EMR, the system used by clinicians is not able to pick results directly from the testing laboratory results portal, the results have to be fed into the EMR manually.

Discrepancy between results in the EMR and hard copies has been noted at times due to typographical errors, therefore there is great need for the hard copy results in the file for backup and consistent follow up of high viral load cases. High viral load register was also being shared during clinic hours leading to some missed records

Define

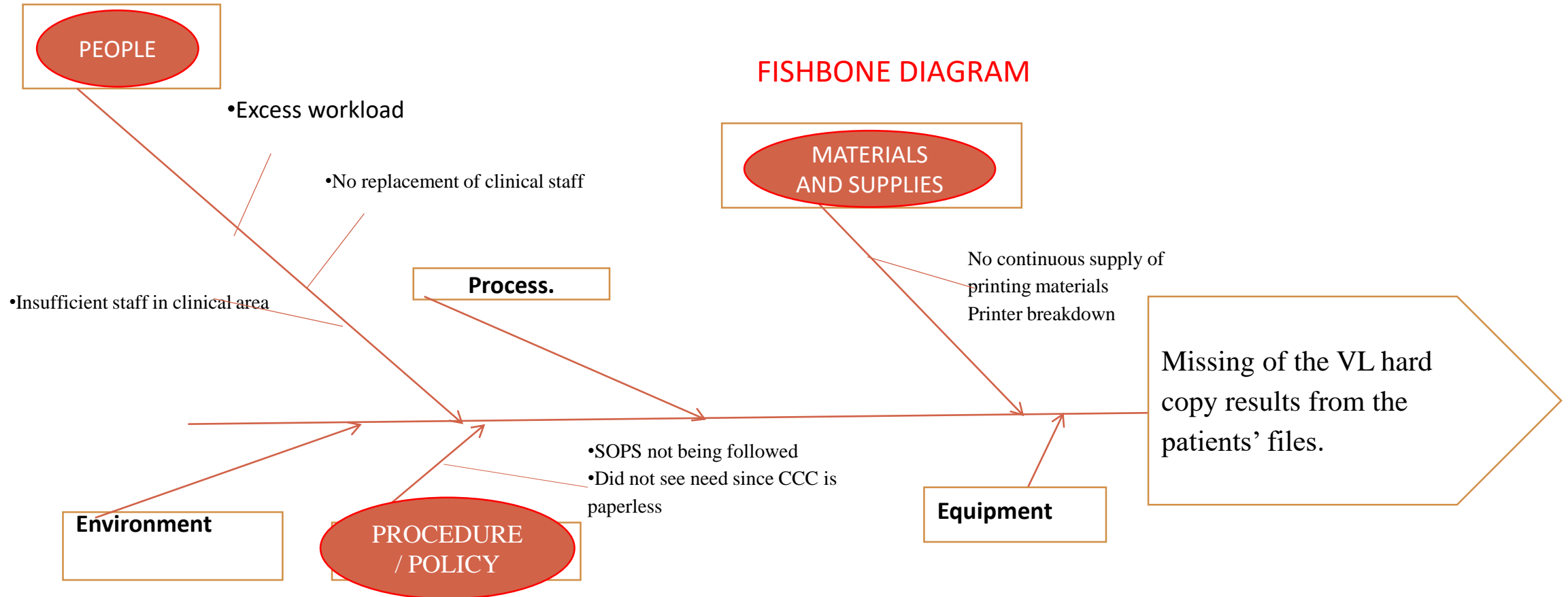
Measure

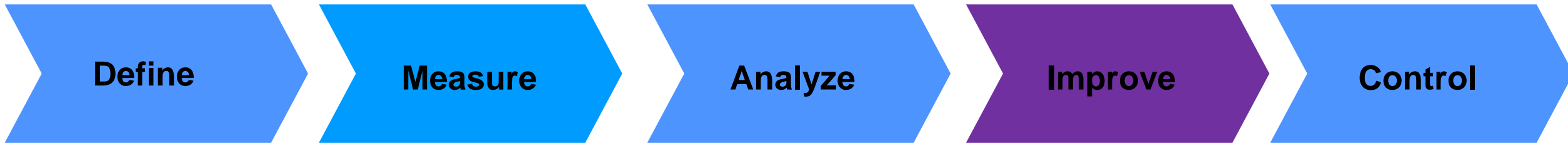
Analyze

Improve

Control

FISHBONE DIAGRAM





IMPACT / EFFORT GRID A Tool for Prioritizing Opportunities

<p>Just do It</p> <ul style="list-style-type: none"> ▪Labeling of the Phlebotomy room ▪Avail enough registers ▪Have complete Documentation at HTS ▪Proper labeling of Line listing area. ▪Have enough registers ▪Improve in archival ▪Signing of result release log ▪Have pharmacy inventory book 	<p>Project</p> <ul style="list-style-type: none"> ▪Filing of hard copy VL results in the patients files
<p>Just do it if impactful</p> <ul style="list-style-type: none"> •None 	<p>Maybe someday</p> <ul style="list-style-type: none"> •Additional staff

Define

Measure

Analyze

Improve

Control

- Just Do It
Before

after



Just DO It Cont.

Highlighting high VL results

HEALTH FACILITY SAMPLES AND RESULTS TRACKING LOG BOOK

Version 01
Effective Date: 01 October 2016

Patient Name	CCC No.	Age	Sex	Viral load justification (e.g. ANC, ART, etc.)	Date sample collected	Date of dispatch from H facility	Date Results received	TAT (Days)	Viral load Results (cp/ml) & Log10	Suppressed (<1000cp/ml) (Y/N)	Received by	Comments
	4677	28	F		1	1	1	5	35	Y	Samuel	62900
	2401	32	F	ANC	1	1	1	2	LDL	Y	Samuel	62900
	4750	30	F	ANC	1	1	1	3	69	Y	Samuel	62900
	9712	20	F	ANC	1	1	1	3	LDL	Y	Samuel	62900
	1897	54	M		1	1	1	3	LDL	Y	Samuel	62900
	3941	28	F	ANC	1	1	1	7	94	Y	Samuel	62900
	3807	30	M		1	1	1	7	134	Y	Samuel	62900

Reviewed by: _____ Signature: _____ Date: _____
Health Facility Samples and Results Tracking Log Book

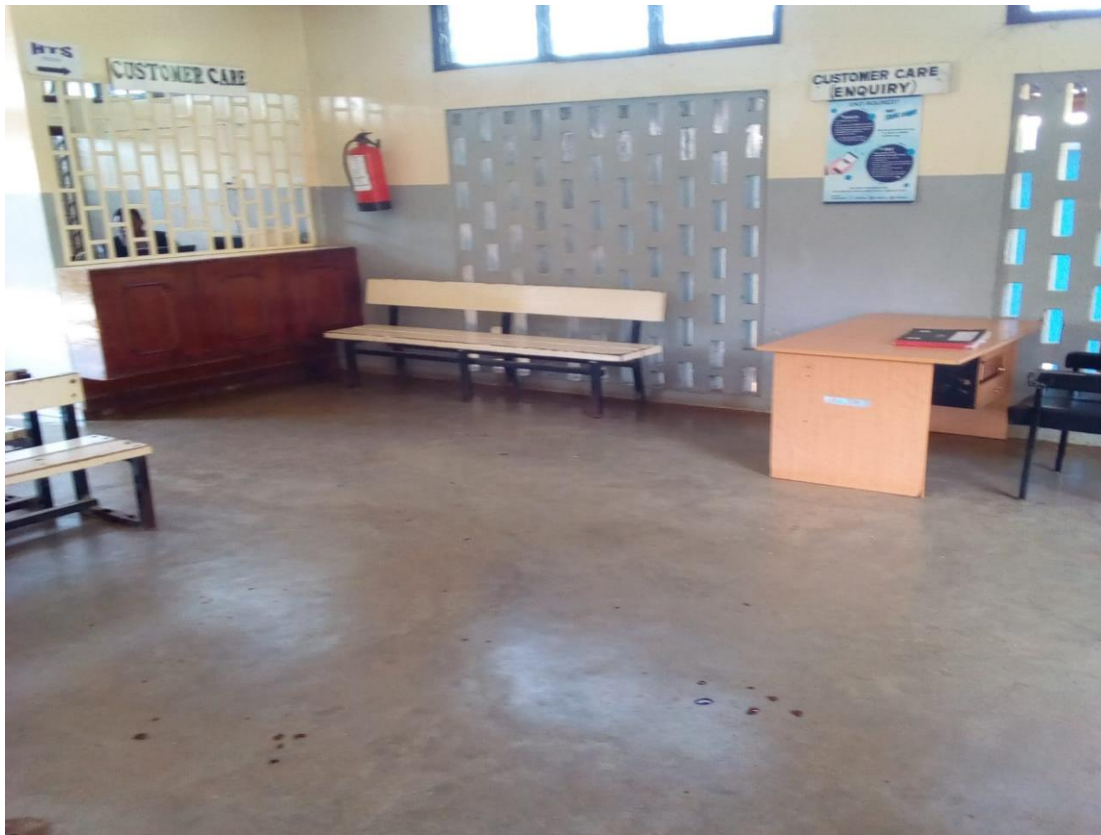
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	11	23	M		1	1	1	3	Low	Y	Samuel	71420
	11	20	M		1	1	1	3	Low	Y	Samuel	71420
	23	24	F		1	1	1	3	Low	Y	Samuel	71420
	343	42	F		1	1	1	3	Low	Y	Samuel	71420
	22	42	F		1	1	1	3	Low	Y	Samuel	71420
	262	44	F		1	1	1	3	Low	Y	Samuel	71420
	267	60	F		1	1	1	3	High	Y	Samuel	Desired to check results for high VL
	29	25	F		1	1	1	3	Low	Y	Samuel	71420

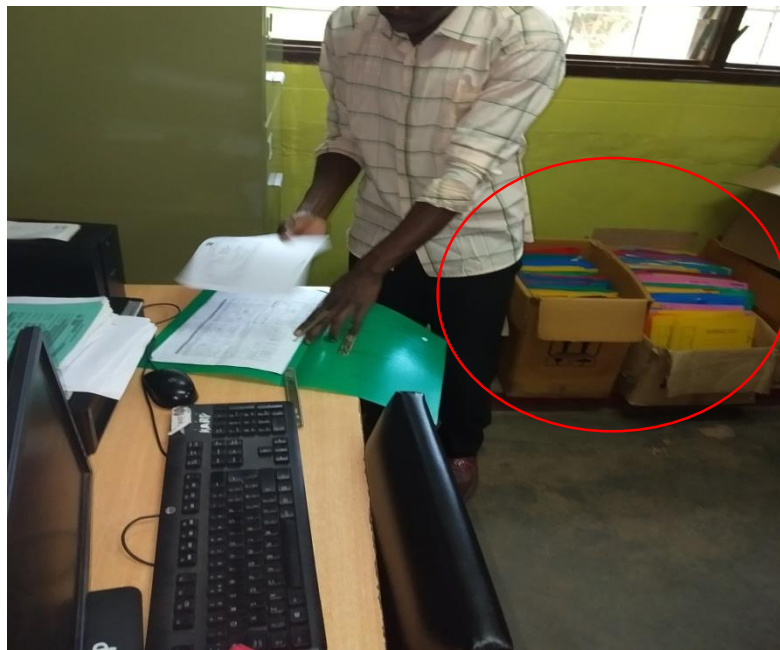
Reviewed by: _____ Signature: _____ Date: 20/10/16
Health Facility Samples and Results Tracking Log Book

LINE LISTING AREA





5S - BEFORE



5S - AFTER





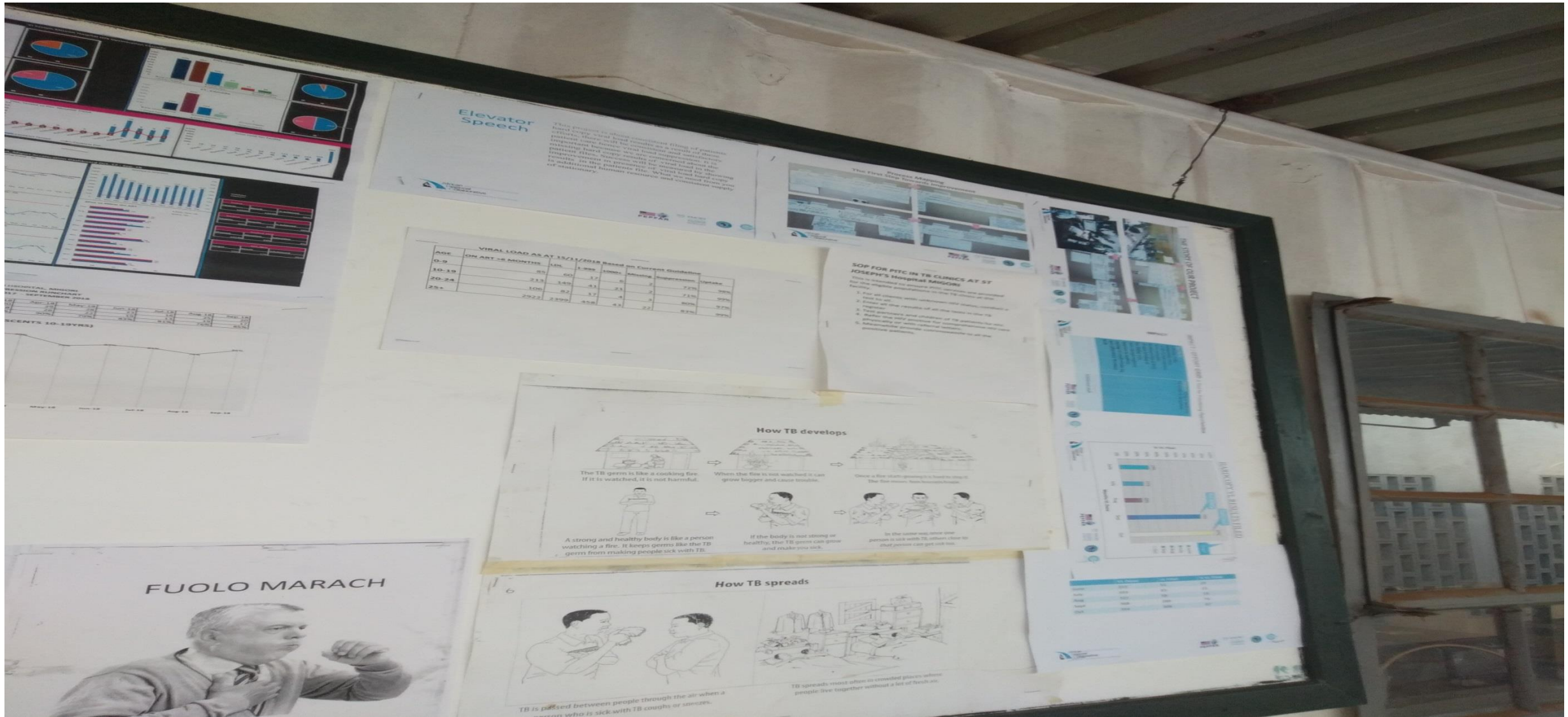
5S - BEFORE

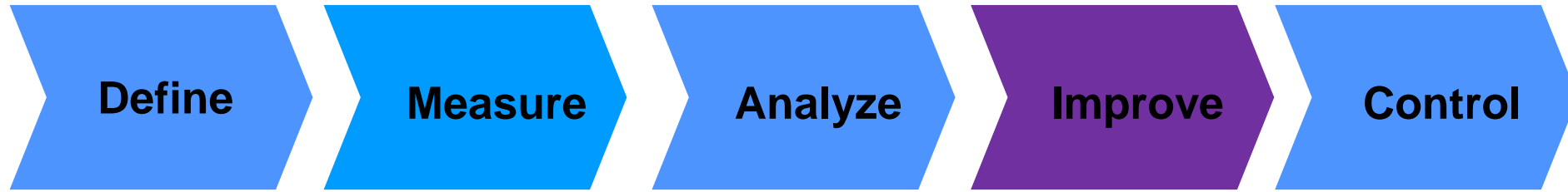
23% of patient file had hardcopy viral load result

5S - AFTER

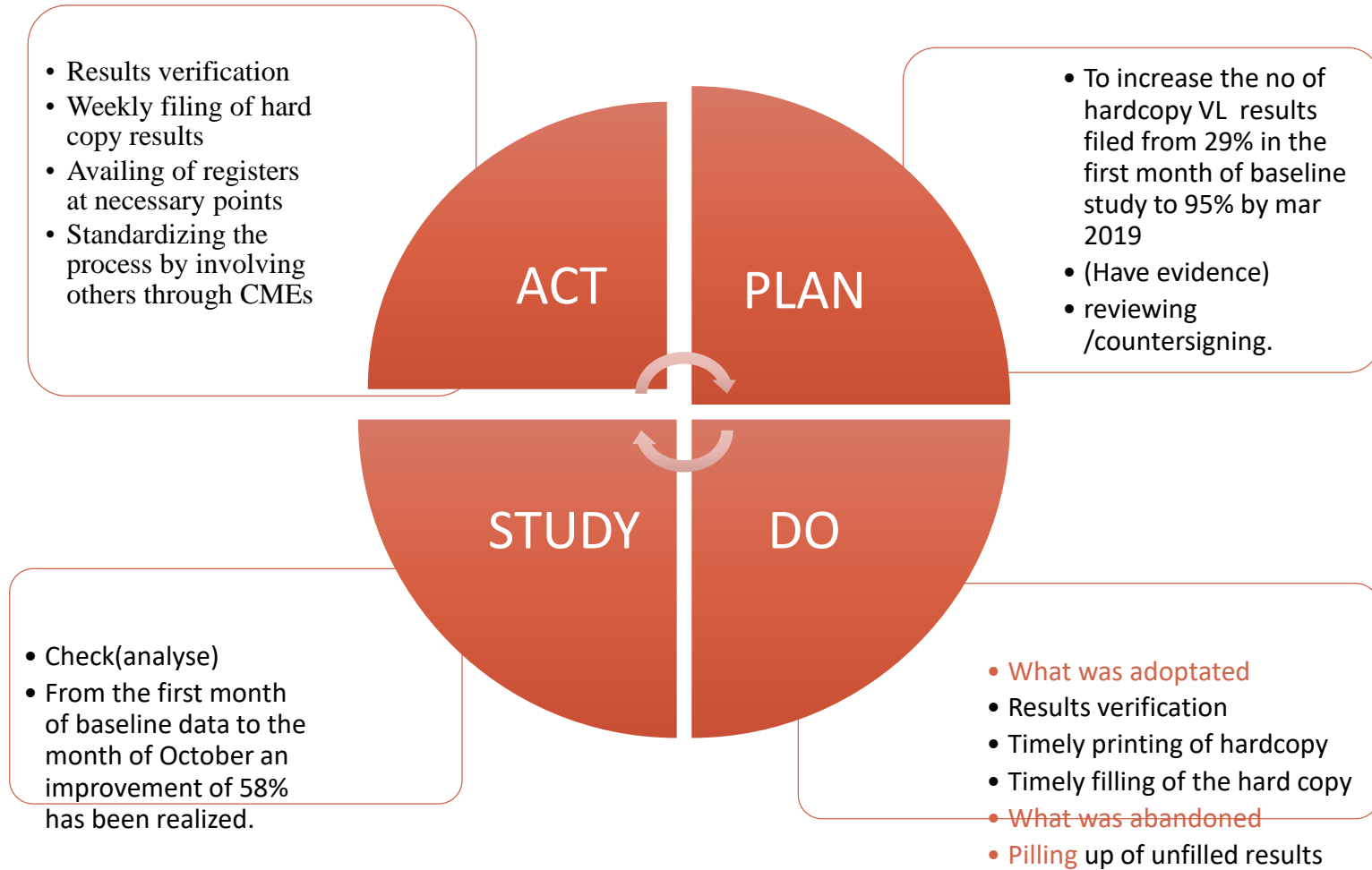
100% of patient file had hardcopy viral load result

VISUAL MANAGEMENT

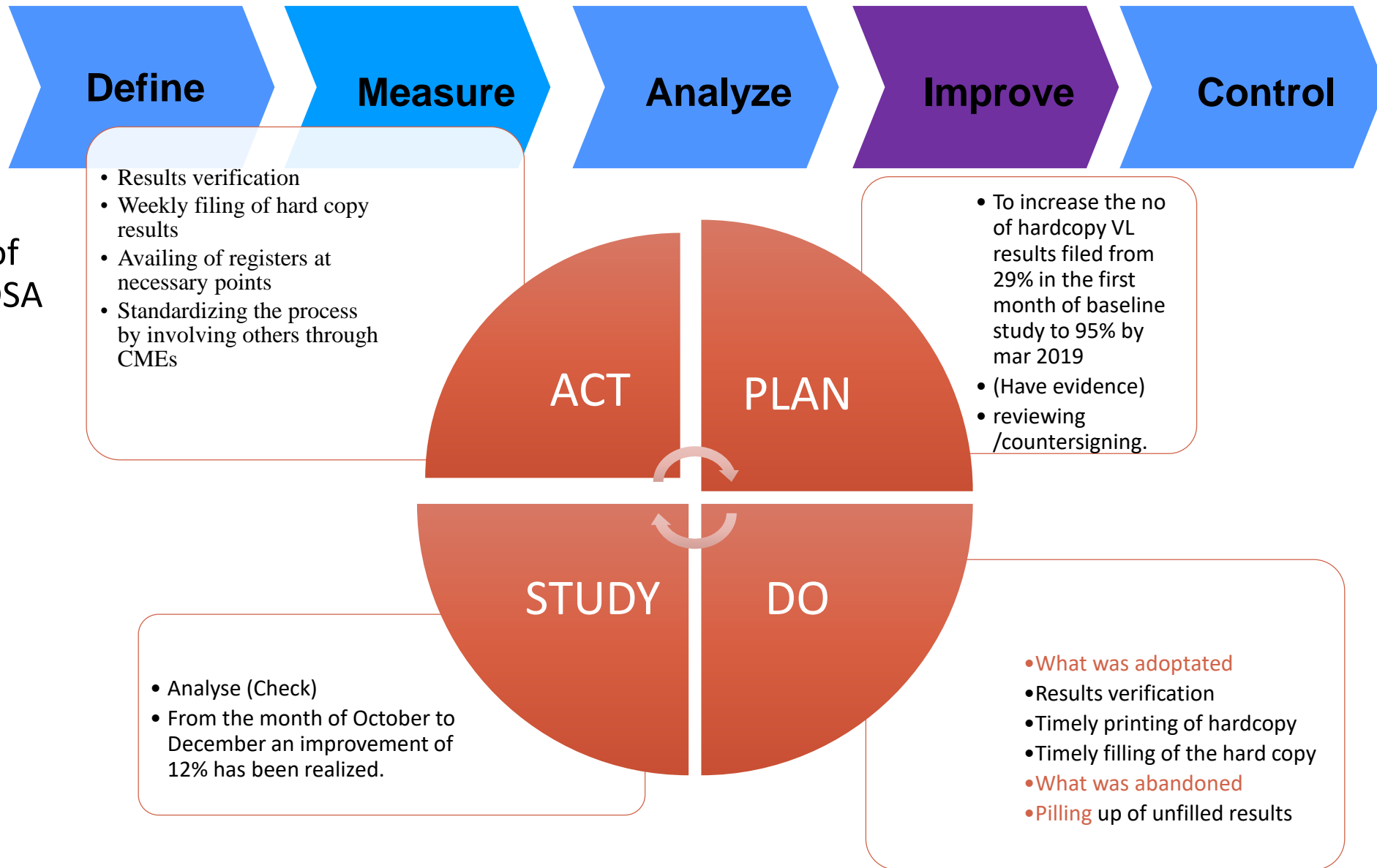




Small Test of Change (PDSA #1)



Small Test of Change (PDSA #2)





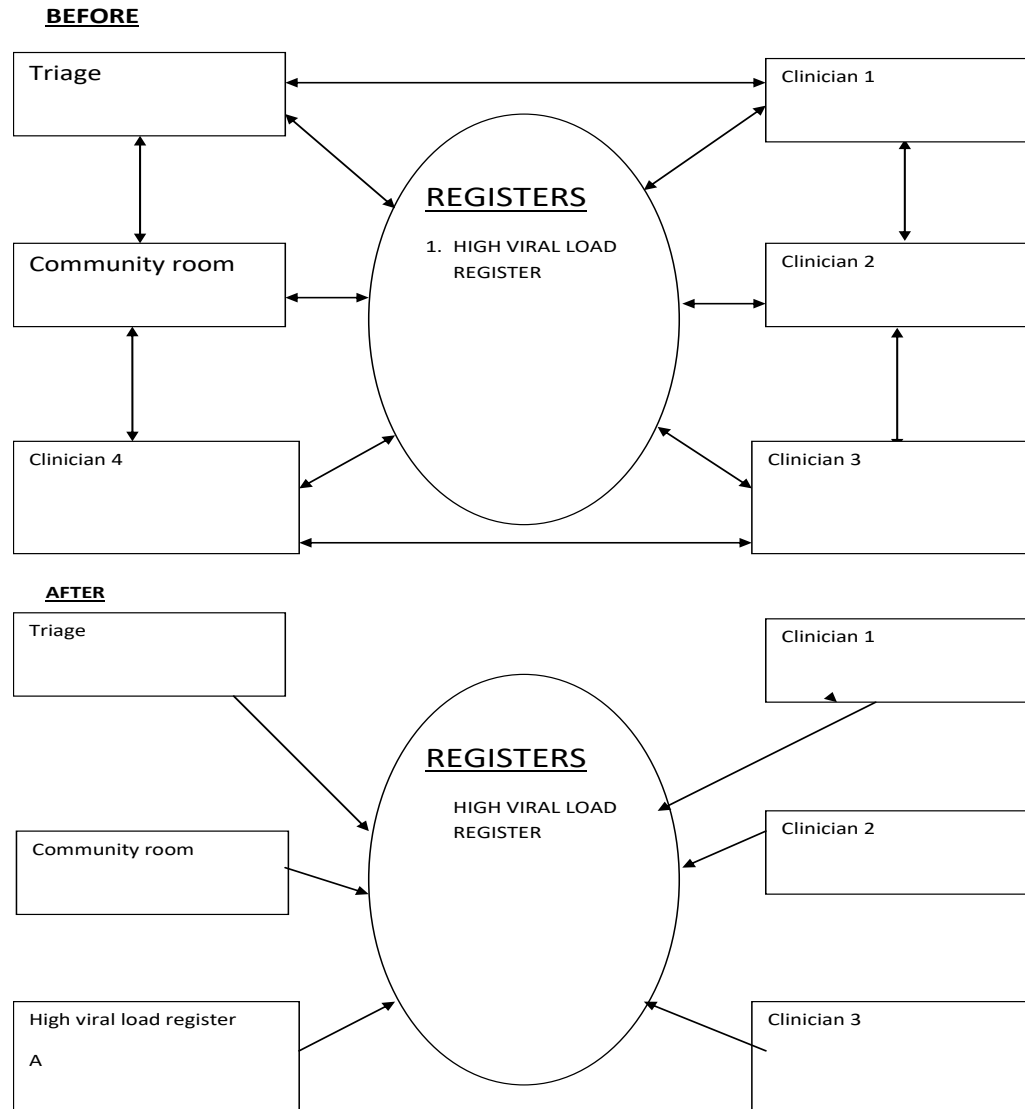
Intervention – ‘After State’ Process Map

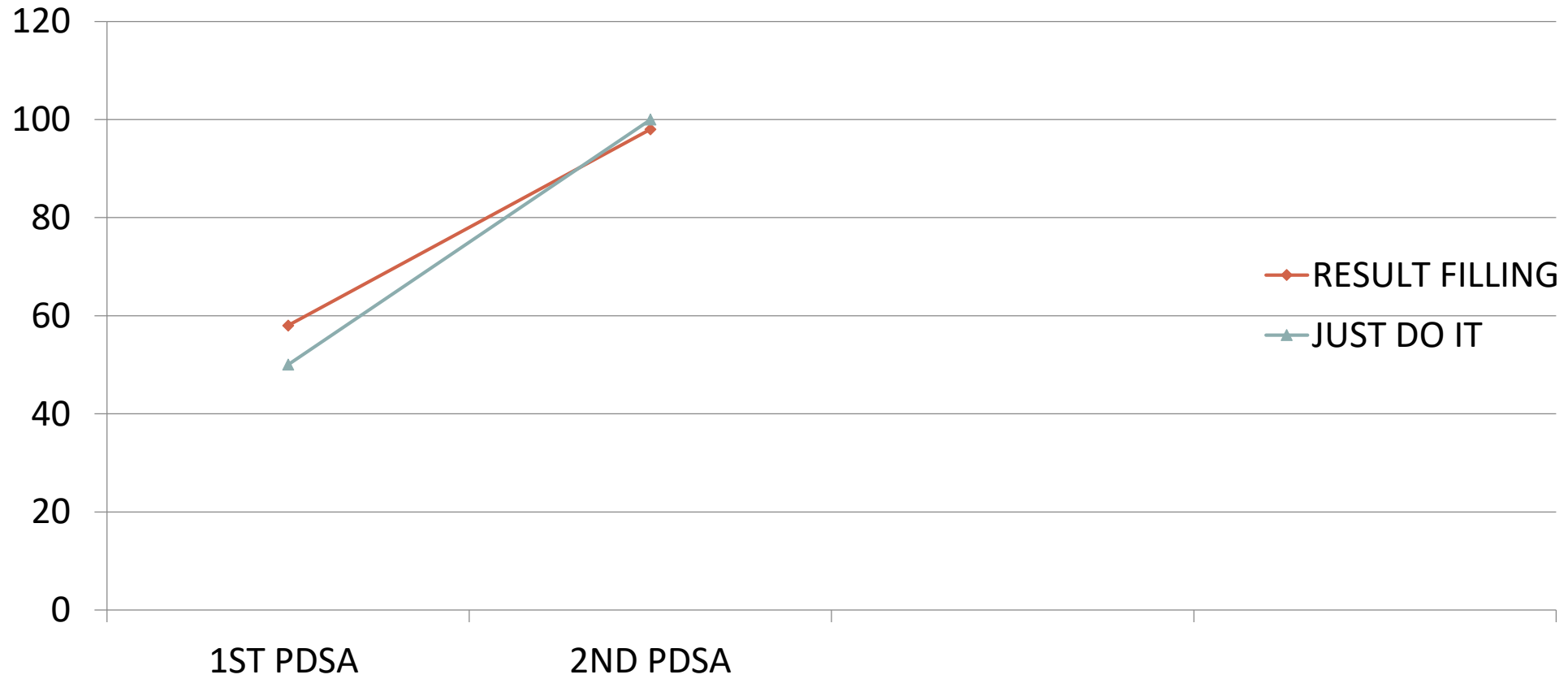
1. Spaghetti movement of the viral load register

- Intervention

The register be placed in the Program coordinators room and all respective departments to fill the register from the coordinators room to help him review and address any problem with high viral load documentation

Intervention in spaghetti movement





Challenges

Challenges

- Lack of sufficient time to carry out project activities effectively

Address challenges

- . Train non team members on how to implement some of the just do its to be able to concentrate on the main project.

Divide work i.e data collection

Lessons Learnt

- Hardcopy viral load results are very essential in patient management regardless of the presence of the EMR
- With proper policies put in place and frequent monitoring, hardcopy results can be easily filed in the patient file.

Action Plan

Topics / Goals	Action Item	By whom	By when
Formulate sop on result management	Write sop		March 30 th 2019
Follow up on hardcopy results filling	File abstraction		Twice monthly