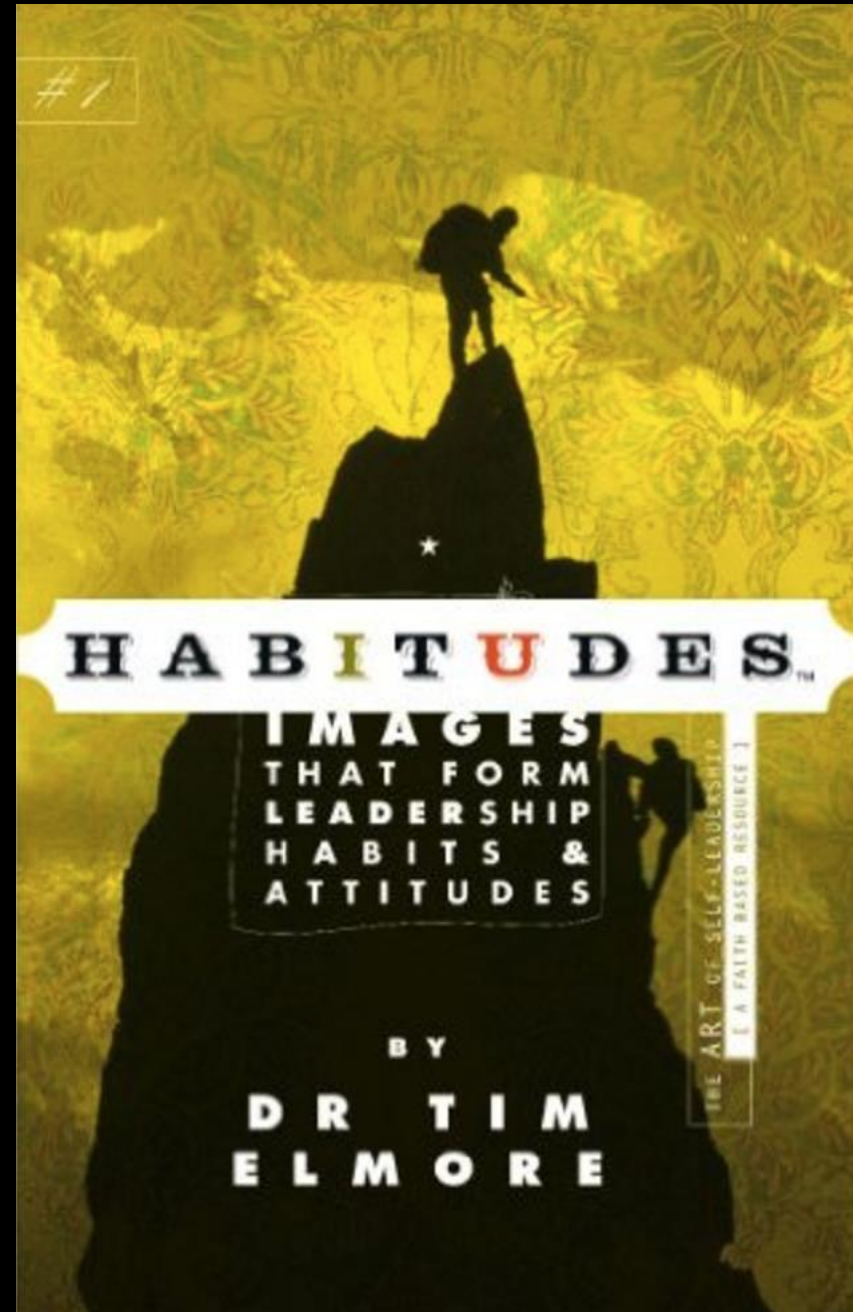




Thank You



Habitudes: Using Images
to form Leadership
Habits and Attitudes





Diagnostics - Clinical Relay



Strengthening the Laboratory Clinic Interface

The SLMTA / Quality Improvement Approach

4 December 2016

Barbara Chase McKinney, MD, MPH

#ASLM2016
@BCMckinneyMD

5 Countries – 5 Stories

TANZANIA – How the SLMTA approach became an inspiration for a hospital star rating system for the entire country



BOTSWANA – Laboratorian tapped to lead hospital accreditation effort after laboratory obtains international accreditation



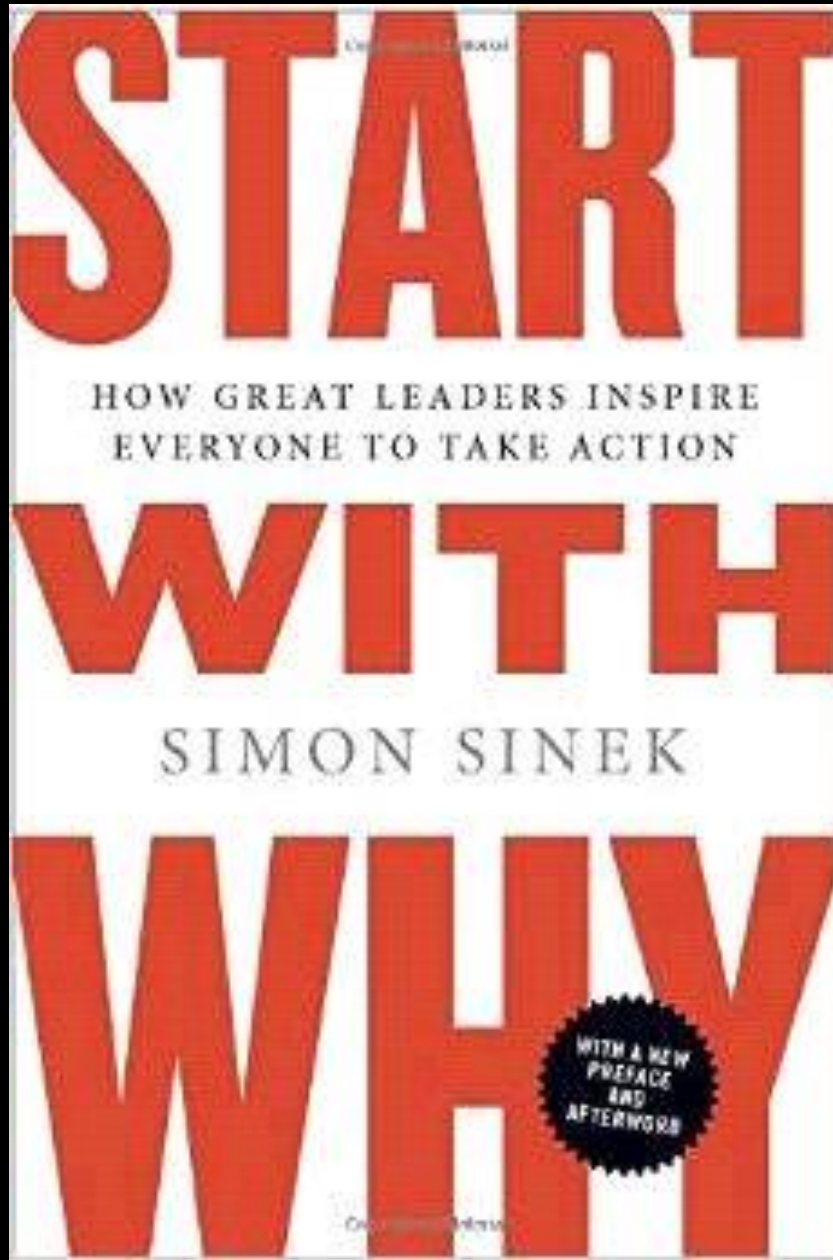
MALAWI – CEO calls on Laboratorian to Implement Total Quality Management (TQM) for Hospital



MOZAMBIQUE and SWAZILAND embrace the laboratory-clinic interface collaborative (LARC) to drive the implementation of viral load testing



WHY?



Diagnostics - Clinical Relay



Looking Back



Laboratories in Africa
attaining international
accreditation

2009

Yes We Can!



2009

Imagine The Future Today



2009

Roadmap To Accreditation



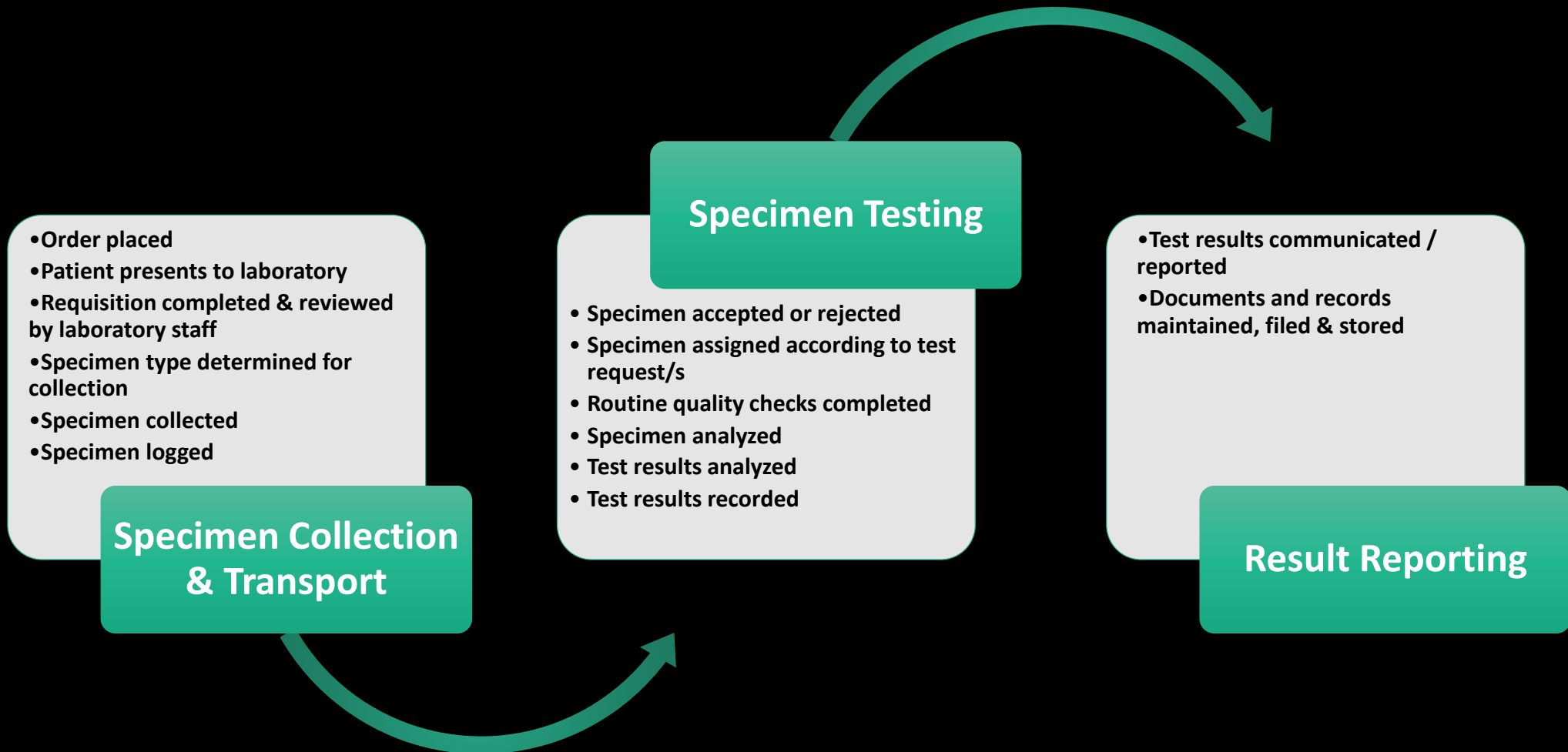
Accreditation

How a notion galvanized laboratories around the world

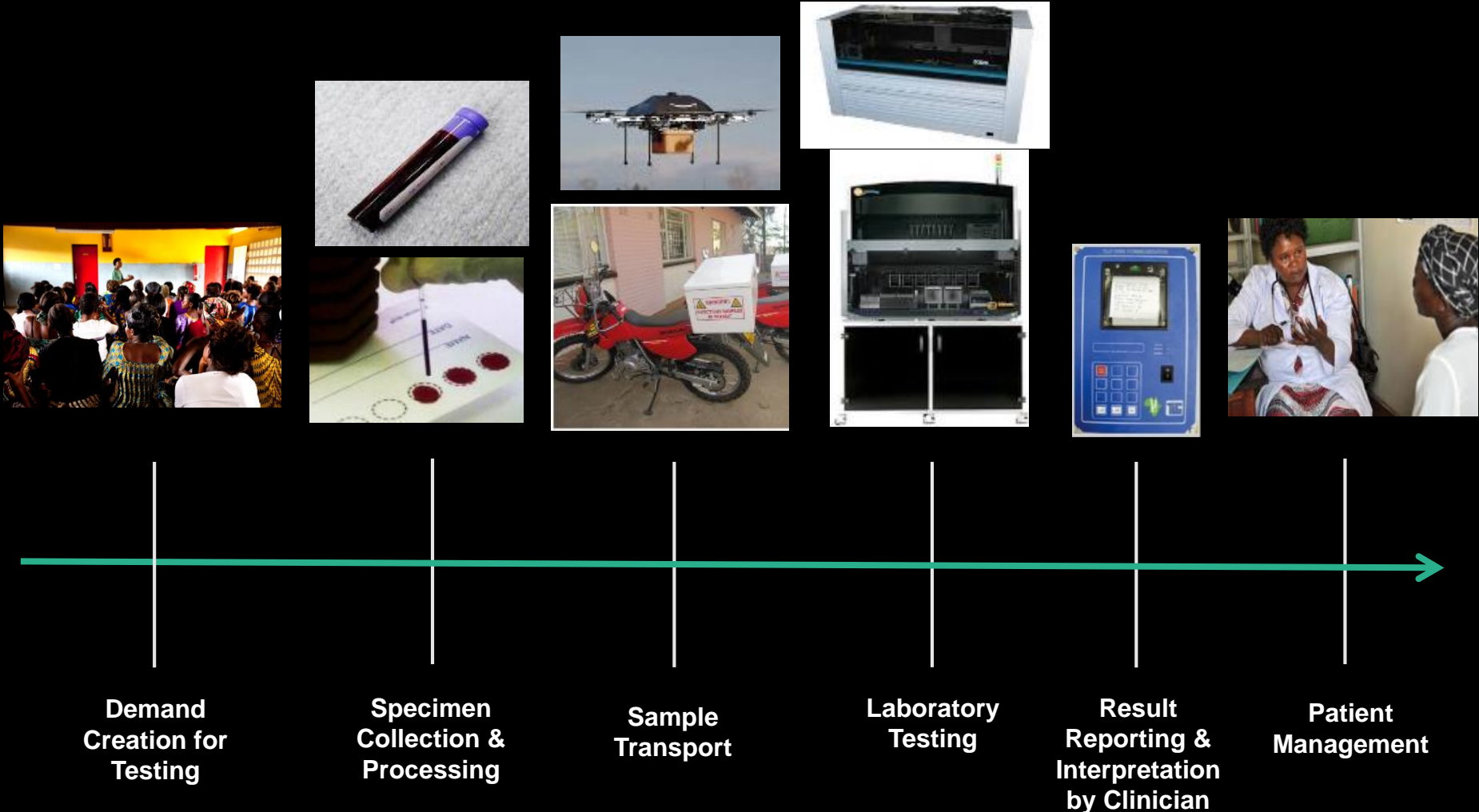
	Step	What happens?	Who is responsible?	Procedures needed?	Pitfalls
	1. Order placed	Clinician determines need	Clinician	Ordering protocols	<ul style="list-style-type: none"> Unauthorized person ordering Inappropriate order
	2. Patient presents to laboratory	Laboratorian interacts with patient	Patient / Laboratorian	Customer Service	<ul style="list-style-type: none"> Lack of timely service Interaction not client-friendly
	3. Requisition completed & reviewed by laboratory staff	Requisition reviewed for proper information	Clinician, Clerk, or Laboratorian	Criteria for specimen acceptability	<ul style="list-style-type: none"> Incomplete patient data Incomplete clinical history Clerical errors
	4. Specimen type determined for collection	Note specific test requested and determine what type of sample is needed	Laboratorian	Specimen requirements for (venous) blood collection SOP for each analyte	<ul style="list-style-type: none"> Not checking or following specimen requirements Inadequate communication to patients regarding specimen self-collection
	5. Specimen collected	Blood drawn from patient; Sputum, urine, stool, or other specimen is collected	Blood - Clinician or Laboratorian, Non-blood specimens - Clinician or Patient	Phlebotomy key competencies Phlebotomy training checklist	<ul style="list-style-type: none"> Blood - Wrong tube, incorrect amount of blood, Injury Non-blood specimens - incorrect specimen or incorrect collection procedure; improper labeling
	6. Specimen logged	Appropriate information recorded in specimen log	Laboratorian	Specimen management	<ul style="list-style-type: none"> Clerical errors Inadequate information Clerical error
	7. Specimen accepted or rejected	Specimen accepted or rejected based on meeting acceptance criteria	Laboratorian	Specimen management Criteria for specimen acceptability	<ul style="list-style-type: none"> Unsatisfactory specimen Specimens with hazardous handling conditions Inadequately labeled specimen
	8. Specimen assigned according to test request/s	Requests reviewed for <ul style="list-style-type: none"> Testing priority - STAT versus routine If multiple tests to be done, sequential workstations versus aliquoting Centrifugation required Send out versus in-house testing 	Laboratorian	Guidelines for STAT testing Guidelines for multiple test from one sample Specific SOPs for each analyte SOP for send outs (specimens referred to other facilities for testing)	<ul style="list-style-type: none"> Processing not performed in a timely fashion as ordered Missing some tests on a requisition with multiple tests requested Centrifuge not performed in a timely manner Send out tests not referred in a timely matter or transported inappropriately

	Step	What happens?	Who is responsible?	Procedures needed?	Pitfalls
	9. Routine quality checks completed	Prior to testing, determine if proper routine QC, reagent validation, equipment maintenance and calibration completed	Laboratorian	SOP for each analyte , Guidelines for quality checks of all Log / Charts for each analyzer or test	QC not done or out of control, Inadequate troubleshooting or follow up of QC Improper calibration Inadequate equipment maintenance
	10. Specimen analyzed	Run analysis on specimen	Laboratorian	Specific SOP for each analyte	Not following SOP Taking shortcuts
	11. Test results analyzed	Review test results for accuracy, legibility, & validity; Cross-checking Assure proper quality monitoring	Laboratorian, Supervisor	Specific SOP for each analyte ,	Release of test results without validation or interpretation Inadequate cross-checking
	12. Test results recorded	Transfer test results into logbook, Record results accurately	Laboratorian, Clerk	Test Reporting SOP; Specimen Management	Clerical errors, Analyte , printout results listed in different order than logbook reporting columns
	13. Test results communicated / reported	Notify Clinician of results via written report Verbal reporting if necessary Critical Values reporting Assure that referral specimens are properly tracked	Laboratorian, Nurse	Specimen management Client satisfaction guidelines	Results not communicated in a timely fashion Results lost Critical values not reported Confidentiality breached Failure to track referral specimens or failure to follow-up on overdue specimens
	14. Documents and records maintained, filed & stored	File & store results in a retrievable fashion Transfer files to long term storage Dispose of files at an appropriate time	Laboratorian	SOP for document & record management (Including Document & Record Retention)	Unable to retrieve information when needed Lack of adherence to document retention schedule Water or moisture damage

The Specimen Flow Process



The Viral Load Cascade



SLMTA - Meet the Clinician

ACTIVITY Meet the Clinician

PURPOSE

Clinicians and laboratorians must work together to provide quality patient care. Neither can achieve that goal without the other. This activity facilitates communications and sharing perspectives as the first step toward building that relationship.

RESOURCES NEEDED

- Handout 1: Questions for Clinicians
- Handout 2: Questions for Laboratorians
- PowerPoint presentation - The Principles of Quality Assurance
- Job Aide: Creating a Clinician Handbook
- Flipchart and markers

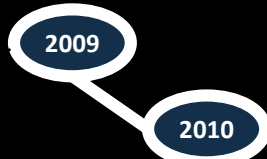




SLMTA

A Global Movement for
Laboratory Continuous
Quality Improvement

- SLMTA launched in Kigali
- First TOT conducted at ACILT



First cohorts of 135 labs in 11 countries enrolled

First-generation indigenous master trainers created



SLMTA song unveiled at 1st Symposium, ASLM2012

- 1st SLMTA lab accredited
- QC/MV Curriculum introduced at Roche SC



- AJLM SLMTA Supplement published
- SLMTA music video unveiled at 2nd Symposium, ASLM2014

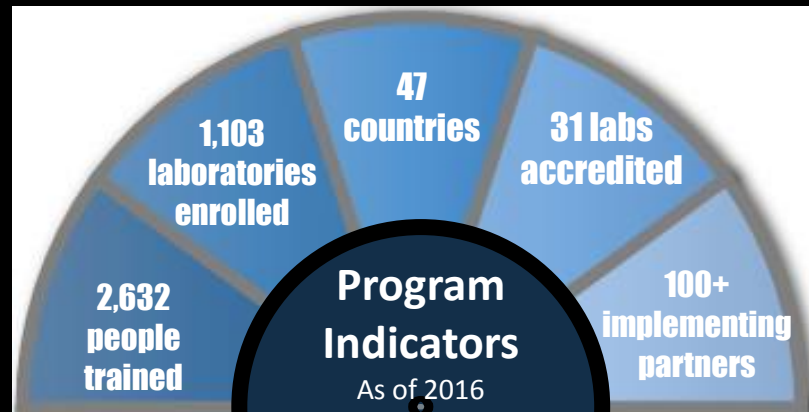
- CDC Excellence in Partnering – International Award
- Official SLMTA website launched



- SLMTA 2 curriculum introduced at Roche SC
- QC/MV lecture video series launched at 3rd Symposium, ASLM2016



The next chapter?



What is the challenge for 2017?

What is the next frontier?

Diagnostics - Clinical Relay



Thought Questions

In your own setting...

- What are you doing to assure that the handoff between the laboratory and the clinic is resulting in better patient care?
- What could you do to enhance the laboratory-clinic interface?
 - by next Tuesday?
 - in medium and long term plans?
- Are there any ongoing initiatives that you could use to drive the health systems toward greater quality & value?
- What tools and skills do you have to offer the entire healthcare system?

5 Countries – 5 Stories

TANZANIA – How the SLMTA approach became an inspiration for a hospital star rating system for the entire country



Mr. Mike Mwasekaga
Dr. Fausta Masha



Star Rating Tool: 12 Assessment Areas



	Facility Star Rating					
	0-Star	1-Star	2-Star	3-Star	4-Star	5-Star
Minimum Score in Four Domains	0-19%	20-39%	40-59%	60-79%	80-89%	90-100%
		*	**	***	****	*****





BOTSWANA – Laboratorian tapped to lead hospital accreditation effort after laboratory obtains international accreditation



Nyangabgwe Hospital Francistown, Botswana



- Public Hospital, one of two referral hospitals in the country, serving northern Botswana
- Established in 1988
- Authorized inpatient beds 542
- Estimated Number of Patients served / year
 - Admissions – 21,185
 - OPD – 50,410
 - A&E – 25,860

Nyangabgwe Laboratory



- 2006 – began a 9-year journey toward accreditation
- 2007 - Pictured following renovation by PEPFAR
- 2012 - Lab was enrolled in SLMTA
 - Implemented Quality Improvement projects
- 2015 - Awarded best performing department in Nyangabgwe Hospital

3 March 2015

“Accreditation of laboratories and hospitals is in the forefront of the Ministry’s strategy to improve the competence and quality of the health care delivery system in Botswana...”



Dr Malaki Tshipayagae Nyangabgwe Hospital Superintendent



Mr David Matema Chief Medical Scientific Officer Ministry of Health



Mrs Maureen Mutasa Chief Executive Officer SADCAS



Mrs Kelebeletse Mokobela Chief Acting Head of Nyangabgwe Referral Hospital Laboratory

Dr. Tshipayagae, Nyangabgwe Hospital Superintendent

Hospital Accreditation Journey

- 2010 - Nyangabgwe Hospital enrolled in COHSASA accreditation
- January 2016 - Very little or no progress towards accreditation
 - No policies and procedures as required by COHSASA
 - Staff did not understand
 - Quality Improvement
 - Accreditation
 - Standards
 - Self assessments inaccurate & not being done as required by COHSASA
 - No Quality Improvement Projects

BOTSWANA – Laboratorian tapped to lead hospital accreditation effort after laboratory obtains international accreditation



Hospital Management wanted someone who understood quality improvement to spearhead the accreditation process...

Kelebeletse Mokobela
Tapped in March of
2016

Where did they start?

1. Establish Hospital Peer Review Working Group/Committee

- Training (Crash Course) for Peer Reviewers
 - Standards
 - Assessment/Scoring - Compliance, Non Compliance, Partial compliance
- Mock assessments

2. First Peer Review Self Assessment conducted March 2016

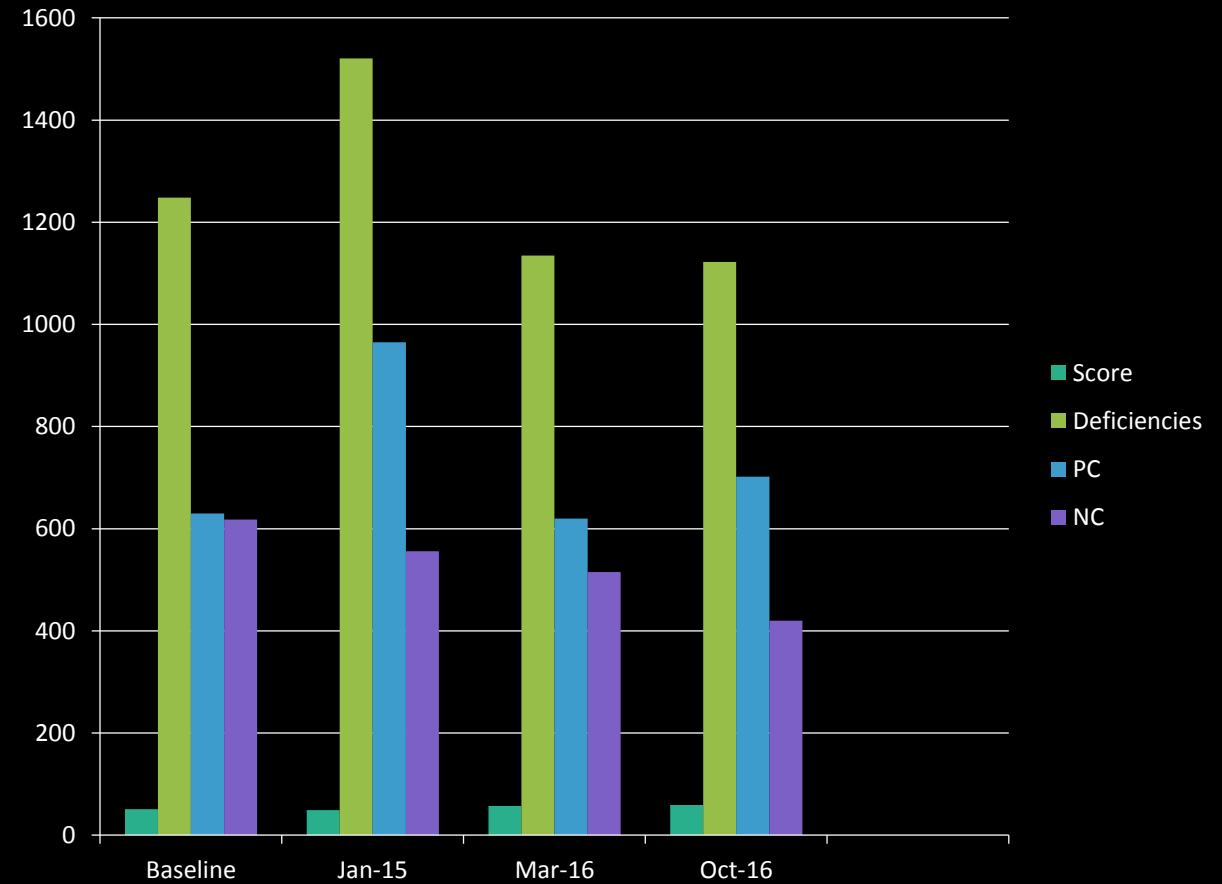
- Majority of non compliant standards were due to lack of policies and procedures

Project Summary

- Aim
 - **Develop Hospital Policies and Procedures by December 2016**
- What did we do
 - Identify all policies and procedures that needed to be developed
 - Create/Train Hospital SOP-development committee - multidisciplinary
 - Quality Training based on COHSASA requirements
- Results
 - Quality manual containing all hospital policies based on ISO 9001 and COHSASA requirements was developed
 - 114 hospital generic SOPs identified
 - All 114 SOPs developed and ready for authorisation by end of November 2016
 - 32 clinical SOPs were identified and completed ready for authorisation
 - 14 clinical protocols developed and undergoing review by departments

Progress in addressing deficiencies since December 2014

	Score	Deficiencies	PC	NC
Baseline 2010	51	1248	630	618
Jan-15	49	1521	965	556
Mar-16	57	1135	620	515
Oct-16	59	1122	702	420



What were the “key ingredients” that made this successful? What lessons did you learn?

- Training of staff is key
- Management involvement is very important
- Team Approach – Multidisciplinary / involvement of staff at all levels

Words of Wisdom...

- **To Laboratory**

- Lab QMS is very advanced; therefore, when spreading to other hospital departments, remember it takes time:
 - To develop understanding / comprehension
 - To overcome resistance
 - To change attitudes toward accreditation and quality
- Lab staff leading hospital quality need to be patient and invest in training

- **To Hospital**

- It took the laboratory many years to reach where they are now – be patient with the process
- Don't expect everything to be perfect at the beginning – just implement what you know and the rest will follow
- Share documents with other departments in the hospital – there is no need for duplication



Laboratory and Hospital Accreditation – How they fit.

Jacqui Stewart

CEO

The Laboratory staff in the SLMTA programme are often in a unique position in a hospital in terms of the depth of training they undergo in relation to quality and accreditation

The basic principles are the same although the content may be different

Examples of areas of support:

- Infection prevention and control systems

- Development of SOPs, protocols, procedures

- Quality improvement methods

- Data and trend analysis

Possible challenges

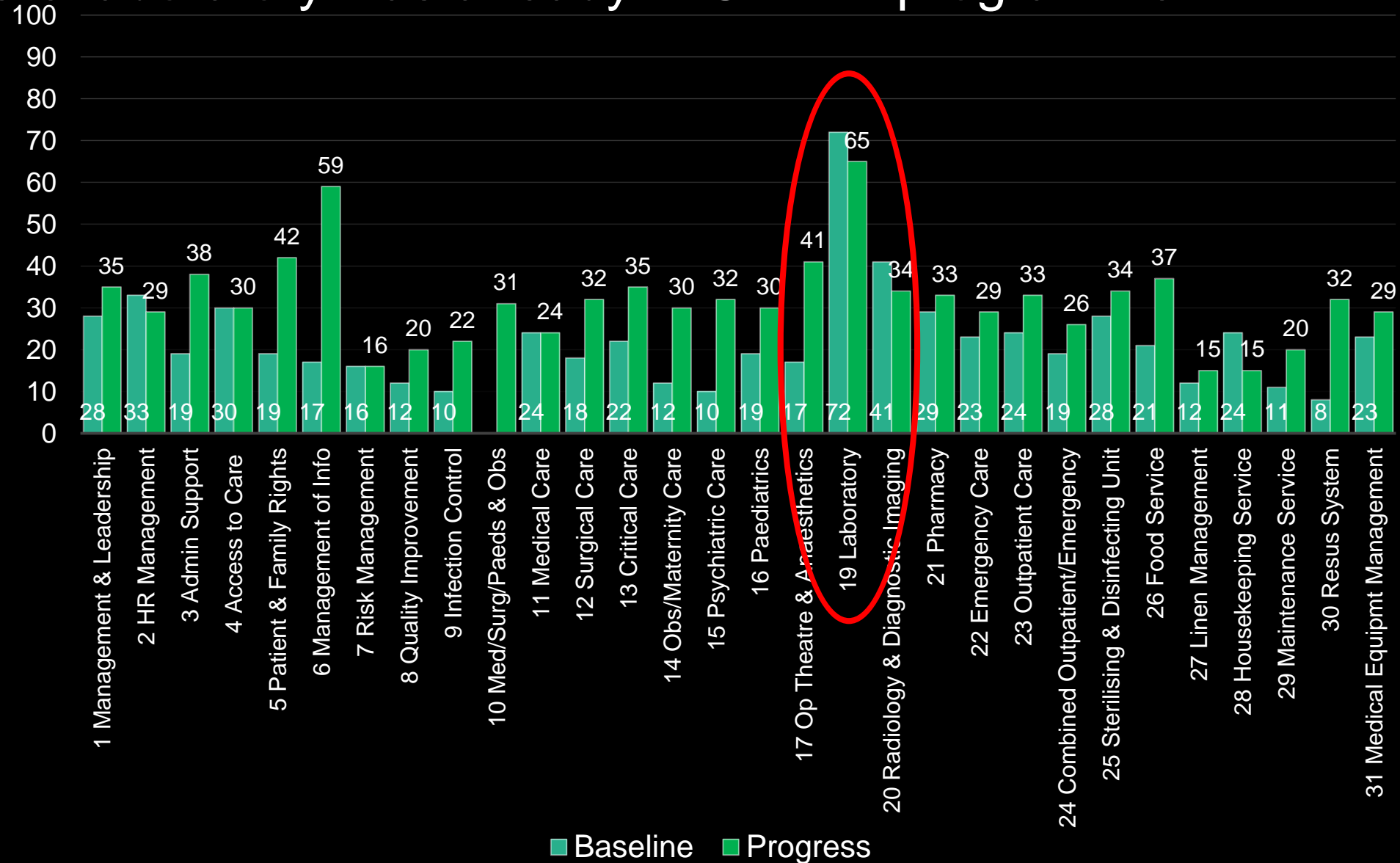
Be aware there may be feelings of resentment – the lab is “getting all the attention and funding”

The SLMTA programme is often run in very resource constrained hospitals. When improvements happen in the lab, it accentuates the shortfalls in other departments

Be open to sharing information with colleagues in other departments

Be sensitive to their challenges, which may be different from yours.

Service scores across a hospital in the accreditation programme where laboratory was already in SLMTA programme



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MALAWI – CEO calls on Laboratorian to Implement Total Quality Management (TQM) for Hospital



Jason Blanchard, CEO



- 275 Bed capacity, providing healthcare to one of the poorest districts in Malawi since 1902.
- Provides specialized women & child's health, infectious diseases, chronic diseases, general surgery, pediatrics, dental, radiology and lab services.
- Main training site for Malamulo College of Health Sciences and also hosts a Loma Linda University Field Station.

Blantyre Adventist Hospital



- Private 40 bed tertiary hospital in the city of Blantyre.
- Provides specialized Surgical, Medical, OB-GYN, Pediatrics, Dental, Radiology, Laboratory, ICU and Emergency care services.

The Laboratory Connection

Elde Paladar

SLMTA Master Trainer



What did you do?

2-Day Workshop

- Goal - Improve efficiency (cost) and effectiveness (quality)
- Customer Focus
- Quality Improvement – PDCA
- Teamwork
- Analytical Tools
- Process Mapping / $P+S=O$
- Training / Competency Assessment
- Documents/Documentation

Post-Workshop Assignments

- Process Mapping – Key processes in every department
- 6S for an efficient workspace
- Implement Quality Improvement Projects

Improvement Projects: Results (BAH)

BAH -IMPROVEMENT PROJECTS	DEPARTMENT	BASELINE (Average)	CURRENT (Average)
Reduce patient process time	OPD	220 mins	45 mins
Reduce number of rejected films	Radiology Department	20%	15%
Reduce discharge process time	Nursing Department	5 hrs	30 mins

Improvement Projects: Results (MAH)

MAH: IMPROVEMENT PROJECT	DEPARTMENT/s	BASELINE (Average)	Sep to Nov (Average)
Reduce Turn-Around-Time (TAT) for repair/maintenance request	Maintenance department	5 days	2 days
Reduce number of Lab Test done/performed but NOT billed or charged to the patient	Lab, Nursing, Clinicians and Accounts departments	23% (Q1 of 2016). 41,000- Total # of test performed – *if 1 test cost 1\$ then that 23% is \$9430 lost	14%
Reduce number of drugs administered and or procedures performed but NOT billed or charged to the patient	Nursing, Clinicians and Accounts departments	24% (Q1 of 2016)	12%

Recognition to verify that indeed there is Improvement in the quality of services?



Blantyre Adventist Hospital
won the
Service Excellence Awards/Hospital Sector
for 2015
organized by
Chartered Institute of Customer Management

*This year, 2016, BAH has been nominated again for this category.

Key Ingredients for Success

- Create a genuine quality culture
- Knowledge, Expertise and Skills
- Top Management Support and Commitment
- Motivation

Words of Wisdom

- **Quality** is important for hospital management & needs to extend to all levels of the organization
- If SLMTA/quality improvement is confined to laboratories, then the **patient** will not experience an organization-wide quality service
- **A TEAM is only as strong at its weakest link**

Most Important reason for hospital's existence...



Diagnostics - Clinical Relay



MOZAMBIQUE and SWAZILAND embrace the laboratory-clinic interface collaborative (LARC) to drive the implementation of viral load testing

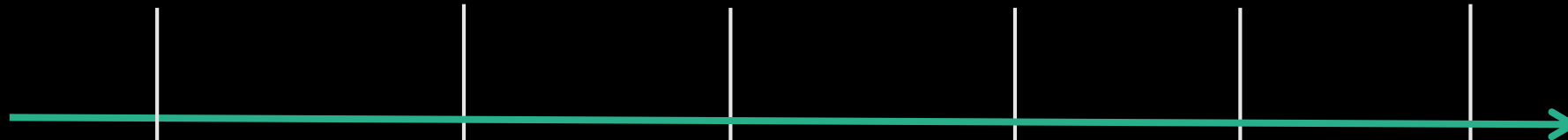


The Viral Load Cascade

LARC
MOZAMBIQUE



LARC
SWAZILAND



Demand
Creation for
Testing

Specimen
Collection &
Processing

Sample
Transport

Laboratory
Testing

Result
Reporting &
Interpretation
by Clinician

Patient
Management



What is LARC?

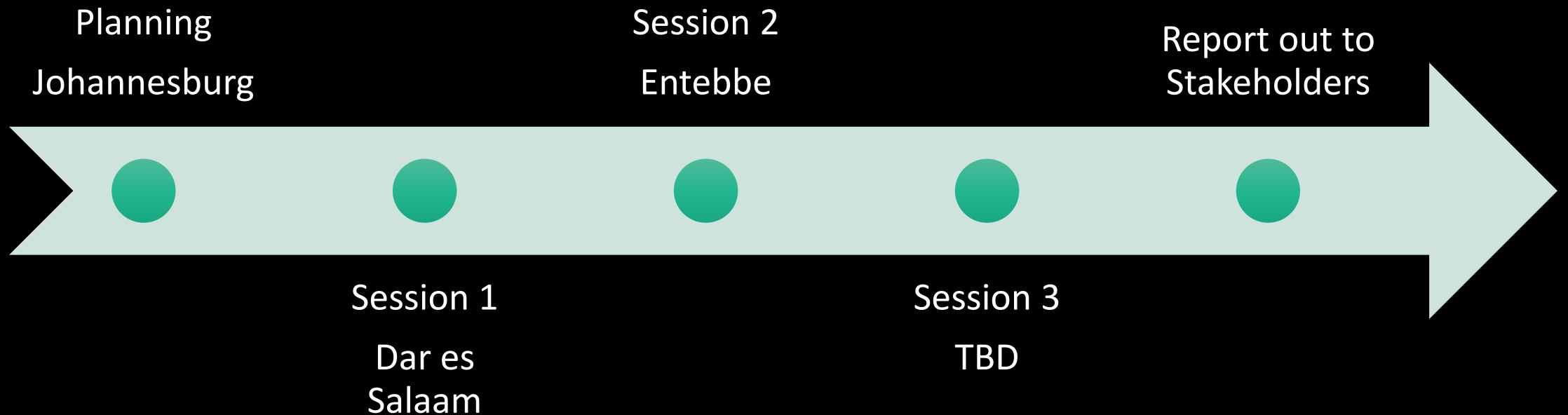
Laboratory African Regional Collaborative

About LARC

Bridging the Laboratory Clinic Interface

- Aimed at improving the interface between laboratory technologists and technicians and nurses and midwives
- 2014 – UNAIDS LAUNCHES *90-90-90: A TRANSFORMATIVE AGENDA TO LEAVE NO ONE BEHIND*
- UNAIDS 90-90-90 goals aim by 2020:
 - 90% of all people living with HIV will know their HIV status
 - 90% of all people with diagnosed HIV infection will receive sustained ART
 - 90% of all people receiving ART will have viral suppression
- VIRAL LOAD TESTING INTEGRAL
- Improving communication between laboratory personnel and clinicians along the continuum is essential to achieving the 90-90-90 goals.
- The LARC initiative will provide time limited grants to six countries (Kenya, Malawi, Mozambique, Swaziland, Tanzania, and Uganda)

Project Overview – IHI Collaborative Model



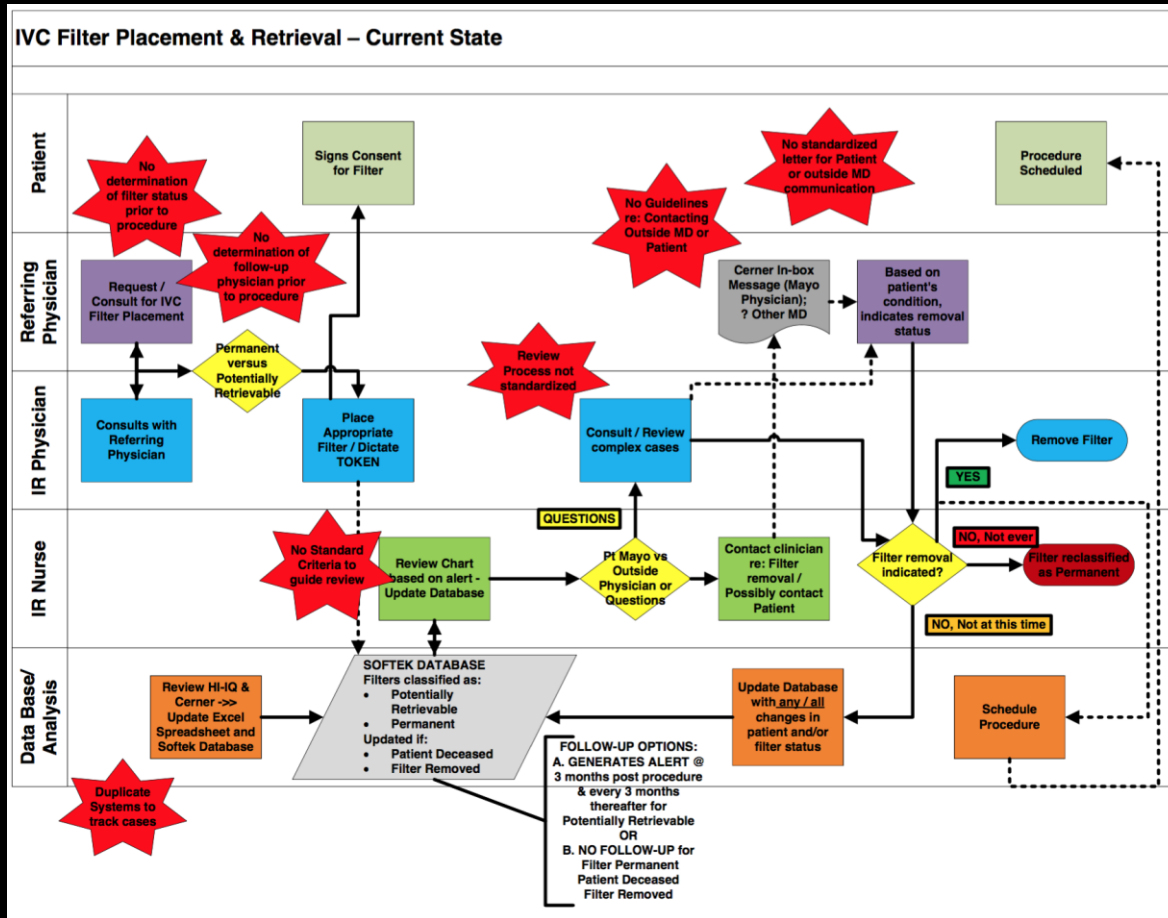
LARC Curriculum

Guiding Principles for Quality Assurance

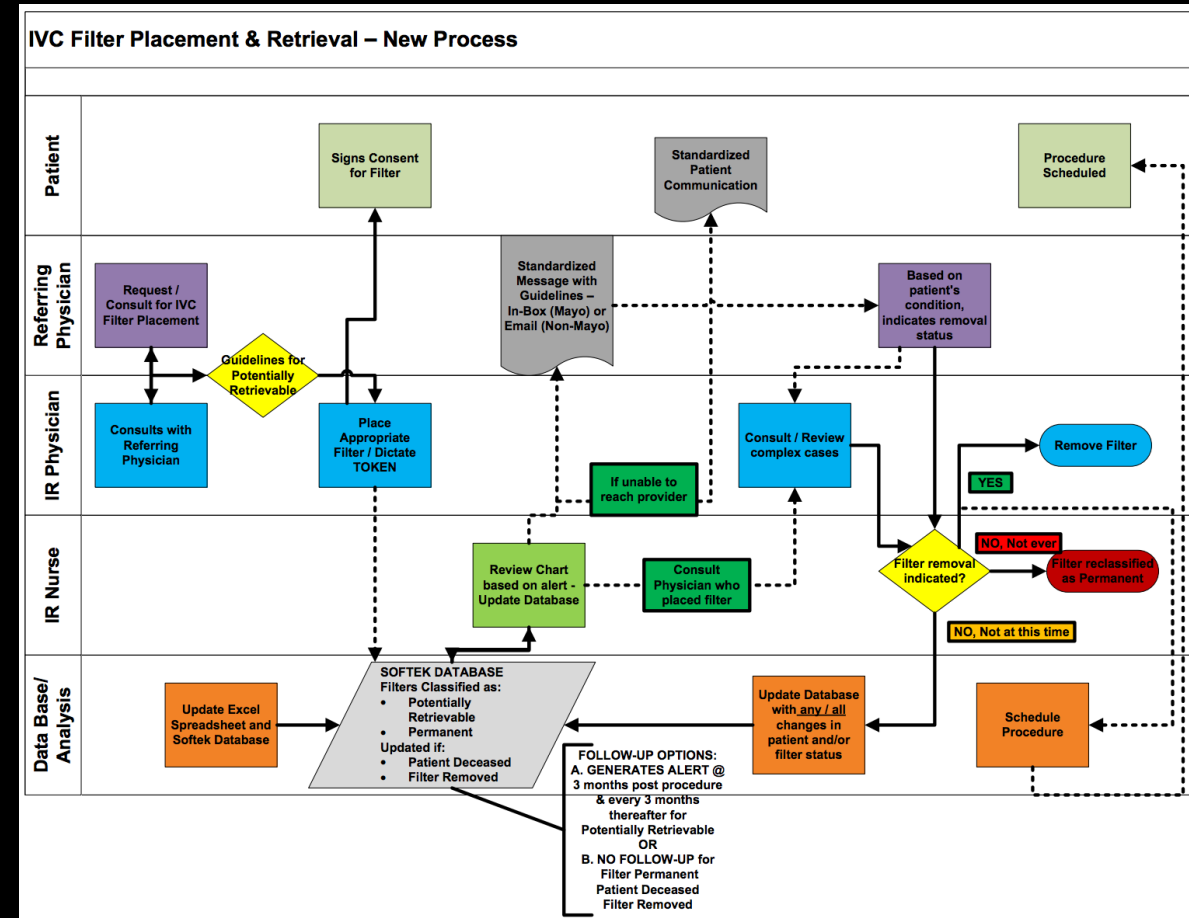
- Focus on **processes** to increase the productivity of work
- Focus on the needs of the **users**
- Use **data** to improve services
- Use **teams** to improve quality
- Improve **communication**

Process Maps

Current State



Future State

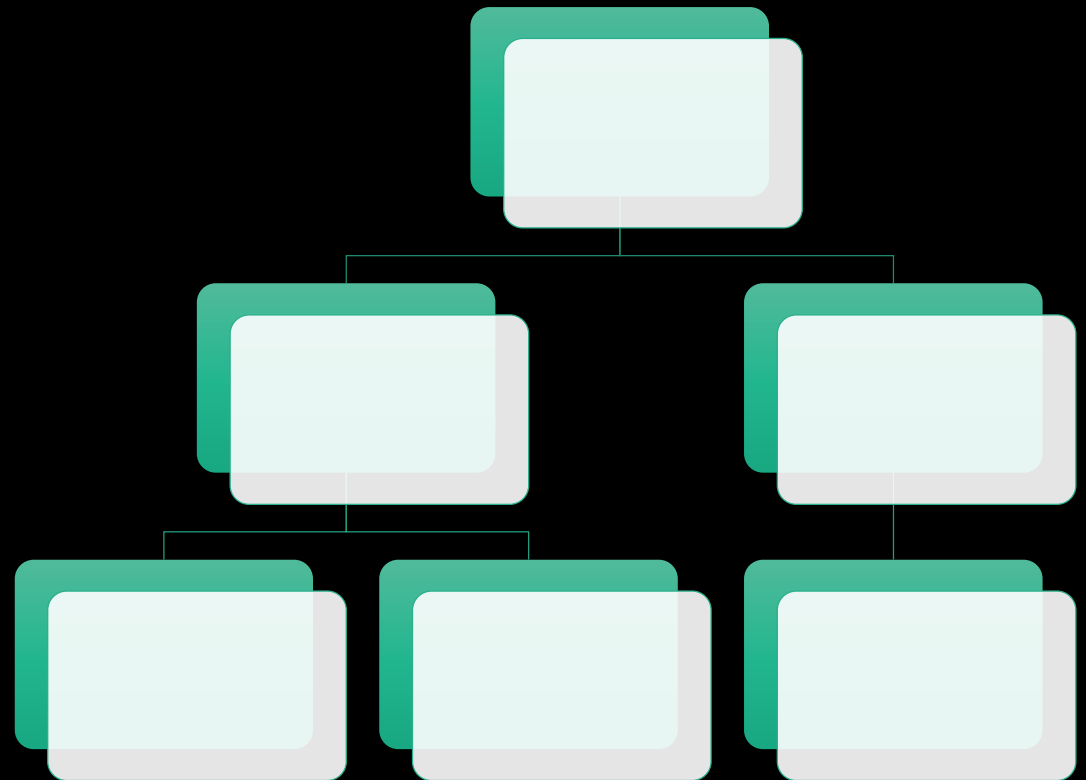


$$P + S = O$$

Process



Structure

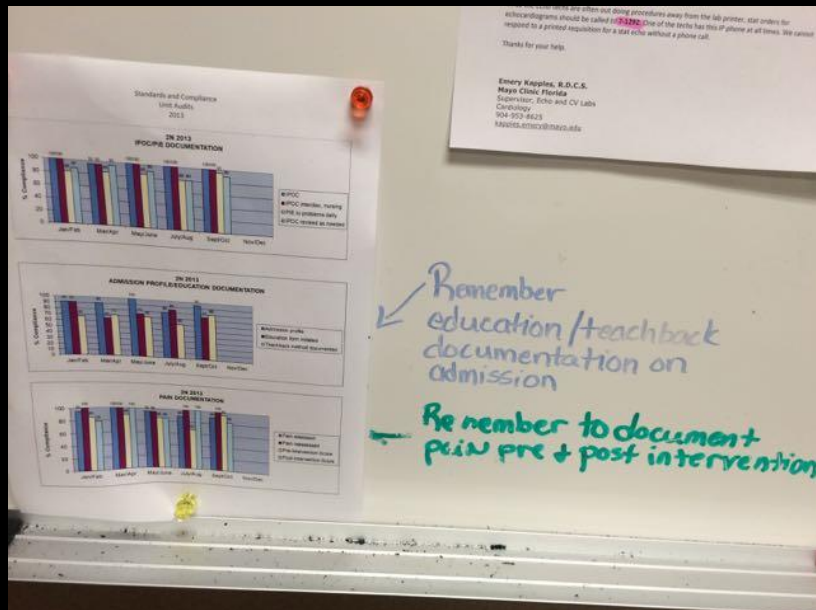


“What gets measured, gets fixed.”

DATA

Use your Data

- Be transparent – display data prominently
- Act on information



Commitment to Safety Learning Board

Next Meeting

AIM 1	PROCESS	OUTCOMES	Aim Parking Lot
Collect data for blood product order to blood administration rates by March 30, 2013. After collecting data for blood product order to blood administration, improve order to administration times under 2 hours by June 17. Team Members: Ashley Reid Rebecca Hillier Dr. Tyler Vahlbrock			
Improve Emergency Department wait times by 20% through utilization of both beds to assist in processing high usage volumes while gathering data information about patient satisfaction. Team Members: Nichell DeLeon Dorell Adams Michael Schmitz, PA			
Gather data by specialty for consult communication rates by March 27, 2013 and then focus on a strategy to improve an existing consult system. Team Members: Ashley Reid Dr. Heather Pritt			

IDENTIFIED OPPORTUNITIES	ACTIONS	RESOLVED

Teams



Quality Improvement (QI) Approach

DMAIC Framework: To Improve Any Process



Nature of the problem?
Goals / Aims
Timeline
Scope

Magnitude of the problem? Select metric to show improvement

What are the most important causes of the problem?

What change will we make to address the causes of the problem?

How can we sustain & spread the improvements?
Communicate success

LEAN - Eliminating Waste

Mis-utilization of skills



Re-prioritization



Transportation/
Material
Movement



Inventories



Motions
(movement)



Waiting



Over-
production



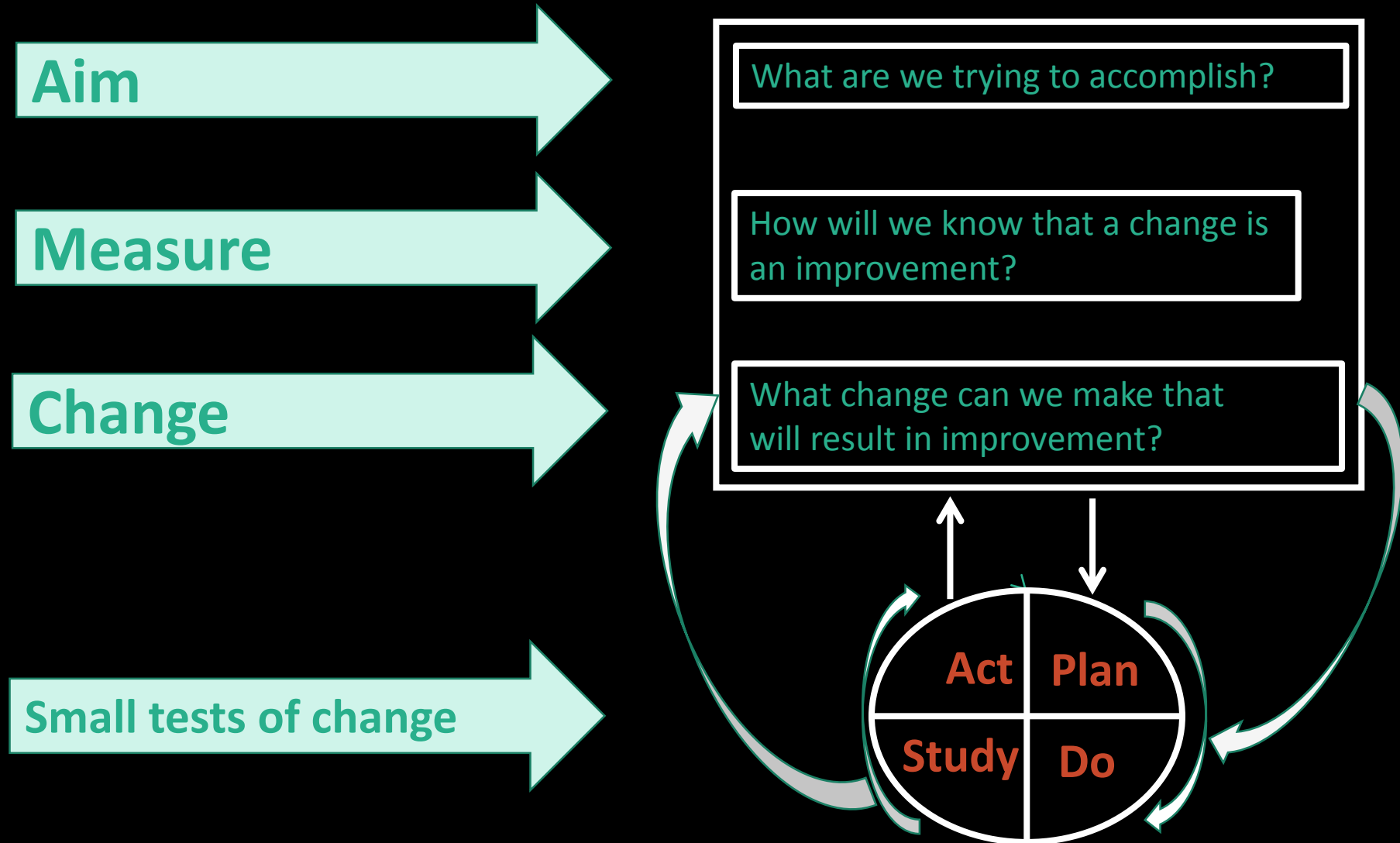
Over-
processing



Defects



The Model for Improvement (IHI)

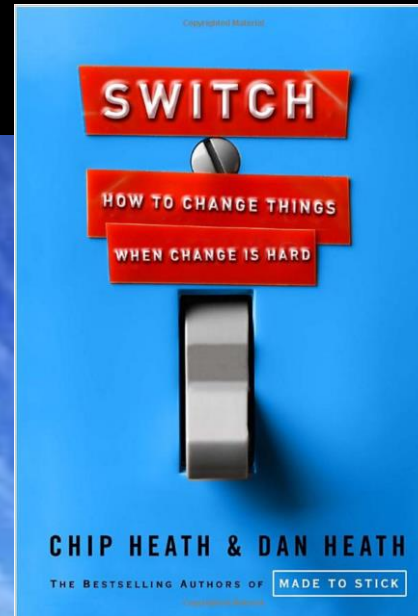


Change
Management

CHANGE IS
GOOD.
TRANSFORMATION
IS EVEN BETTER.

Switch

- **DIRECT the Rider**
 - FOLLOW THE BRIGHT SPOTS.
 - SCRIPT THE CRITICAL MOVES.
 - POINT TO THE DESTINATION.
- **MOTIVATE the Elephant**
 - FIND THE FEELING.
 - SHRINK THE CHANGE.
 - GROW YOUR PEOPLE.
- **SHAPE the Path**
 - TWEAK THE ENVIRONMENT.
 - BUILD HABITS.
 - RALLY THE HERD.



Project Checklist

Session 1 Deliverables DEFINE / MEASURE

- Identify Stakeholders
- Map the Process (Current State)
- Identify / Prioritize Opportunities
- Action Plan
- Project Outline
- Baseline Metrics / Data Collection Plan
- VOC Information
- Elevator Speech
- Communication Plan
- 1 Rapid/Small Test of Change (PDSA)
- Presentation

Session 2 Deliverables ANALYZE / IMPROVE

- Root Cause Analysis
 - Fishbone Diagram, 5 Whys, or Pareto Chart
- Update Project Outline, if necessary
- 1 Rapid/Small Test of Change (PDSA)
- 1 5S Exercise
- 1 Visual Management Application
- Create Future State Map (if ready)
- Presentation

Session 3 Deliverables CONTROL

- Update Project Outline, if necessary
- Validate Solution(s) / Interventions
- Modify Solution(s) where necessary by additional Test of Change (PDSA)
- Create Control Plan
- Transfer to Operational Owner
- Share/Spread Intervention, if applicable
- Final Presentation

Embed Improvement in your DNA
Continuous Quality Improvement = The Way We Work



This story is important because...



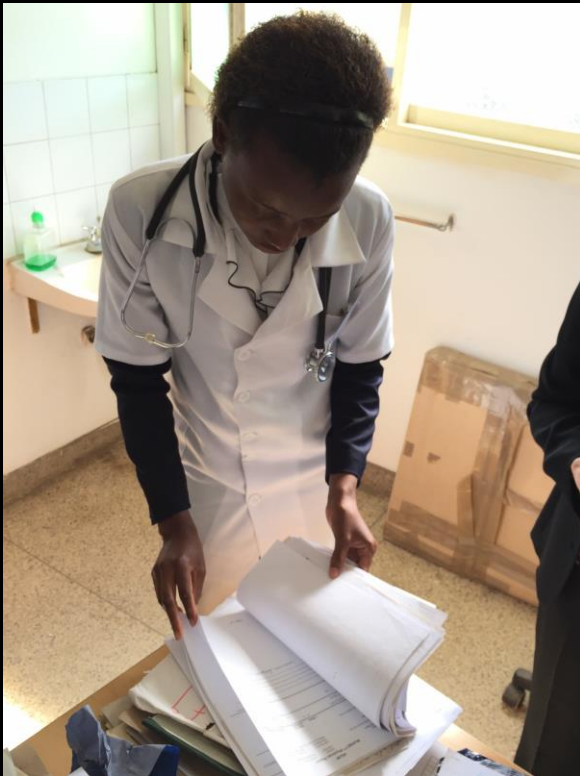
Mozambique

Viral Load Cascade – Demand Creation for Testing



Creating Demand for Viral Load Testing

Demand from Clinicians



Demand from Patients



Bagamoyo Health Center

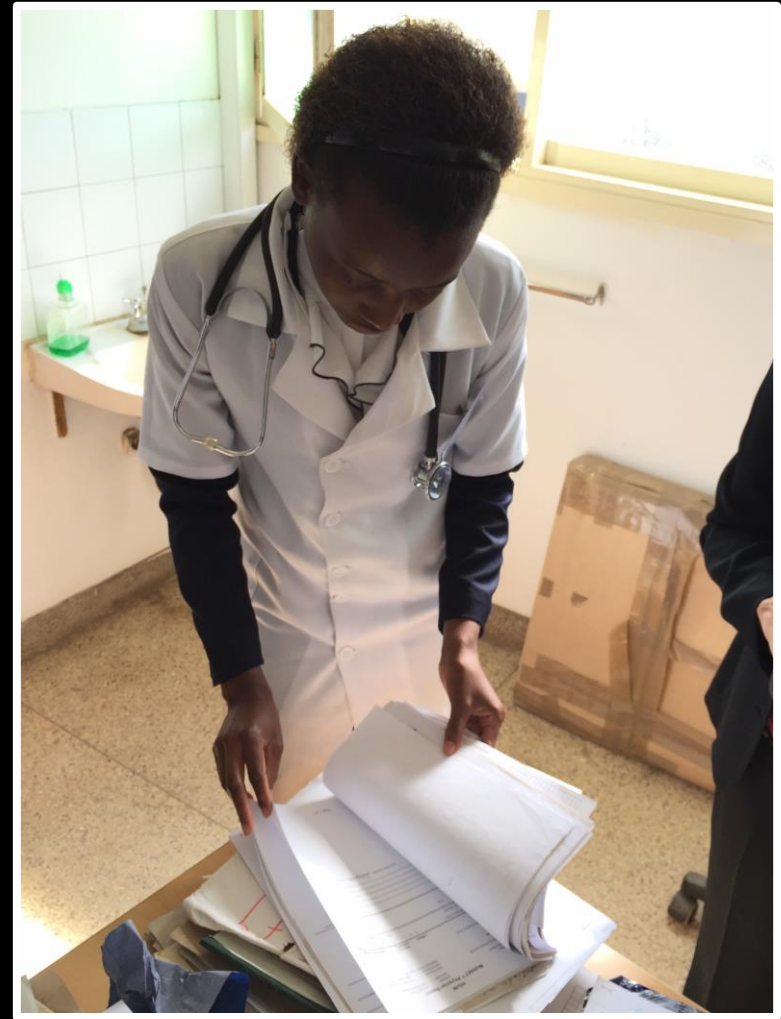
- Primary health care facility in the National Health System (NHS)
- **6914 HIV+ patients on antiretroviral treatment**
- One clinician trained in VL monitoring in 2015
- Despite National Guidelines calling for VL monitoring, CD4 monitoring still used for pregnant women and children 2-5 (MCH Clinic)



Maputo City, Mozambique

Bagamoyo Health Center – Baseline Data

- Approximately 5 VL tests ordered per month over the 6 months prior to beginning LARC
- 0% VL tests ordered appropriately in the MCH Clinic
 - 25 charts reviewed
 - 11 patients required VL testing according to country algorithm
 - 0 VL tests ordered



Mapping the Process



Summary – Observations on Successful Implementation of a New Clinical Algorithm

What does not work

- Sending out the Algorithm in an email
- Training Alone
- Training one person in a clinic without the “how to” for training their colleagues
- Multiple algorithm versions circulated, some with different VL cutoffs

Recommendations for success

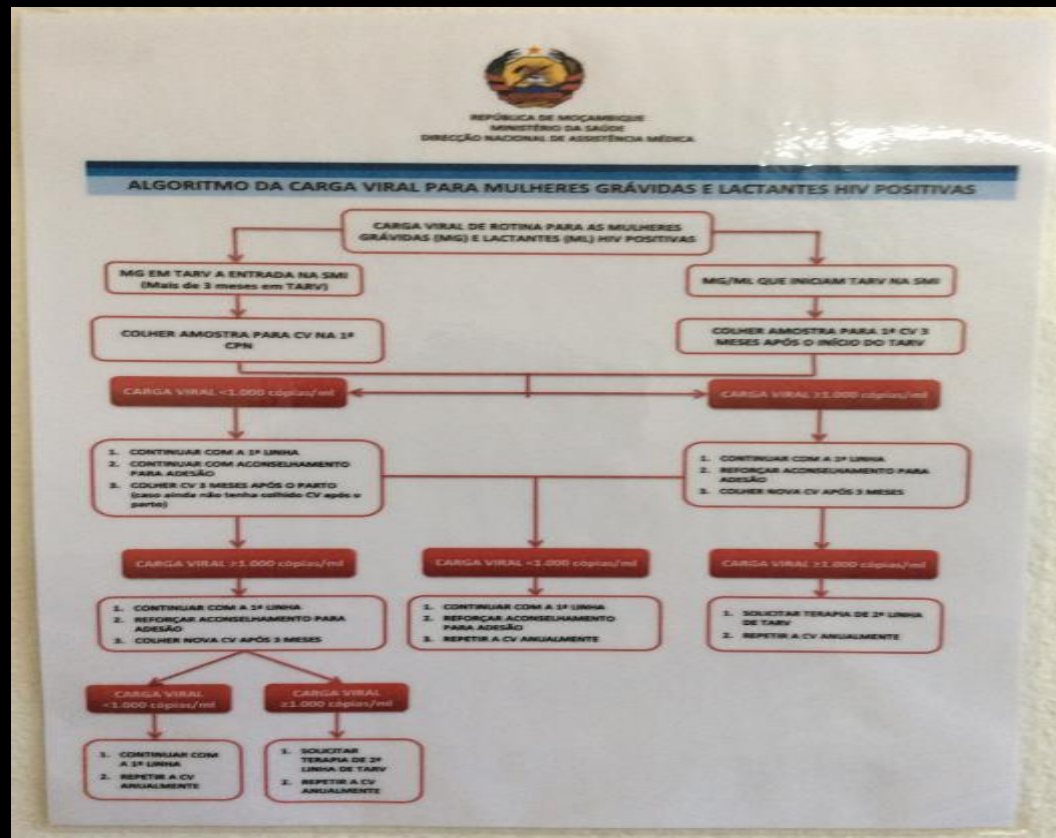
- Clinical competence must be developed
 - Use of actual cases
 - Mentoring/Coaching
 - Demonstrating competency
- Process mapping is very beneficial for planning prior to implementing a new process
- Change management is required, so all understand:
 - “The Why”
 - How each person will be affected by this change


Intervention

- Education for Clinicians
- Copy VL Requisition Forms
- Post National Algorithm in Consultation Rooms
- Weekly Chart Audit




Visual Management




 REPÚBLICA DE MOÇAMBIQUE
 MINISTÉRIO DA SAÚDE

DEFINIÇÕES DE FALÊNCIA TERAPÊUTICA PARA ADULTOS E CRIANÇAS

	ADULTOS	CRIANÇAS
FALÊNCIA VIROLÓGICA	a) Aumento de 1 log de carga viral em relação à carga viral previamente detectável (com intervalo de 3 meses), ou b) Carga viral detectável (carga viral maior ou igual a 100 cópias/ml no soro ou DBS, plasma ou sangue total) confirmado em 2 medidas repetidas num intervalo de pelo menos 3 meses, na presença de boa adesão, havendo sido indetectável previamente, e sem vacinação ou infecção concomitante actual (ou nos últimos 30 dias).	
FALÊNCIA IMUNOLÓGICA	a) Queda na contagem de linfócitos T CD4+ a limites inferiores a sua contagem pré-tratamento, ou b) Queda em 50% em relação ao pico da contagem de linfócitos T CD4+ após início do tratamento, ou c) Contagem de linfócitos T CD4+ persistentemente abaixo de 100 células/mm ³ , após 12 meses de terapia antiretroviral.	Mudança de categoria imunológica para categoria inferior, ou não resposta ao tratamento. Crianças maiores de 5 anos: contagem de CD4 persistente abaixo de 100 cells/mm ³ . Crianças menores de 5 anos: contagem de CD4 persistente abaixo de 200 células/mm ³ (onde não estiver disponível CD4 percentual) ou CD4 <10%.
FALÊNCIA CLÍNICA	Recorrência ou aparecimento de condição que indica imunodepressão severa (condições definidoras de estágio 4 da OMS), após 6 meses de tratamento eficaz.	Recorrência ou aparecimento de condição que indica imunodepressão severa (condições definidoras de estágio 3 e 4 da OMS, com a excepção de TB), após 6 meses de tratamento eficaz.



Weekly Chart Audit / Data Collection Tool





CONSELHO MUNICIPAL
PELOURO DE SAÚDE E ACÇÃO SOCIAL
CENTRO DE SAÚDE DE BAGAMOYO

PROTOCOLO DE CONTROLE DE PEDIDOS DE CARGA VIRAL EM MULHERES GRÁVIDAS

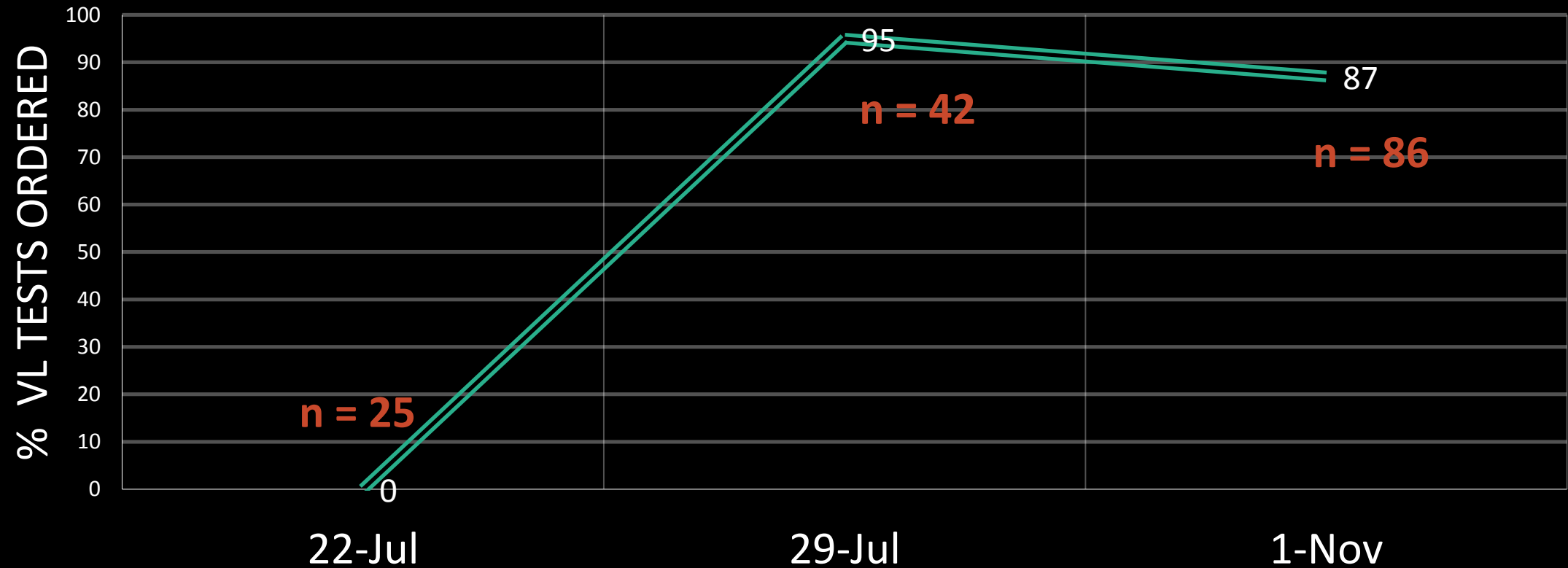
Nome do Paciente	NID	Número da consulta	Data de início de TARV	TARV 23 meses	Data de pedido de Carga Viral	Nome da Clínica	Amostra enviada ao Lab de referencia no dia seguinte		Resultado recebido dentro de 30 dias		Carga Viral >1.000 copies/ml	Comentários
							Sim	Não	Sim	Não		
	757/16	3º	25/5/16	x	29.07.16	Angalima x						
	751/12	3º	2012	x	1/1	Angalima x						
	571/16	3º	14.04.16	x	1/1	Angalima x						
	805/15	3º	10.6.15	x	22.7.16	Angalima x						
	10016/16	4º	2010	x	27.7.16	Angalima x						
	586/16	4º	23.7.16	x	27.7.16	Angalima x						
	206/7	3º	2007	x	27.7.16	Angalima x						
	577/13	3º	2013	x	27.7.16	Angalima x						
	595/10	4º	2014/16	x	27.7.16	Angalima x						
	1965/	4º	2014	x	28.7.16	Angalima x						
	326/12		2012	x	29.07.16	Jecechi x						
	1695/18	2º	16.4.16	x	29.7.16	Jecechi x						

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 style="text-align: center;">Overarching Goal</p> <p>Increase the demand for viral load testing for the HIV+ patients of the Maternal Child Health Clinic (MCH) and the Bagamoyo Health Facility, in order to prevent vertical transmission and detect treatment failure</p>	<p style="text-align: center;">AIM Statement</p> <p>Increase the percentage of viral load tests ordered according to national algorithm</p> <p style="text-align: center;">- From 0% (Baseline July 2016) to 80% by 30 June 2017 for entire clinic (HIV+ clients)</p> <p>Metric:</p> <ul style="list-style-type: none">  <u># of viral load tests ordered</u>  # MCH patients that require viral load testing according to country algorithm 	<p style="text-align: center;">Intervention</p> <p style="text-align: center;">Create Demand from the Clinician</p> <ul style="list-style-type: none"> • Education for Clinicians • Copy VL Requisition Forms • Post National Algorithm in Consultation Rooms <ul style="list-style-type: none"> • Weekly Chart Audit <p style="text-align: center;">Create Demand from Patients</p> <ul style="list-style-type: none"> • Patient Education Sessions • Patient Education Materials

RESULTS – MCH Clinic

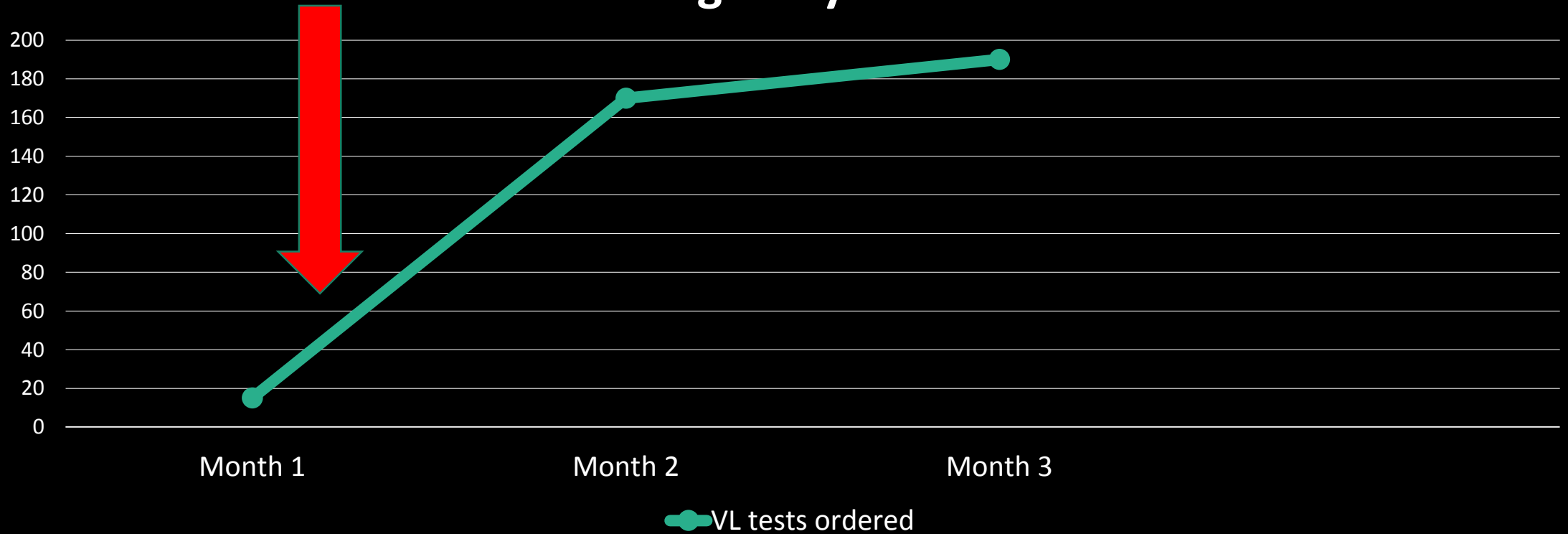
VIRAL LOAD TESTING ORDERED ACCORDING TO NATIONAL GUIDELINES



RESULTS - Entire Clinic

**LARC Clinician
Training /Engagement**

Bagamoyo Clinic Viral Load Tests Ordered



Swaziland

Viral Load Cascade – Result Reporting and Interpretation by Clinician

Expanded window for VL BLOOD DRAW (for Patient convenience)

SAMPLE PROCESSING (CENTRIFUGATION) + SAMPLE STORAGE

UPDATE SAMPLE DELIVERY CHECKLIST w VL

FIS ISSUES

- * Low Volumes
- * Whole Blood - Sent from Lab
- * Time Delay in Lab
- * VL Form only

CREATE VL TRANSMITTER LOG FOR LAB

Patients criteria and VL

NURSE ORDER VLT

Phlebotomist COLLECT SAMPLE FROM PATIENT (WB) 2-30min

Phlebotomist STORE SAMPLE AT ROOM TEMP (WB) MIN - 3 hrs

Phlebotomist Package sample

Phlebotomist PICK UP AND TRANSPORT SAMPLES 10-15min

Receptionist/Phlebotomist Blood Received in Lab Reception only System Entry/Reflog

Receptionist/Phlebotomist Molested Section SHS - 1 month 3 wks

Molecular Lab Technologist RENEW & AUTHORIZE RESULTS. Results

Automatic PRINT RESULTS

Data Person SORT RESULTS BY FACILITY Data Person 1 DAY

Data Person DISTRIBUTE SORTED RESULTS in Pigeon holes 1 Day

Phlebotomist Results Pickup for delivery 2-4 Days

* TIME

* Result Del by EMS

* Communicate High VL to Patient



Define

Measure

Analyze

Improve

Control



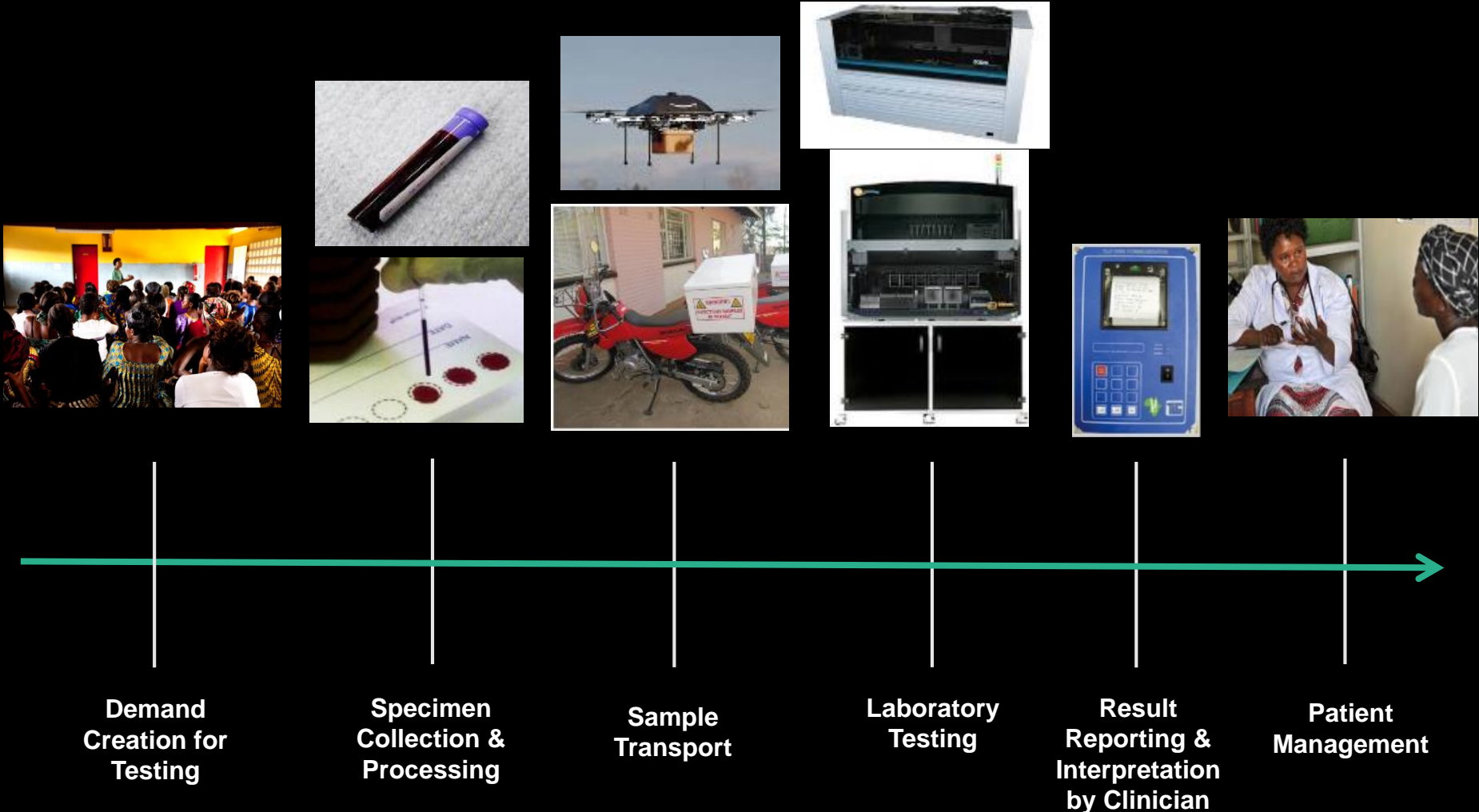
Go & See - Trace/Validate Process at Site



Motshane Clinic – Baseline Data

12% of patients were receiving appropriate clinical follow-up

The Viral Load Cascade



Define

Measure

Analyze

Improve

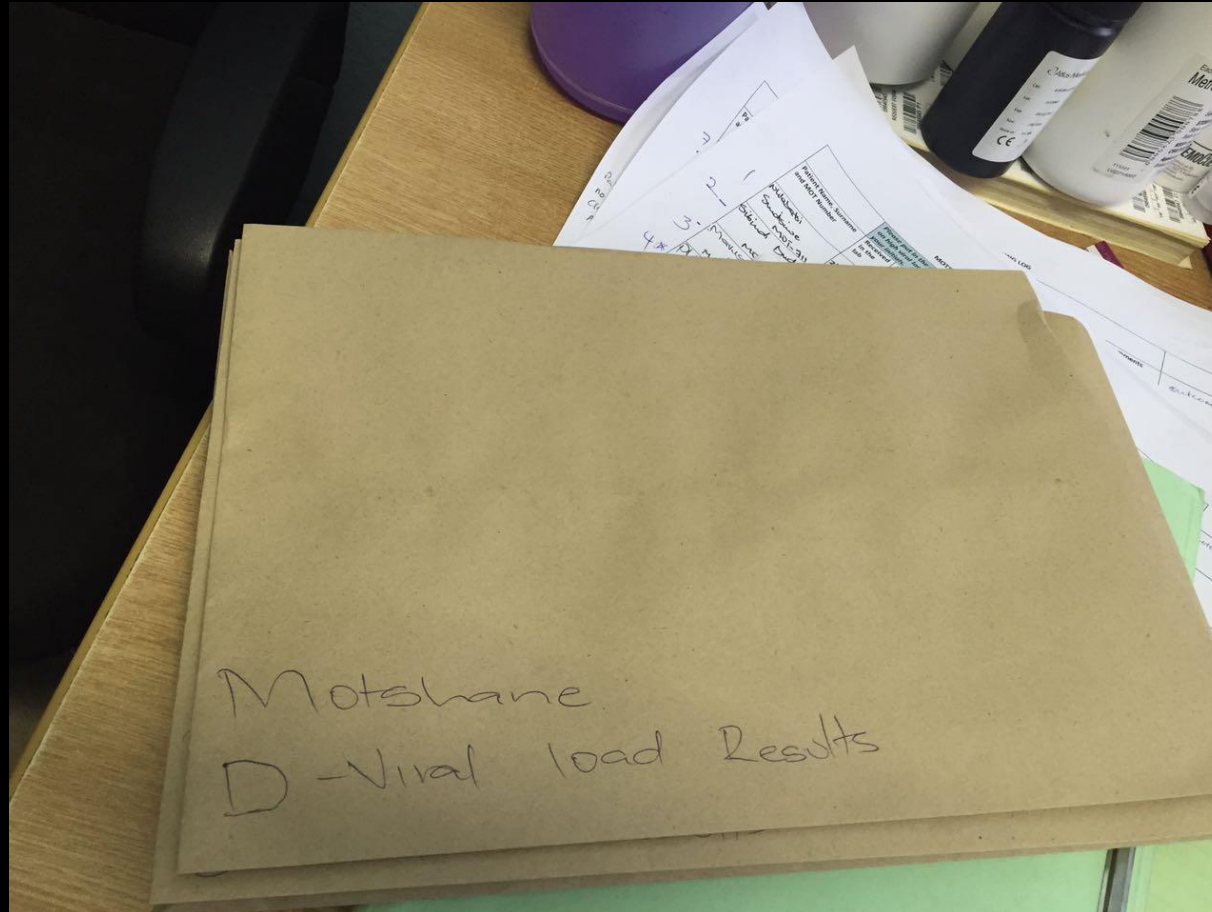
Control

8 METERS

RESULTS
LOST



Where were the VL test results?

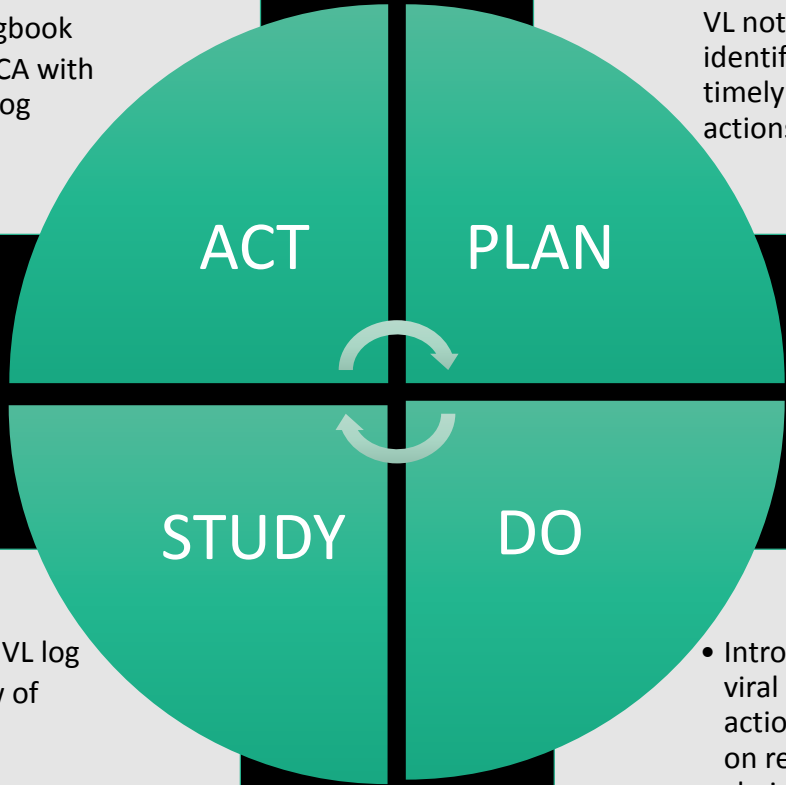




PDSA #1

- Process works well
- Modify logbook
- Do 2nd PDCA with modified log

- Patients with high VL not being identified and timely follow-up actions not done.



- Review of HVL log
- Desk review of files and documents

- Introduce a high viral load log with actions to be taken on results and chain of custody

Define

Measure

Analyze

Improve

Control

MOTSHANE CLINIC HIGH VIRAL LOAD TRACKING LOG

Please put in the date of when the below actions on high viral load results were carried out and your initials.								
Patient Name, Surname and MOT Number	Received in the lab	Received by nurse	Reviewed by nurse	Received by the Expert Client	Actions taken by expert client (Please tick actions carried out and put in next appointment date)	Date of next review by nurse (sign.)	Comments	Outcome
Mwabetsi Sudsiwe MOT-711	26/8/16 H9	27.08.16 Z.M	Zinnie Mkhout	Zodwa 27/08/16	<input checked="" type="checkbox"/> Call Patient <input type="checkbox"/> Call Treatment Supp. <input type="checkbox"/> File Results Appt. Date: 28/8/16	ZMKhout	Promised to come to the clinic 28/08/16	
Sibindi Dudu MOT-59	26/8/16 H9	27.08.16 Z.M	Zinnie Mkhout	Zodwa 27/08/16	<input checked="" type="checkbox"/> Call Patient <input type="checkbox"/> Call Treatment Supp. <input type="checkbox"/> File Results Appt. Date: 28/8/16	ZMKhout	Promise to come to the clinic 28/08/16	Has already done counsel to the clinicians
Mavuso Bongani MOT 1133	26/8/16 H9	27.08.16 Z.M	Zinnie Mkhout	BABILI 27/8/16	<input checked="" type="checkbox"/> Call Patient <input type="checkbox"/> Call Treatment Supp. <input type="checkbox"/> File Results Appt. Date: 10/09/2016	ZMKhout	Promise to come and finally came on 11/08/16	PT started first session counselling
Phiri Lwanda	24/08/16 H9	08-08-16 Z.M	Zinnie Mkhout	BABILI 5/8/16	<input checked="" type="checkbox"/> Call Patient <input type="checkbox"/> Call Treatment Supp. <input type="checkbox"/> File Results Appt. Date: 11/08/2016	ZMKhout	PT promise to come but she didn't come.	PT promise to come, for she said she will come she didn't show up.
Mamba Sougule MOT 136	23/08/16 H9	24/8/16 Lundini	Zinnie Lundini	Zethu 24/08/16	<input checked="" type="checkbox"/> Call Patient <input type="checkbox"/> Call Treatment Supp. <input type="checkbox"/> File Results Appt. Date: 25/08/16	Lundini	She promise to come 25.08.16	She came has already done counselling session
Sitsebe Mandla MOT-1960	23/08/16 H9	24/8/16 Lundini	Zinnie Lundini	Zethu 24/08/16	<input checked="" type="checkbox"/> Call Patient <input type="checkbox"/> Call Treatment Supp. <input type="checkbox"/> File Results Appt. Date: 25/08/16	Lundini	She promise to come 25.08.16	He came the is to re-initiate on ART
Total patient results with high Viral loads =			6		Total Patients with high VL acted on fully within 2 days =			6

High Viral Load Tracking Log

100%

Reference clinic
FAX->0

Reference:
Specimen(s):

Tests ordered HIV V/Load

HIV VIRAL LOAD

HIV: Viral Load (CAP/CTM) **951000**
log value **5.98**

C.N.M

Flags RefInterva
RNA copie

CAP/CTM(2) 18/08/16 08:49 Op V Nokwanda Hlophe
Authorised by P Siphilwe Dlamini (Medical Technologist) 18/08/16
--- End of Laboratory Report ---

Client Follow-Up Attempts

Date of Follow-Up: 9 / 8 / 16 Method: Phone Home Visit SMS

Date of App: ___ / ___ / ___ Reason for Missed Appt: _____

Outcome of Follow-Up: promise to come New Appt: ___ / ___ / ___

Date of Follow-Up: 24 / 08 / 16 Method: Phone Home Visit SMS

Date of App: ___ / ___ / ___ Reason for Missed Appt: Client defaulted and was re

Outcome of Follow-Up: client to come for High Viral Load Results New Appt: 25 / 08 / 16

Date	Reason	Step up	conselling	Outcome	Next
14/09/16	High viral load			Pt had an issue with time she cannot keep time because she takes her tabs in the morning and in the evening.	12 /
12/10/16	High viral load			Pt has managed to keep time in the morning.	

LABORATORY REPORT

Specimen Received 12/09/16
 Laboratory Number VNM01
 Reference: 0964

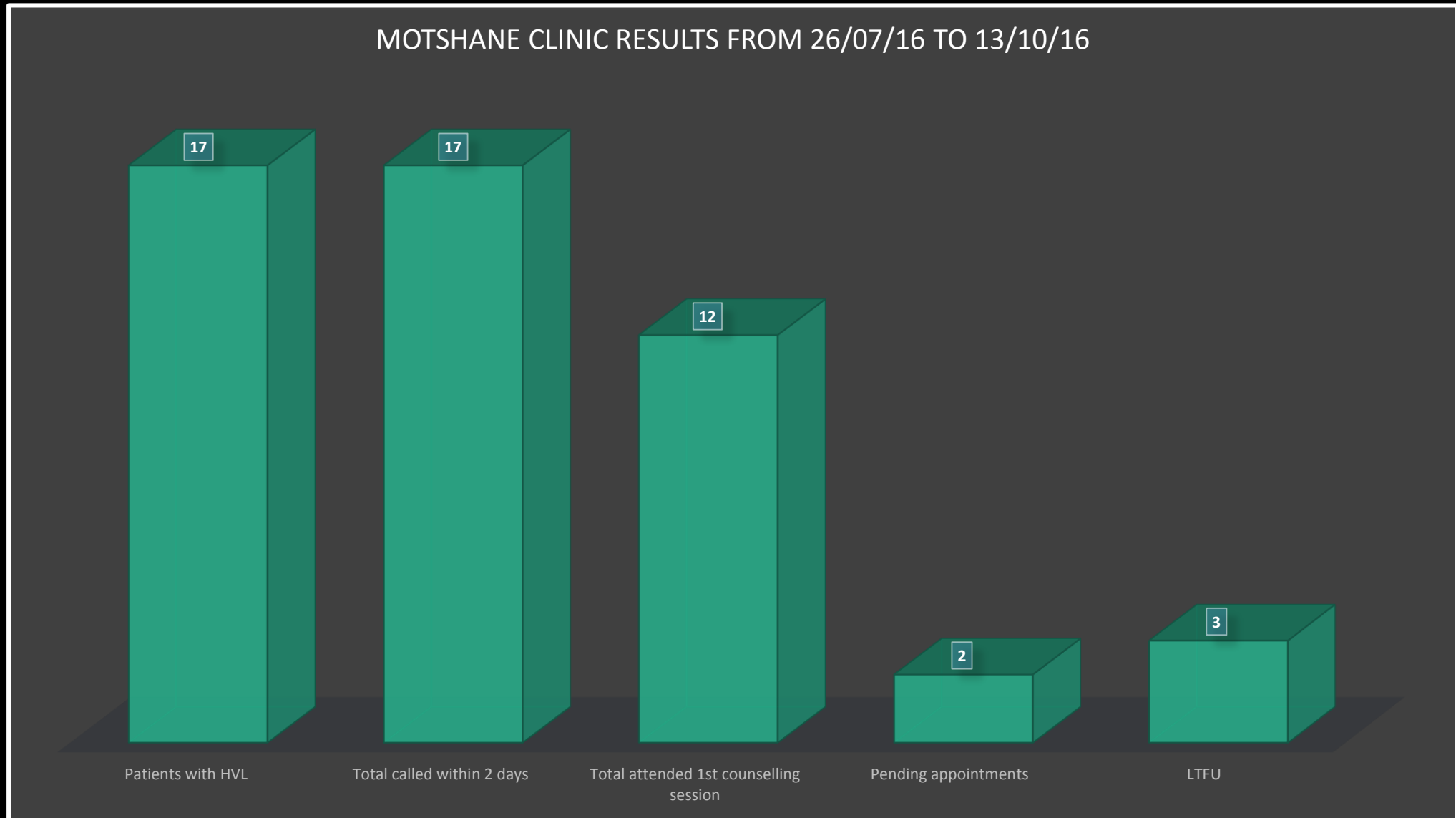
Tests ordered HIV V/Load

HIV VIRAL LOAD	Flags	RefInterval
HIV: Viral Load (CAP/CTM)		RNA copies
log value	1850 3.27	

AP/CTM(3) 12/09/16 08:33 Op U Susan Kamalizeni
 Authorised by P Siphwe Dlamini (Medical Technologist) 12/09/16 1

--- End of Laboratory Report ---

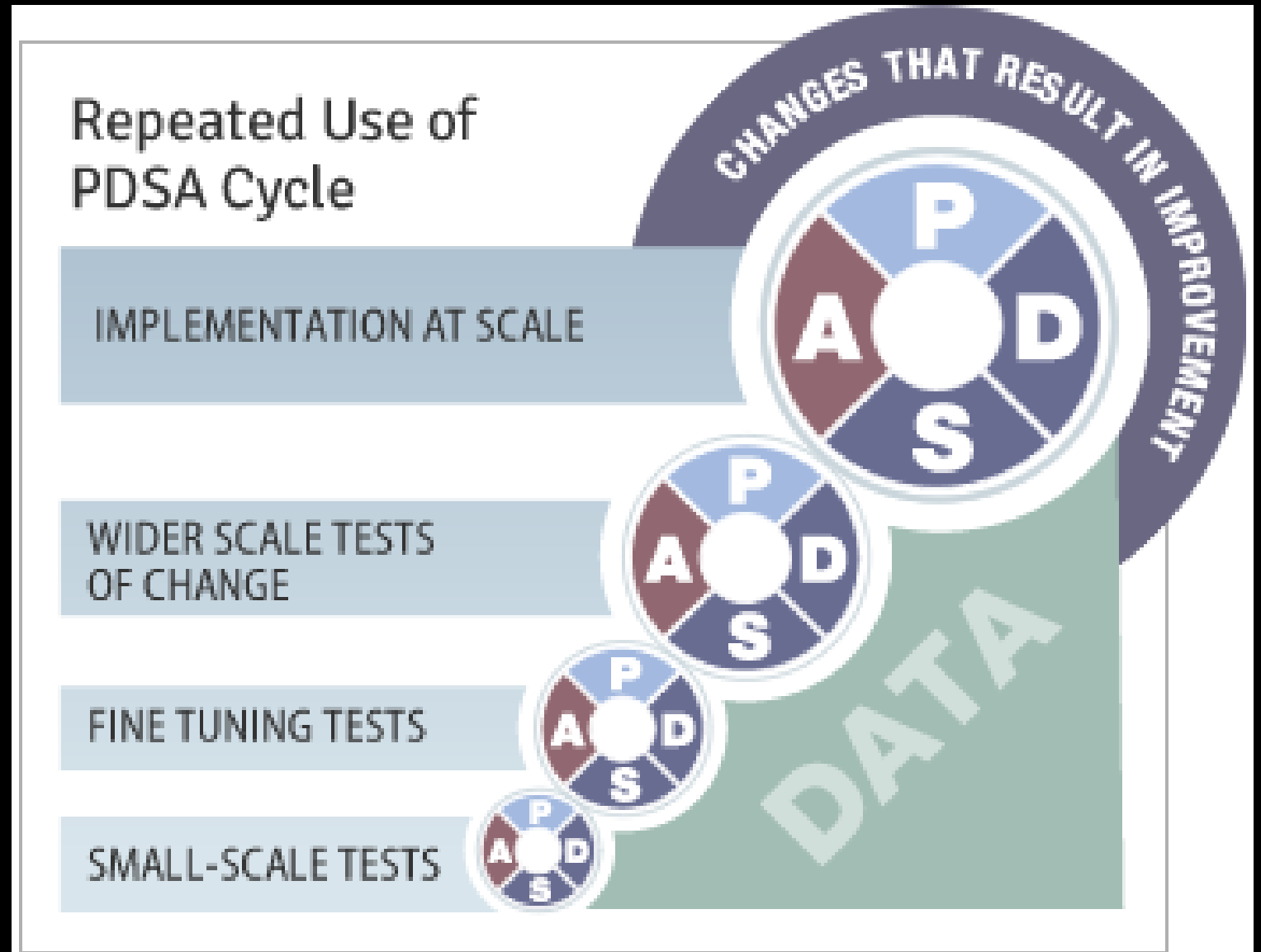
RESULTS



Motshane 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>Overarching Goal:</p> <p>Improve the care & management for patients with high HIV viral load (HVL), specifically addressing the result reporting/clinician interpretation step of the viral load cascade.</p>	<p>AIM Statement</p> <p>Increase the percentage of HVL patients with documented appointment and timely clinical follow-up from 12% to 80% by 30 June 2017.</p> <p>Metric: Numerator – # of patients who met the defined HVL follow-up criteria. Denominator – # of patients with high VL.</p>	<p>Your Intervention</p> <p><u>HVL Results Tracking / Handoff Log</u> plus <u>HVL Register</u> with appropriate follow-up actions (Results review by clinician, Call patient to set up adherence counselling (EAC) appt., 3 EACs, Viral Load reordered).</p>

PDSA – Not one and done!



Inter-cadre Collaboration



Thought Questions

In your own setting...

- What are you doing to assure that the handoff between the laboratory and the clinic is resulting in better patient care?
- What could you do to enhance the laboratory-clinic interface?
 - by next Tuesday?
 - in medium and long term plans?
- Are there any ongoing initiatives that you could use to drive the health systems toward greater quality & value?
- What tools and skills do you have to offer the entire healthcare system?

Diagnostics - Clinical Relay





Thank You

