QUALITY IMPROVEMENT A3 POSTER "CONTEST"

October 2023

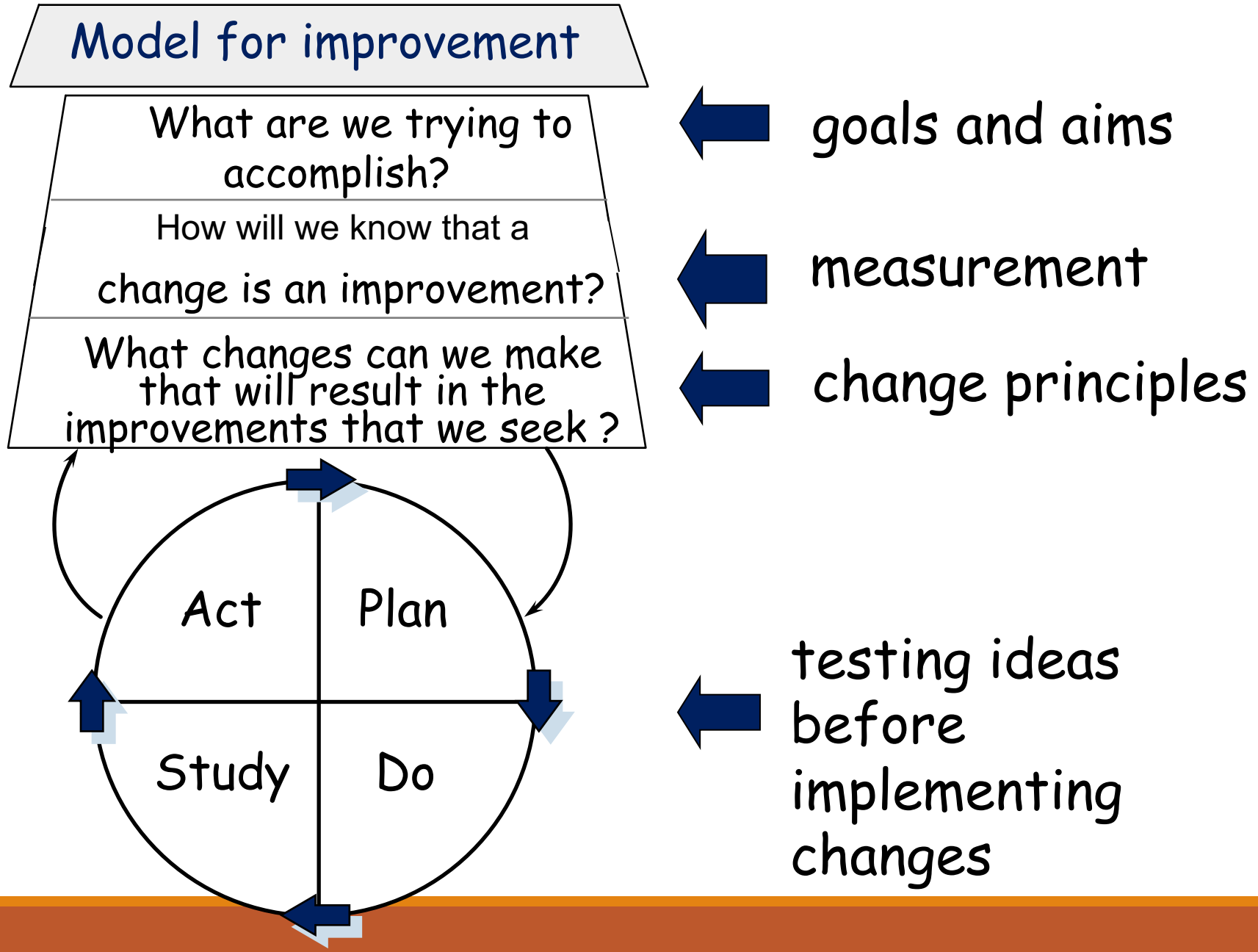
“Quality” = Three Components

Deming:

1. Quality Planning

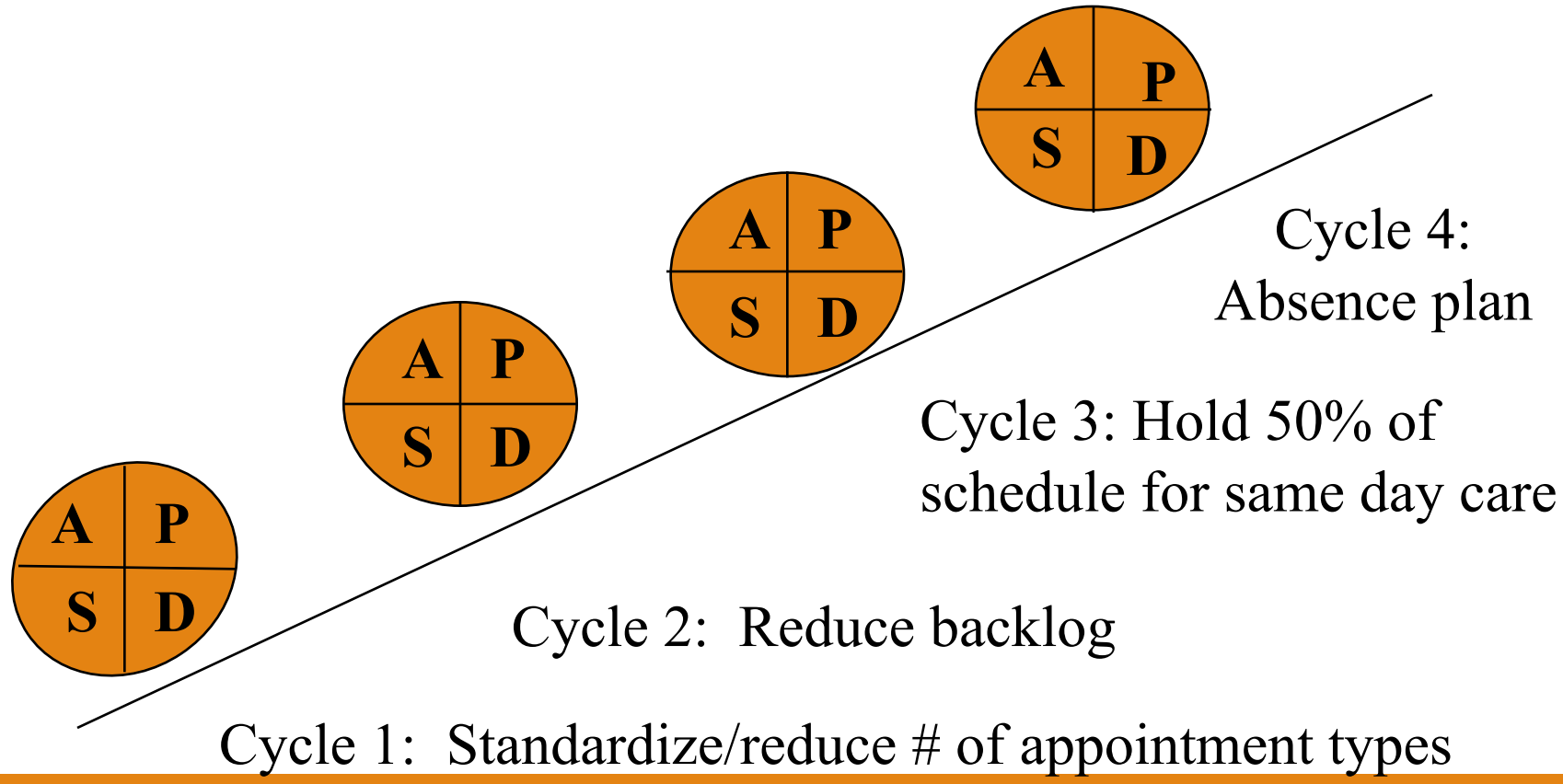
2. Quality Assurance

3. Quality Improvement

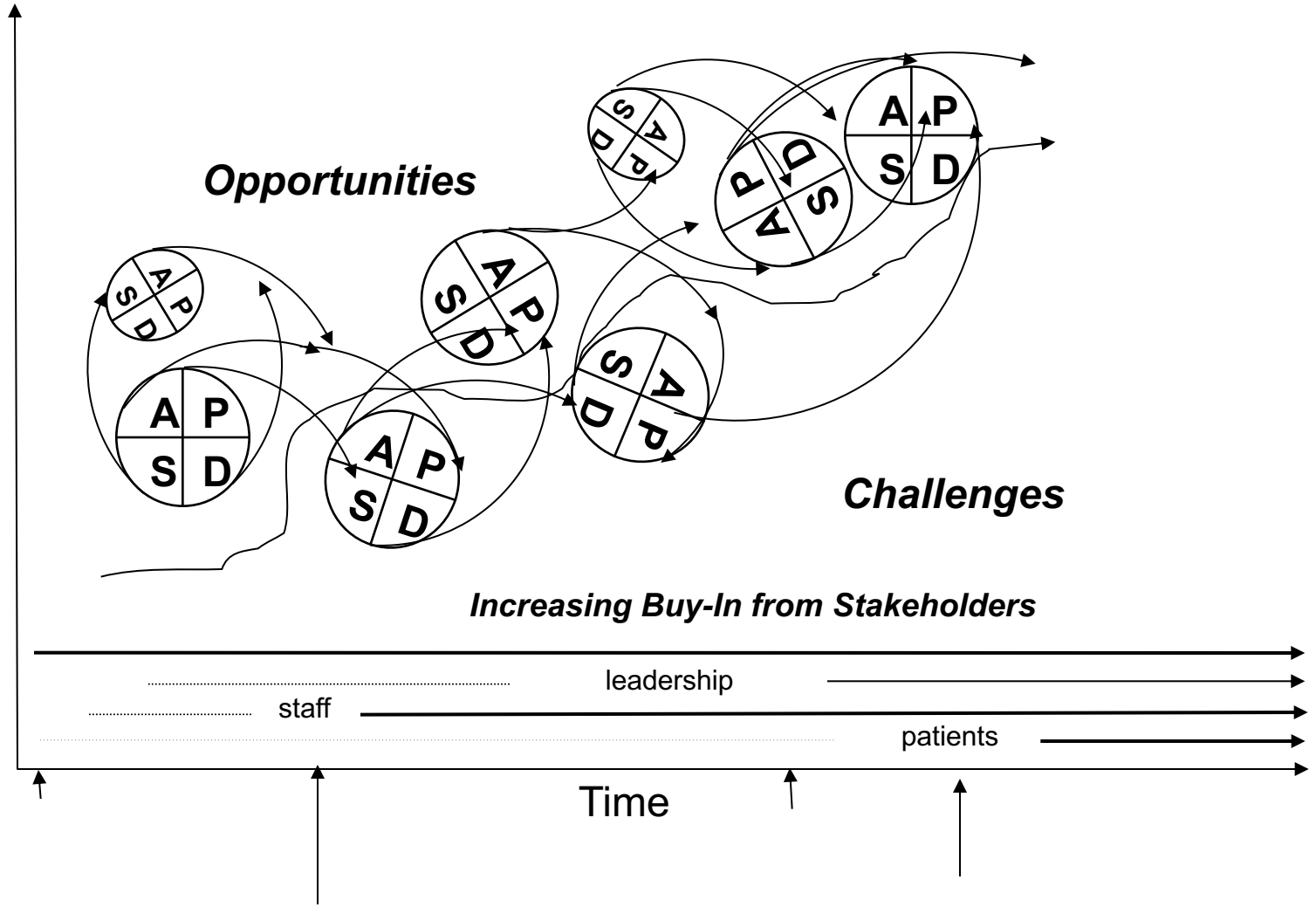

Model for improvement
What are we trying to accomplish?
How will we know that a change is an improvement?
What changes can we make that will result in the improvements that we seek ?
Act
Plan
Study
Do
goals and aims
measurement
change principles
testing ideas before implementing changes

Testing…testing…Aim:

Next Available Appointment < 7 days



A Realistic Conceptual Model of Rapid Cycle Change



What is an "A3" Project Management System?

- A structured cycle of improvement
- A framework for organizing thinking
  - Can be used for any type of problem: clinical/Admin or both
  - Individual and teams (and systems) – a living, dynamic document
- Eliminates the waste of debating method
- Reveals the issues, problems and previous ways of thinking
- Makes problem solving visual
- Tells a Story

A Key tool in becoming a High Reliability Organization

LEAN A3

1. Reason for Action: **VISION / Analysis –what you are trying to improve (specific)** **Team and AIM**	**4. Gap Analysis: (between current and Future process maps)** **= Change**	**7. Completion Plan:** **The results of your PDSA processes –that is "Sustained" over time** **Spread**
2. Current State: Show Flow Map- your current Process you want to change = Baseline measurement	5. Solution Approach: Find Change Ideas –list possible changes to test	8. Confirmed State: Show a new graph that demonstrates an improved outcome Sustain & Spread
3. Target (or Future) State: Show Flow Map of your Ideal/Target State Measure	6. Rapid Experiments (Show results of Multiple PDSA Cycles =Rapid Cycle Improvement) Change	9. Insights: what you have learned; where you need to go next; new Ideas to help sustain and spread your changes

Title:

Owner:

Sponsor:

Team Members:

Coach:

Facilitator:

Start Date:

Updated on:

A3

Team/Aim

Map/Measure

Map/Measure

Change

Change

Change

Sustain

Sustain

Sustain

1. Reasons for Action:

Reason for Action:

2. Current State:

Current State:

3. Target State:

Target State:

4. Gap Analysis:

Gap Analysis

5. Countermeasures / Solution Approach:

If We:

Then we expect:

6. Rapid Experiments:

7. Implementation / Completion Plans:

8. Confirmed State:

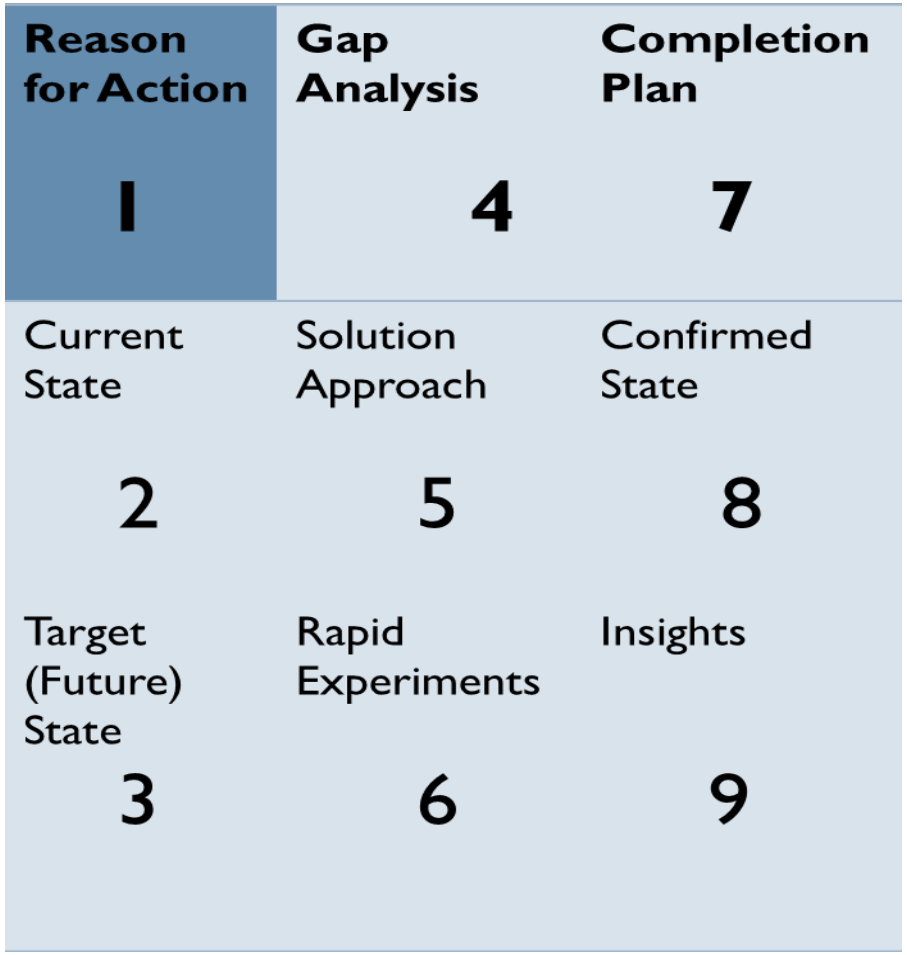
9. Insights:

A3 Box 1 Reason for Action

What is the problem statement?

What is the scope of the problem?

What are the boundaries you will set?



QI Project “AIM” - in “SMART” format

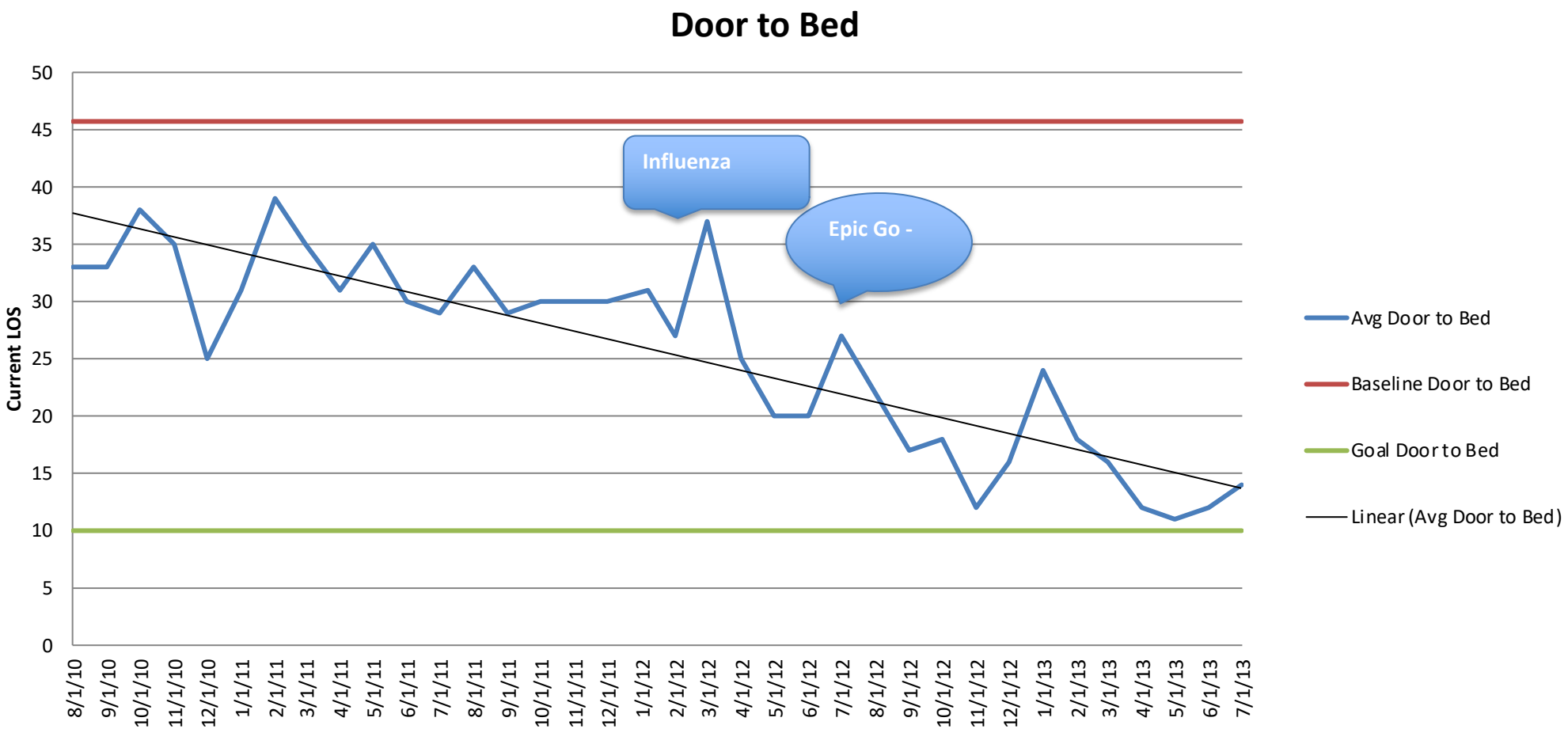
- **S**pecific: is your AIM clear about what you want to improve?
- **M**easurable: Have you included numerical targets (goals)?
- **A**chievable: Is this practical in your setting?
- **R**elevant: does this project relate to patient outcomes? Can you link it to the strategic goals of your hospital?
- **T**imely: have you included a time-frame for concluding this project?

Box 1- Examples

- Reduce the number of expired medications from ~ 6% to < 2% by December 31

- Decrease the time it takes the Laboratory to report the results of a CBC test (from the time of venipuncture) from 3 hours to 1 hour by January 28

Result: 30% Improvement in time from ED to Inpatient Bed



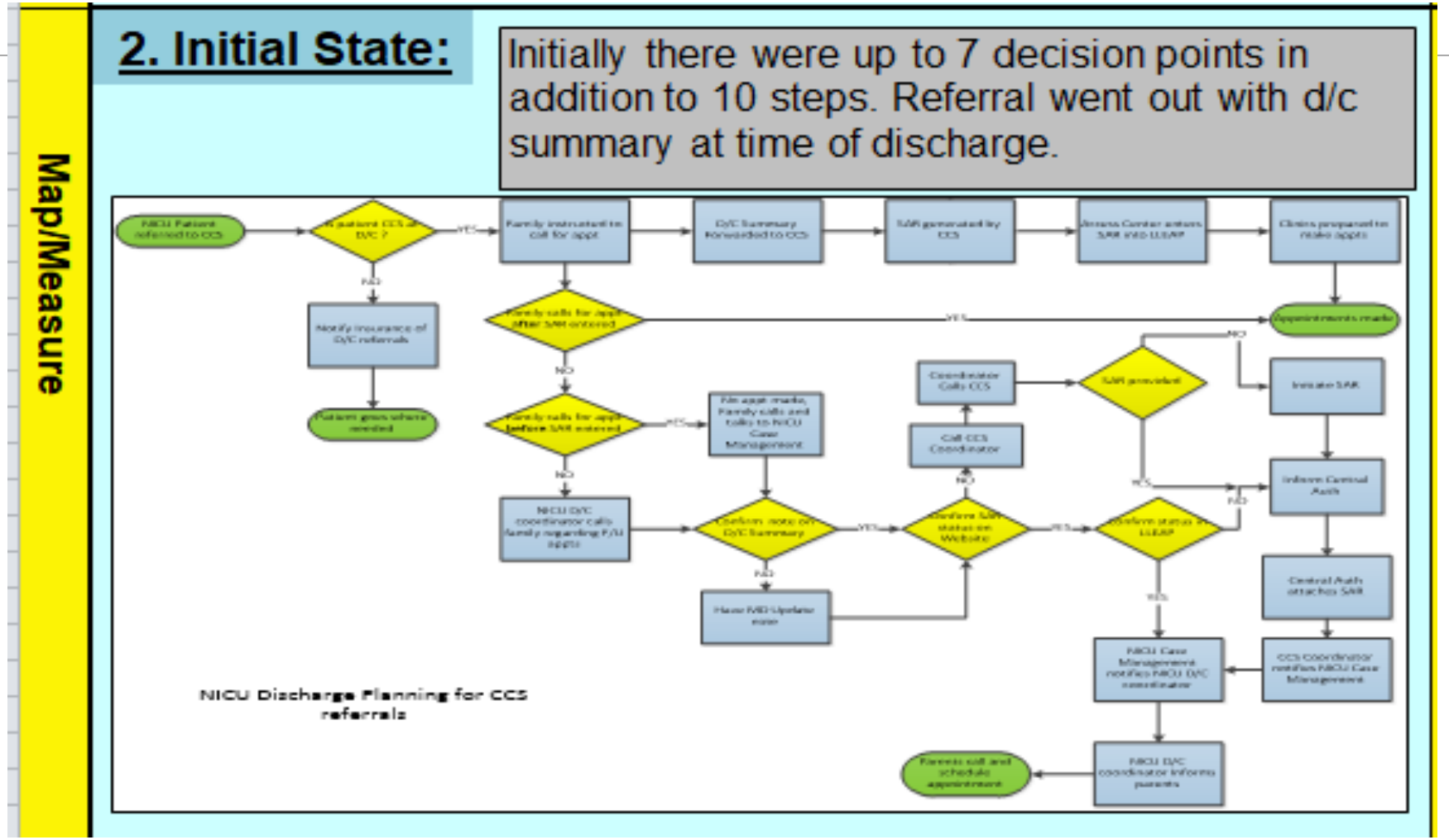
A3 – Box 2 Current State

What does the organization look like now?

- Business case for need:
- What are the current/upcoming changes you wish to initiate?
- Have you personally visited the site to change?
- Identify the core process?
- Flow Map the core processes
  - Identify (high-level) major issues (Kapowie's)

Reason for Action **1**	**Gap Analysis** **4**	**Completion Plan** **7**
Current State **2**	Solution Approach **5**	Confirmed State **8**
Target (Future) State **3**	Rapid Experiments **6**	Insights **9**

Box 2 – Current State



A3 – Box 3 Future (Target) State

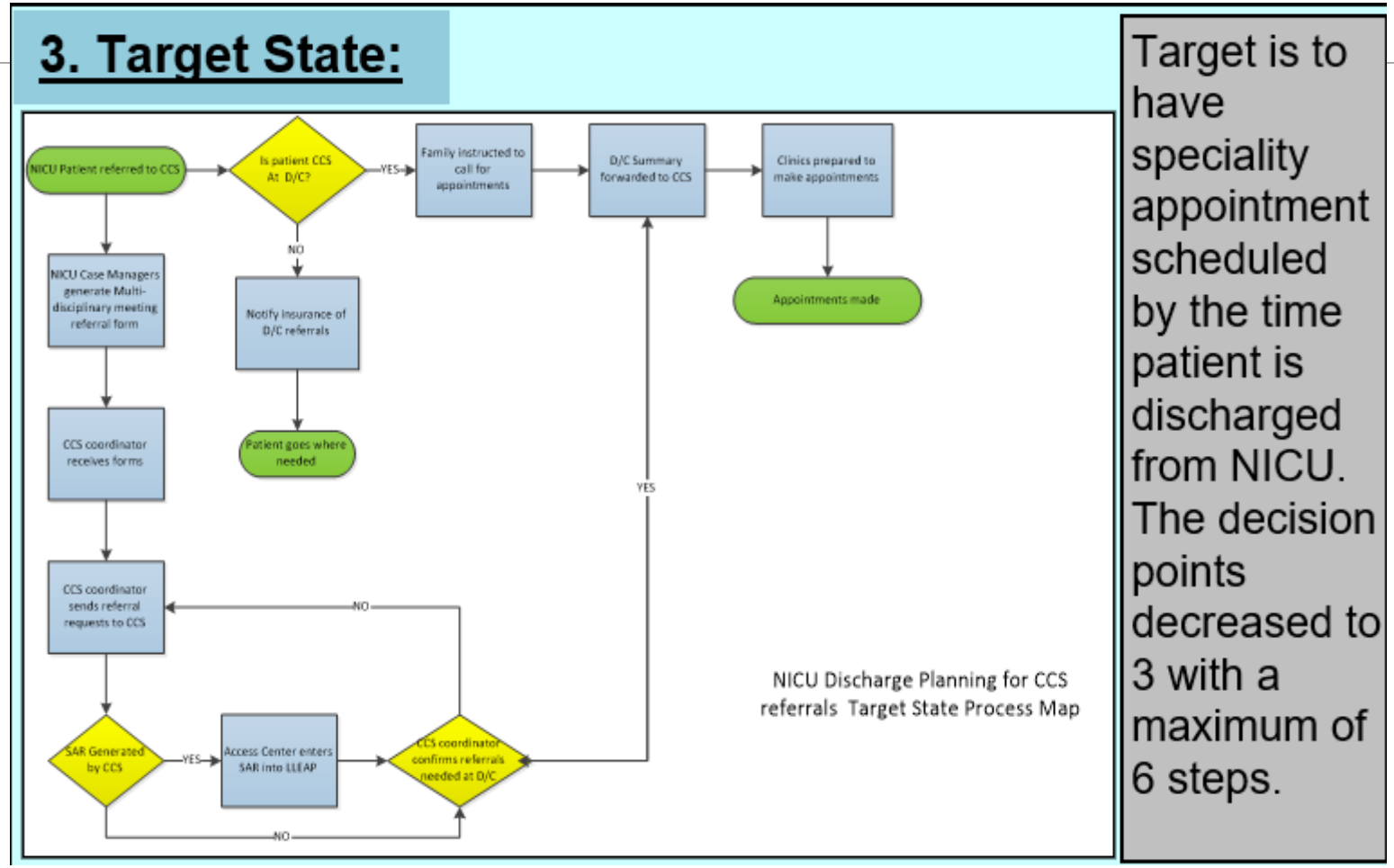
What do we want the organization to look like at:

- 1 year
- 5 years from now?

What does “Good” [“Ideal] look like?

How will we know when we have made an impact?

Ideal State (Future)



Target is to have speciality appointment scheduled by the time patient is discharged from NICU. The decision points decreased to 3 with a maximum of 6 steps.

A3 – Box 4 Gap Analysis

What are the gaps to be closed between the current and future state?

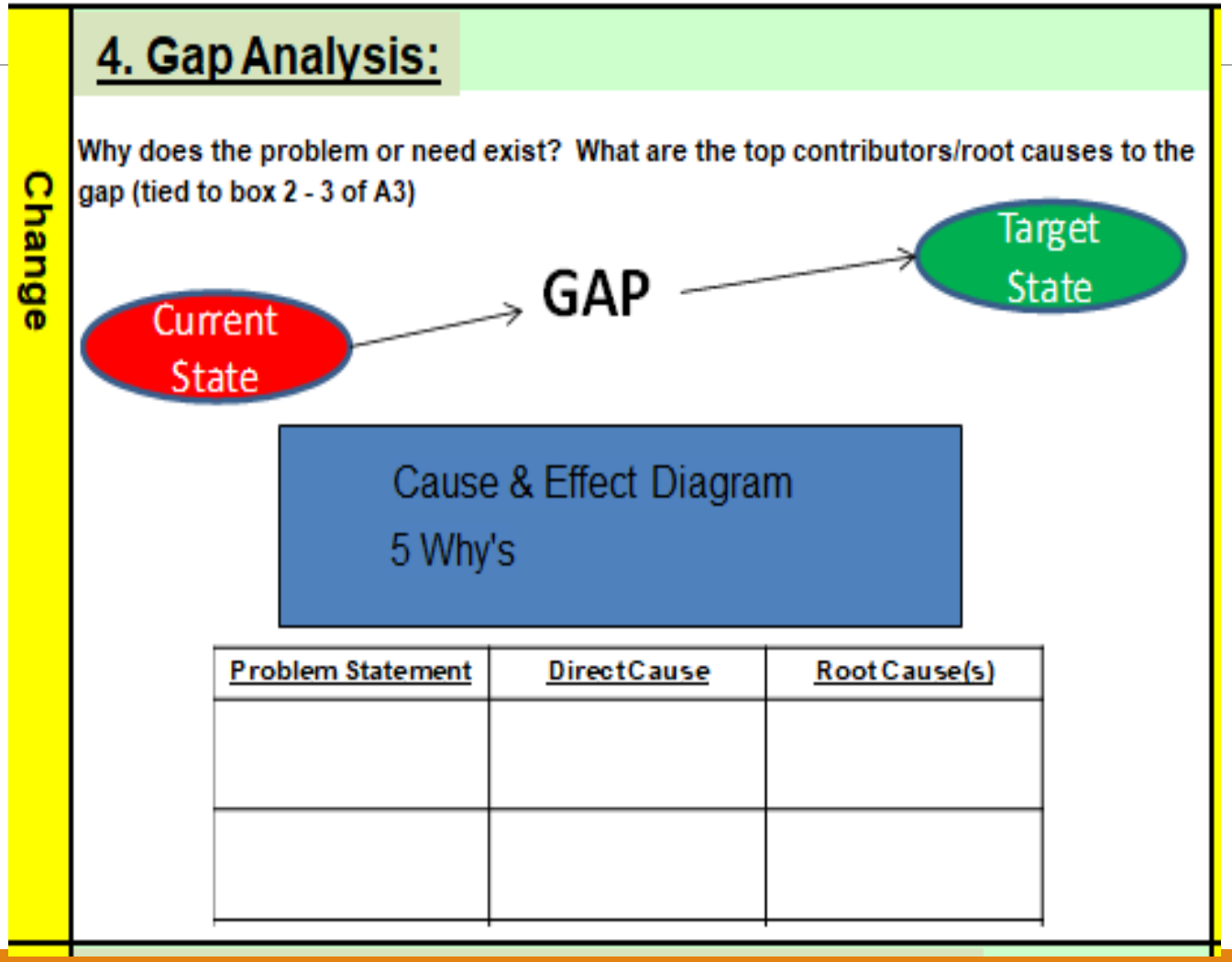
What impact do these gaps have on our ability to reach our target state?

How much control / influence do we have over these gaps?

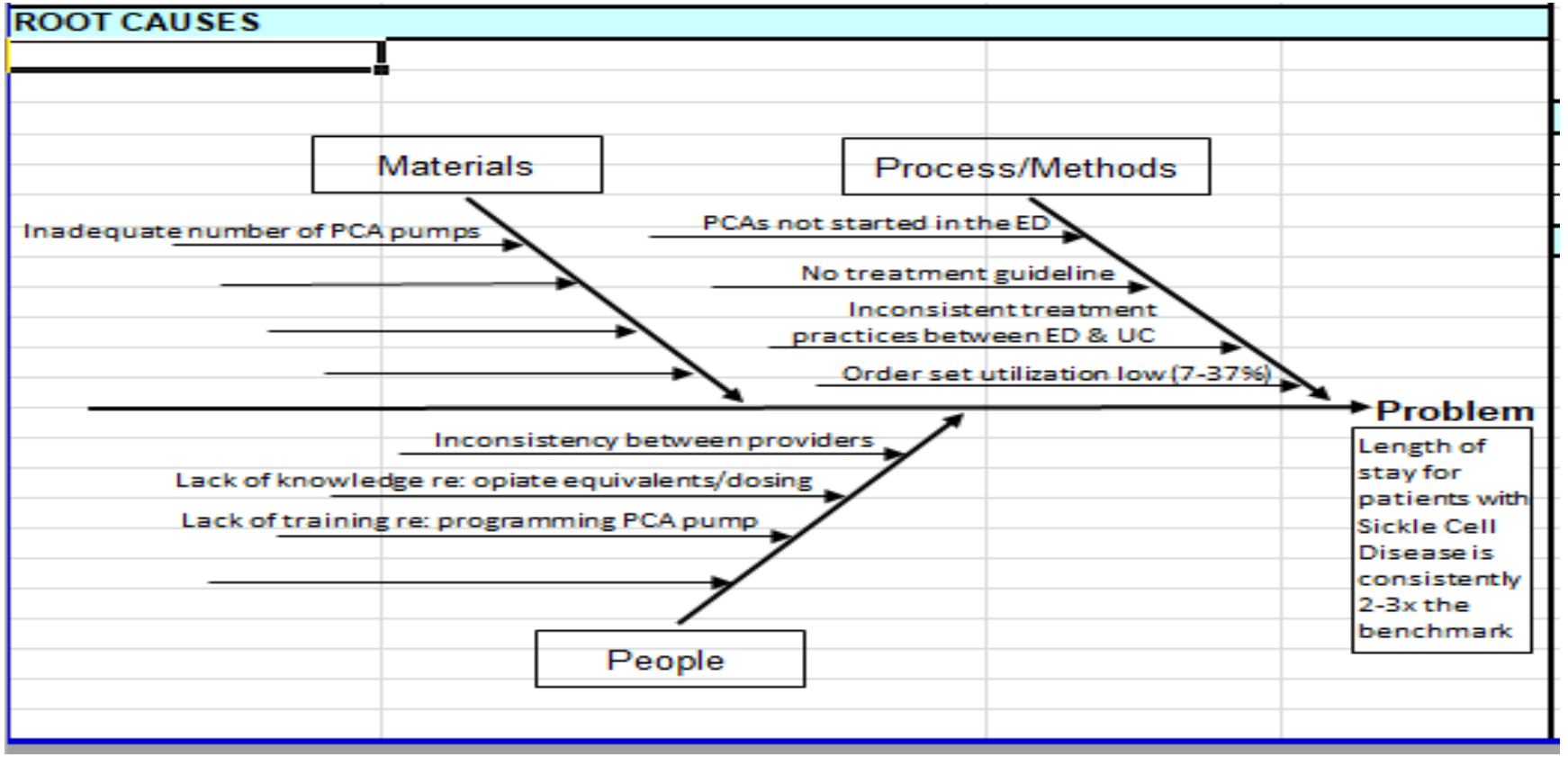
What are some of the potential root causes of the gaps?

Reason for Action 1	**Gap Analysis** 4	**Completion Plan** 7
Current State 2	**Solution Approach** 5	**Confirmed State** 8
Target (Future) State 3	**Rapid Experiments** 6	**Insights** 9

Box 4 – Gap Analysis



Box 4 Gap Analysis – Fishbone Diagram



A3- Box 5 Solution Approach

What ideas do we have for closing the gap?

Which of the core processes have the most potential to close gaps (attain target)

What have others done to close the gaps?

How easy or difficult are the solutions being proposed?

Reason for Action **1**	**Gap Analysis** **4**	**Completion Plan** **7**
Current State **2**	Solution Approach **5**	Confirmed State **8**
Target (Future) State **3**	Rapid Experiments **6**	Insights **9**

A3- Box 5 Solution Approach

Change

5. Countermeasures / Solution Approach:

Countermeasures - what do you propose to close the gap for those key processes?

Ask how each root cause could be eliminated or minimized - at least 3 "hows" for each root cause

If we…	Then we expect…
Ex. Exam time ≠ proc. time	Adjust procedure times
	Modify xxx
	Add room for prep
Ex. #2	Trial 1
	Trial 2
	Trial 3
Ex. #3	Trial 1
	Trial 2
	Trial 3

An example of the "What If" process:

If we change "X" what is the expected result in "Y"?

A3 – Box 6 Rapid Experiments

Proposed “change” Ideas -“measures” to address each root cause

Predicted results for each cause

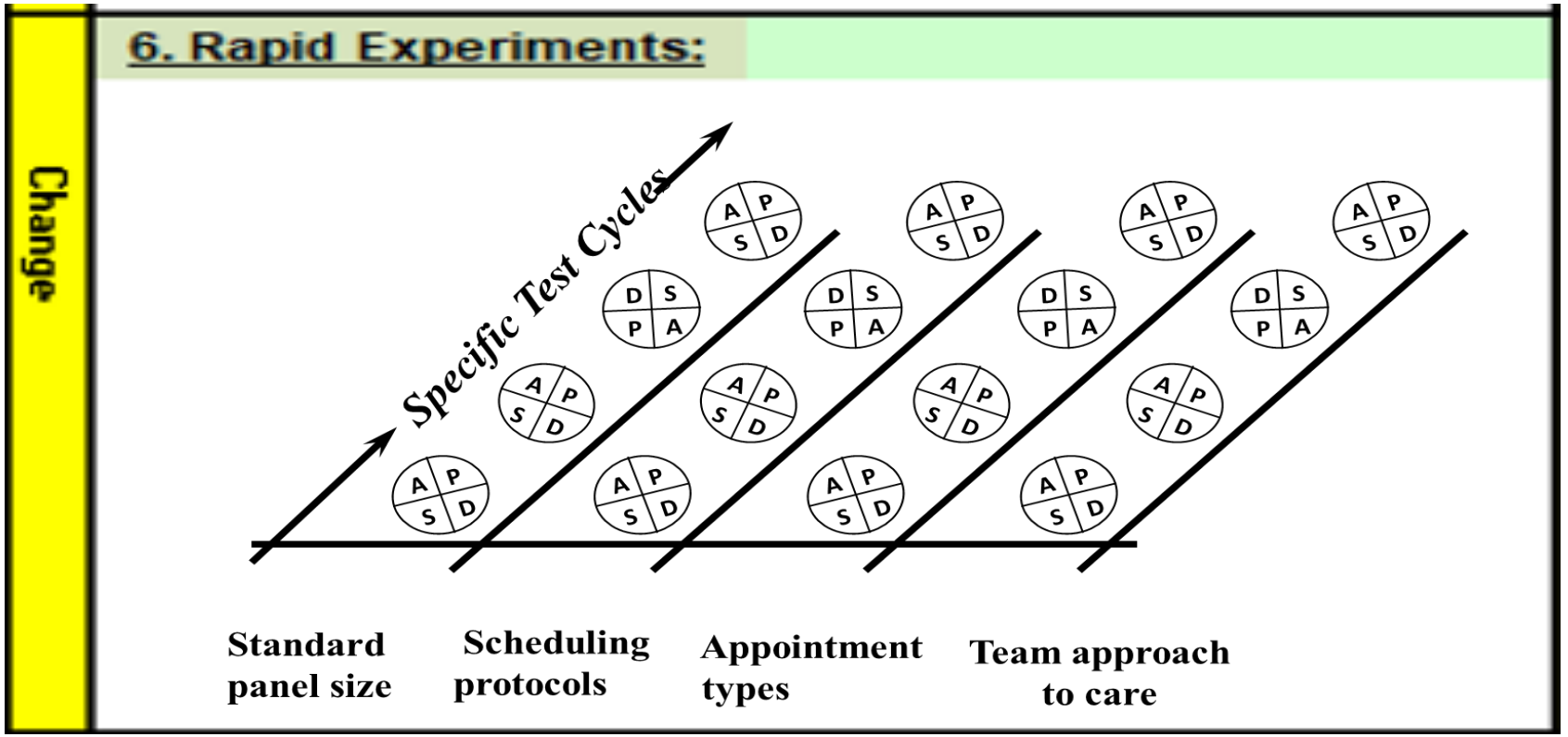
Do multiple PDSAs

Assessment Q:

- Are there clear countermeasure steps identified?
- Do the countermeasures link to the Root Cause of the problem?
- Who is responsible for what, by when (5 whys)
- Will these action items prevent recurrence of the problem?
- Is the implementation order clear and reasonable?
- How will the effects of the countermeasure be verified?

Reason for Action 1	**Gap Analysis** 2	**Completion Plan** 7
Current State 2	**Solution Approach** 5	**Confirmed State** 8
Target (Future) State 3	**Rapid Experiments** 6	**Insights** 9

A3- Box 6 Solution Approach



A3 – Box 7 Implementation

Table to document how you will do the different PDSA cycles in closing the gaps

- Who? (who leads task)
- What? (task)
- When? (completion date)
- Where?

Learn and improve as you go

Reason for Action 1	**Gap Analysis** 4	**Completion Plan** 7
Current State 2	**Solution Approach** 5	**Confirmed State** 8
Target (Future) State 3	**Rapid Experiments** 6	**Insights** 9

Box 7 Implementation

Sustain

7. Implementation / Completion Plans:

What are the implementation plans? Who does what by when?

Refine Standard Work, Train and Communicate

What	Who	By When

A3 – Box 8 Confirmed State

Accomplishments

Metrics (data)

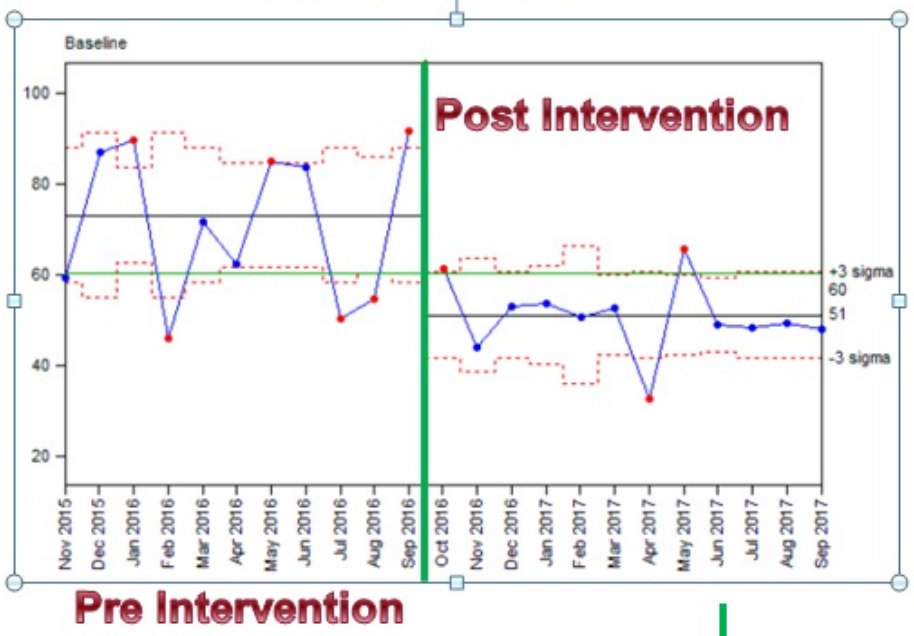
- run charts, control charts, etc.
- Document quantified change:

  (% improvement or % no longer happening, etc.)

Reason for Action **1**	**Gap Analysis** **4**	**Completion Plan** **7**
Current State **2**	**Solution Approach** **5**	**Confirmed State** **8**
Target (Future) State **3**	**Rapid Experiments** **6**	**Insight / Reflection** **9**

Box 8 – Confirmed State

Average time to tPA **Goal: Door-to-t-PA <60 min**



Stroke ATV - Average time to tPA
Phase Analysis

Transport backpacks Compared to Baseline

Statistically Improved

	Baseline Mean	Transport backpacks Mean	Difference of Means (Abs)
Estimate	70.981818	50.653373	20.328445

Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017
59	87	90	46	72	62	85	84	50	54	92	61	44	53	54	50	53	33	66	49	48	49	48

A3 – Box 9 - Insights

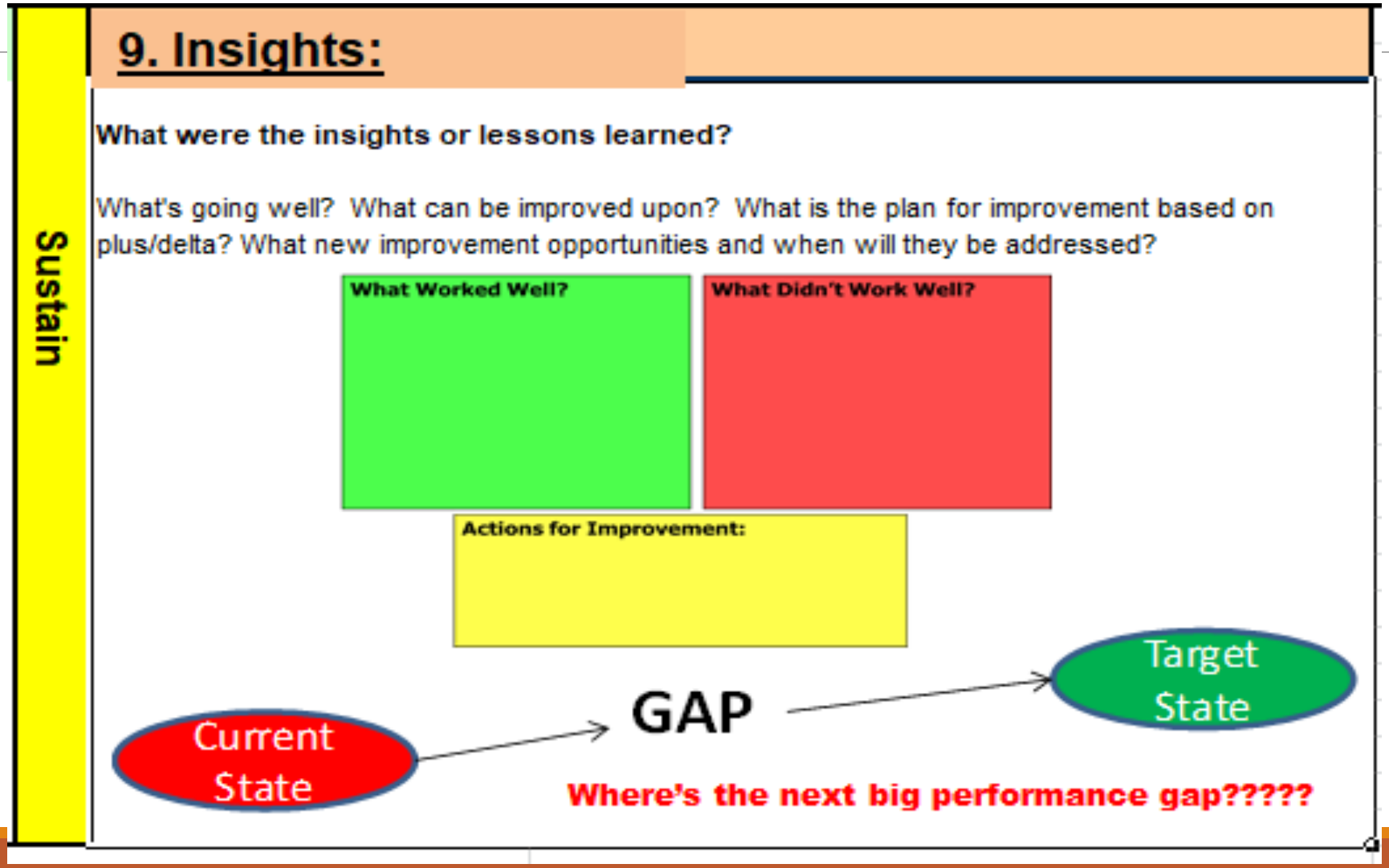
What have you learned from this process?

How can we make it better next time

Summary: it completes the **story** of your successful QI Project

Reason for Action 1	**Gap Analysis** 4	**Completion Plan** 7
Current State 2	**Solution Approach** 5	**Confirmed State** 8
Target (Future) State 3	**Rapid Experiments** 6	**Insights / Reflection** 9

Box 9 – Insight / Reflections



Guidelines in Creating a Poster

- The title of the poster should quickly orient the audience – a prominent block of text- no more than two lines
- The Aim of the QI project should be clearly stated
- Make sure each section is readable
- Emphasize visuals: Graphs, figures, or pictures
- Use Color to emphasize concepts and to link ideas
- Minimize abbreviations
- Use Process mapping (current and Ideal states)

A – 3 Evaluation

Examples of Good A – 3 Formats

ELECTRONIC MEDICAL RECORDS SYSTEM,

Prepared by: Dr. Willard Mumbi-CMS, Davelias Ng' ambi-HA, Linda Muleya-HR

Lusaka EYE HOSPITAL
A Seventh-day Adventist Institution

THE PROBLEM

- Having an efficient medical records as a very cardinal part of quality assurance for Lusaka Eye hospital.
- One of the areas that needed quality improvement was the medical records system.
- The hospital was using a physical paper file system to record and retain patient's medical records. This was a tedious system which resulted in as much 20% of the files that would get lost either due to misfiling or patients would go with the files to their home without authorization and the information would be lost.
- This compromised the quality of patient care
- The paper files also consumed a lot space and the cost of printing which covered about 15% of the total annual hospital budget.

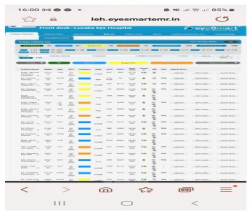
AIM

To reduce the number of patient files that go missing by 100% by end of 2023. This is by developing and implementing a robust electronic medical records system.

FLOW MAP OF PRESENT STATE

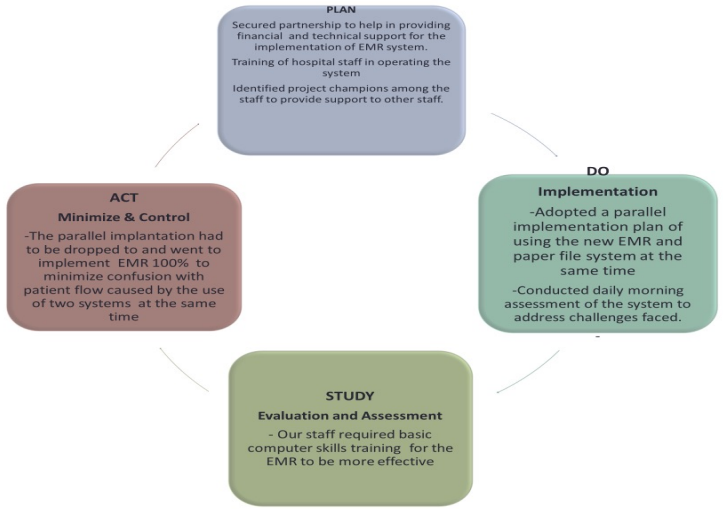
BEFORE

AFTER



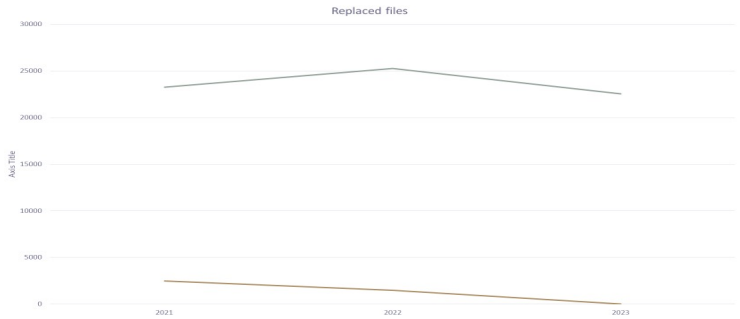
FLOW MAP OF FUTURE STATE

PLAN DO ACT STUDY CYCLE



DATA

The chart shows the number of patient files that have been replaced as missing files, compared to the number of registered patients over a period from 2021 2023 quarter three.



RESULTS

- From 2021 to 2022 we had 60% reduction in replaced files. This was to efforts implemented.
- We introduced excel spreadsheet to record patient file details.
- However, because of limited space, files kept on missing.
- EMR guarantees almost 100% sorting out the issue of missing files.

Year	Patient seen	Replaced files (lost/misfiled files)
2021	23,274	2,500
2022	25,278	1,500
2023	22560	0

SUMMARY

i. Change is best managed when team work is emphasized

- The results for the quality improvement implemented is the hospital has a smart medical records management system that is efficient and will guarantee no loss of patient files.
- Our patients do not have to worry about losing their file reference cards they used loss all the time, all they need to present is their names.
- The hospital no longer has to buy paper files. Those funds have been redirected to meet other hospital needs.

FUTURE STEPS/ WHAT'S NEXT?

- The next project in improving quality at LEH is to reduce on patient waiting time.
- The number of patient coming to our hospital has in the past year almost doubled. This is mainly due to the introduction of the National Insurance scheme and the hospital's good will reputation.
- We plan to increase the patient screening booths from the current three to six in OPD1. This will be accompanied by reorganizing our staff to meet this increasing patient flow.

Title: Implementation of A Nursing Preceptorship Program at the Andrews Memorial Hospital

Owner: Lisa Henry RN MSN

Team Members: Nursing Staff of Andrews Memorial Hospital

Start Date: Jan 2022
Updated On: October 3, 2023

A3

Team/Aim

1. Reasons for Action

- Address challenges and gaps in support and training
- Alleviate strain on finances and workforce
- Improve patient care quality and community impact
- Enhance organizational stability and employee loyalty
- Support retention of experienced nurses
- Elevate the nursing profession through strategic solutions and

2. Current State

Maps/Measure

- Inadequate support for new staff
- Punitive organizational culture
- Inconsistent care quality due to uneven training
- High turnover rates necessitating expensive onboarding
- Strained community impact due to workforce shortages
- Insufficient beds for patient admission due to closed units
- Concerns about the erosion of employee loyalty
- Significant impact on organizational stability, finances, patient care, and the nursing profession

3. Target State

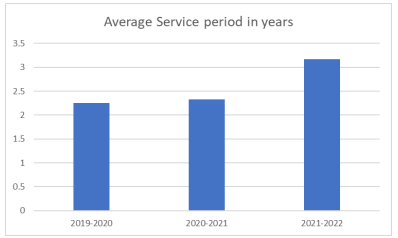
Map/Measure

- Provide comprehensive support and guidance to new healthcare professionals
- Transform organizational culture to be positive and collaborative
- Standardize care quality through consistent training
- Reduce employee turnover rates and associated onboarding costs
- Optimize bed availability to meet patient admission needs
- Enhance community impact by addressing workforce challenges
- Foster employee loyalty and commitment
- Improve organizational stability and reputation
- Contribute to the advancement and sustainability of the nursing profession

Change

4. Gap Analysis

- Inadequate support for new nurses
- negative culture
- Lack of trained preceptors
- increased turnover
- Inadequate Staffing
- Lack of experienced nurses
- Decreased beds available



5. Countermeasures

If we

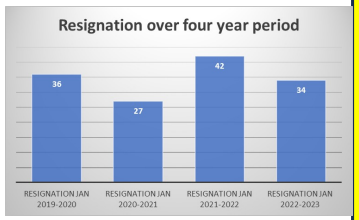
- Design the preceptorship program.
- Create thorough preceptor training modules
- Track progress and continuously improve
- Collect input from preceptors and participants.
- Ensure program outcomes align with goals

Then we

- Provide a structure and framework for mentorship
- Enhanced mentoring skills, knowledge and consistent precepting experience
- Insights for program refinement
- Improved program efficiency and effectiveness
- Goal achievement and gap closure

6. Gap Analysis

Driving Factors:
Migration for better opportunities
Higher-paying public sector jobs
Pandemic Impact:
Lower turnover during travel restrictions
Surge in resignations after restrictions eased



Sustain

7. Implementation/ Completion Plans

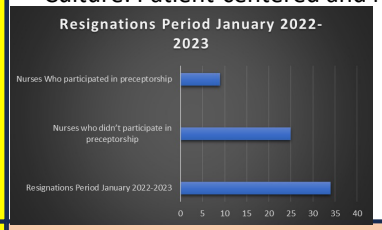
Preceptorship Program Phases (Jan 2022 – Ongoing):

Phase 1 (Nov - Dec 2021) targeted nurses with 1-4 years' experience, establishing a strong foundation through an 8-hour training program.

Phase 2 (Jan 2022 – Ongoing) expanded to all units, involving a broader group of potential preceptors. The focus is on seamless onboarding for new nurses, aiming for comprehensive unit coverage with trained preceptors.

8. Confirmed State

- Patient Satisfaction: Improved, reflecting excellent nursing care.
- Patient Outcomes: Enhanced, with fewer adverse incidents.
- Medication Errors: Decreased, ensuring safer practices.
- Operational Units: All units are fully functional, optimizing coverage.
- Culture: Patient-centered and respectful, promoting cohesion.



9. Insights

Hansen (2021) emphasizes that implementing preceptorship and continuous support programs is vital to nurturing competence and confidence in newly graduated nurses at the outset of their professional journey.
Aparicio and Nicholson (2021) stress the need for future program optimization. They highlight the necessity of comprehensive support for preceptors/supervisors and new nurses to enhance the overall program experience, underlining the importance of a holistic support system. These insights underscore the critical role of ongoing support structures in fortifying the nursing workforce.

We are barely beginning to scratch the surface of what needs to be done to support retention, but it is a start.

STEPPING UP CLUBFOOT CARE

KENDU ADVENTIST HOSPITAL
JUSTIN KIM PT, DPT, COMT; DARIL MBEWA OT, HND; DENNY HONG MD, MPH

HISTORY

The global prevalence of clubfoot is 0.6 to 1.5 per 1,000 live births, with 10% of cases concentrated in Eastern Africa. In Kenya, 1,200 infants are born with clubfoot.

AIM

To maximize evidence-based treatment for patients with clubfoot by increasing new patient referrals to 20% in 2023.

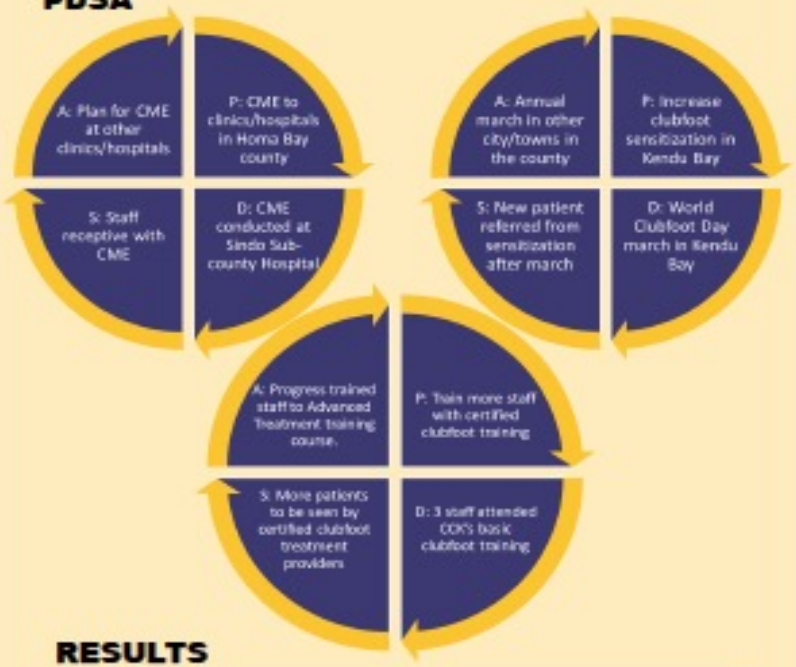
CURRENT STATE

TARGET STATE

SOLUTIONS

If we	Then we
Increase the number of staff trained by certified clubfoot treatment program by Clubfoot Care for Kenya	Improve the quality of care and can maximize the number of patients seen in the clubfoot clinic
Provide a clubfoot CME focused on identification and referral to other institutions in Homa Bay county	Increase the number of patient referrals with clubfoot to maximize patient impact in the county
Engage in community sensitization about clubfoot and available treatment	Maximize patient engagement in the community and increase the number of patient referrals

PDSA



RESULTS

CHALLENGES

- Cultural stigma and distrust in the western approach.
- Economic barriers in an indigent community.
- Lack of access due to rural setting and lack of awareness

NEXT STEPS

- Conduct awareness campaigns in neighboring towns.
- Engage community health volunteers and village chiefs.
- Expand referral base and promote healthcare recognition through CME sessions
- Staff training with CCK's Basic and Advance Clubfoot Treatment approach

Psycho-Social and Emotional Pattern of Critical Care Units Personnel in Dealing with Patients

Adventist Hospital Davao, Philippines

OWNER
Chris Del Monte

SPONSOR
Nestor V. Molleda

TEAM
8 Members

1 Reasons for Action

Improve the Compassionate Care of our Critical Units (Emergency Room, Hemodialysis, Intensive Care) Personnel in Dealing with Patients.

Process Start: Administration of Pre-test to Critical Care Units personnel before administration of intervention programs

Process End: Administration of Post-test to Critical Units personnel after administration of intervention programs

2 Current State

Self-Care Behavior	Pre-Test
Physical Self-Care	56%
Cognitive Self-Care	50%
Psychological and Emotional Self-Care	40%
Behavioral Self-Care	65%
Interpersonal Self-Care	44%
Existential Self-Care	78%
Quality of Life Scales	**Pre-Test**
Compassion Satisfaction	67%
Burnout	87%
Secondary Traumatization	82%
Compassionate Nursing Care Scales	**Pre-Test**
Professional Performance	90%
Continuous Follow-up	84%
Patient-Centered Performance	88%
Emphatic Communication	72%

3 Target State

Self-Care Behavior	Pre-Test	Post-Test
Physical Self-Care	56%	Increased
Cognitive Self-Care	50%	Increased
Psychological and Emotional Self-Care	40%	Increased
Behavioral Self-Care	65%	Increased
Interpersonal Self-Care	44%	Increased
Existential Self-Care	78%	Increased
Quality of Life Scales	**Pre-Test**	**Post-Test**
Compassion Satisfaction	67%	Increased
Burnout	87%	Decreased
Secondary Traumatization	82%	Decreased
Compassionate Nursing Care Scales	**Pre-Test**	**Post-Test**
Professional Performance	90%	Increased
Continuous Follow-up	84%	Increased
Patient-Centered Performance	88%	Increased
Emphatic Communication	72%	Increased

4 Gap Analysis

5 Solutions

Interventions	Possible Outcomes
Integrate regular physical activities into their weekly schedules, specifically allocate one-hour sessions every Tuesday and Thursday	Enhance Critical Units personnel self-care practices
Integrate daily devotional and prayer time before work starts and spiritual group activities	Improve spiritual life and relationship with colleagues.
Conduct a one-on-one session within Mental Health Clinic and psychoeducation	Recognize and address mental health concerns and cater mental health issues and concerns
Conduct one day small group training session focused on the principles of "iCare for Souls".	Instill a deep understanding of compassionate care, emphasizing nursing practice on emphatic and supportive aspects.
Reduce duty hours from 12 hours to 9 hours per shift in adherence to DOH guidelines	Support the well-being of nursing personnel and enhance capacity for compassionate care. Improve the overall work-life balance of the nursing personnel.

6 Rapid Experiments

Self-Care Behavior	Pre-Test	Post -Test After the Implementation of Intervention Programs
Physical Self-Care	56%	Improved
Cognitive Self-Care	50%	Improved
Psychological and Emotional Self-Care	40%	Improved
Behavioral Self-Care	65%	Improved
Interpersonal Self-Care	44%	Improved
Existential Self-Care	78%	Improved
Quality of Life Scales	**Pre-Test**	**Post -Test After the Implementation of Intervention Programs**
Compassion Satisfaction	67%	Improved
Burnout	87%	Improved
Secondary Traumatization	82%	Improved
Compassionate Nursing Care Scales	**Pre-Test**	**Post -Test After the Implementation of Intervention Programs**
Professional Performance	90%	Improved
Continuous Follow-up	84%	Improved
Patient-Centered Performance	88%	Improved
Emphatic Communication	72%	Improved

7 Implementation Plan

Page 2

Programs	Responsible Person	Due Date
Phase 1		
Create Team For The Study/Action Research/Pre-Test	Mr. Nestor Molleda/Chris Del Monte	February 2023
Phase 2		
Intervention Program		
Integrate regular physical activities into their weekly schedules, specifically allocate one-hour sessions every Tuesday and Thursday	Mr. Nestor Molleda	April 2023
Integrate daily devotional and prayer time before work starts and spiritual group activities	Mr. Dennis Rubin Mr. Niel Esdrelon Ms. Herschell Dumaua	April 2023
Conduct a one-on-one session within Mental Health Clinic and psychoeducation	Mr. Christopher Del Monte	May 2023
Conduct one day small group training session focused on the principles of "iCare for Souls".	Mr. Handel Cabrera	July 2023
Reduce duty hours from 12 hours to 8 hours per shift in adherence to DOH guidelines	Ms. Sheena Mae Avance	June 2023
Phase 3		
Post-Test/Analyze Result After Implementation of Intervention Program	Mr. Chris Del Monte	August 2023

8 Confirmed State

Page 3

Metric	Period Test Conducted	Value		Percentage of Change
Self-Care Behavior		**Pre-Test**	**Post Test**	
Physical Self-Care	30 Days	56%	92%	56% ▲
Cognitive Self-Care	30 Days	50%	95%	45% ▲
Psychological and Emotional Self-Care	30 Days	40%	95%	55% ▲
Behavioral Self-Care	30 Days	65%	98%	33% ▲
Interpersonal Self-Care	30 Days	44%	89%	45% ▲
Existential Self-Care	30 Days	78%	99%	21% ▲
		Average Increase		42.5% ▲
Quality of Life Scales		**Pre-Test**	**Post-Test**	
Compassion Satisfaction	60 Days	67%	94%	27% ▲
Burnout	60 Days	87%	28%	59% ▼
Secondary Traumatization	60 Days	82%	24%	58% ▼
		Average Decrease of B and ST		58.5% ▼
Compassionate Nursing Care Scales		**Pre-Test**	**Post-Test**	
Professional Performance	30 Days	90%	100%	10% ▲

9 Insights

- ✓ Critical Units Personnel needs work-life balance.
- ✓ Hospital activities, physical, social, mental, and spiritual enhance the well-being of personnel
- ✓ Well-being of personnel affects their dealings to patients

A – 3 Evaluation

Examples of Excellent Results from using the A – 3 Formats

Improving the inpatients' admission process

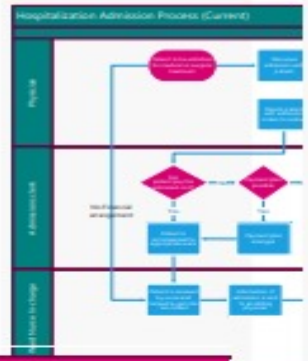
La Loma Luz Adventist Hospital

Marvin Camal, MD, LLLAH CMO; Marcia Lennen, RN, LLLAH CNO; Jaime Adan Sosa, LLLAH CEO; Diana Roberts, CFO; Amir Segura III, HRM and Jeffrey Cho, MD, MPH

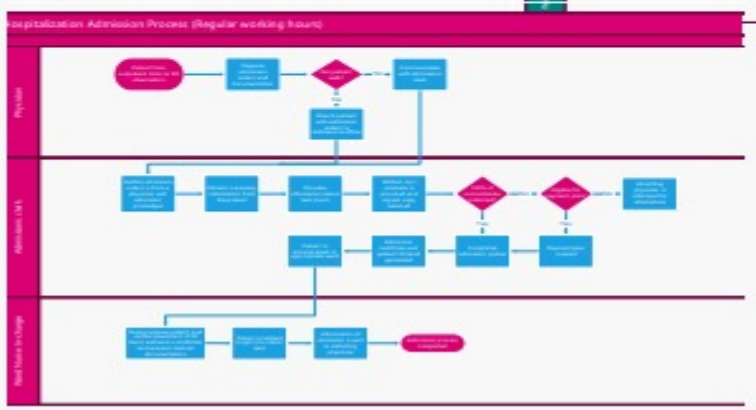
Reason for Action

Remaining financially viable in the ever-evolving healthcare landscape requires careful monitoring of preventable losses. Two sentinel events in the month of August 2023 signaled the need to examine the admissions process at our hospital. These two events involved surgeries performed prior to payment resulting in patients being discharged with a total pending balance of $10,858.00, this being a potential loss of income. By October 01, 2023, we aim to prevent all future occurrences of non-emergent inpatient admissions before a financial plan is in place.

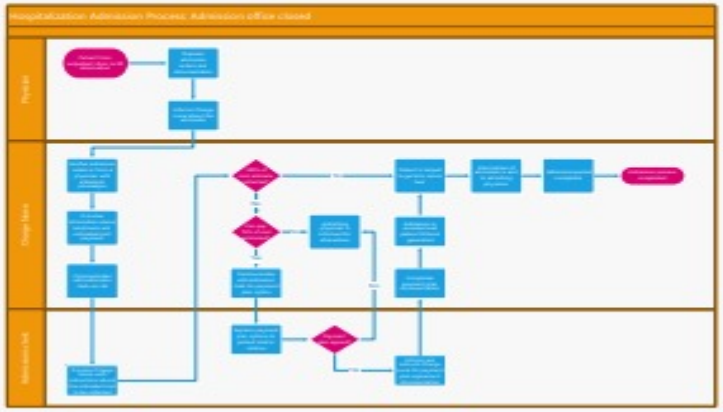
Current State



Target State



Target State (Continued)



Gap analysis

- Providers occasionally bypass the admission process and patients receive treatment prior to financial arrangements being made.
- Hospital nurse does not verify that financial arrangements have been made.
- No admissions clerk/space identified to process all admissions without exception

Solutions

- Cashier to be the admission clerk
- Meet with key stakeholders to identify additional gaps in process and educate on target process Bring awareness to all physicians with admitting privileges about admissions process
- A patient ID wristband will be issued only after financial arrangements have been made
- Educate nurses that only patients with a wristband will be taken to the hospital wards for admission.
- Laminate and display in strategic locations the Hospital admission process flowchart.

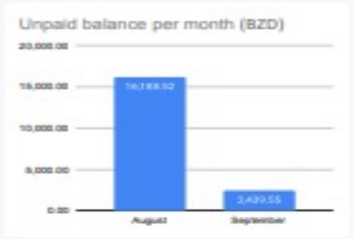
Rapid Experiments

- Meet with physicians, front desk staff and operating room staff.
- Gather data of non urgent admissions done without financial arrangements after communicating the admission process to stakeholders.

Implementation plan

Task	Lead	Due date	Complete
Meet with physicians and front desk staff	Mr. Adan Sosa	30th August 2023	✓
Register information of all admissions and financial data	Ms Yuridia Jimenez	Ongoing	
Analize data entered by billing officer to update graphs	Dr. Marvin Camal	Ongoing	

Confirmed State



Insights

- Creating a flowchart was very helpful in identifying where the current problems lie.
- This project reinforced the importance of gathering feedback from key stakeholders in a face-to-face meeting who can provide valuable insight into weaknesses in the current process and propose workable solutions.
- Through seeking feedback we can increases buy-in from those involved and this improves adherence to the target process.

KANYE ADVENTIST HOSPITAL(KAH)

QUALITY IMPROVEMENT PROJECT POSTER

TITLE: IMPROVING DOCUMENTATION ON A & E TRIAGE FORM

PRINCIPAL CONTRIBUTORS: 1. DR B TOMBS, 2. M. MATSOGA, A MOTLHAJOE, 3. L. MANGWANE, 4. N SEFETENG 5. P. PONTSHO
CONTRIBUTOR AFFILIATIONS: CEO, PNO 1, PNO 2 , CRN, PRN

THE PROBLEM STATEMENT

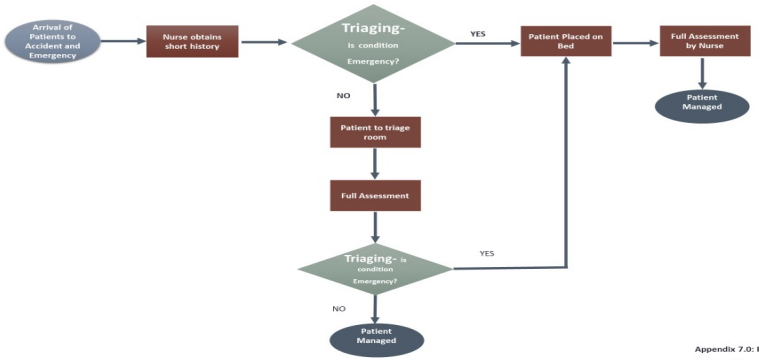
Despite all the measures that are being implemented to document on Accident and Emergency triage form, we still have incomplete documentation of some variables, as evidenced by a score of 36% (2022) during triage form Audit versus the target of 100%

Incomplete documentation can result in inappropriate medical decisions, loss of valuable information, increased workload and reducing system efficiency, poor patient outcomes, lack of data for quality improvement and program evaluation, continuity and research. Incomplete documentation can also lead to compromised legal and practice standards which are meant to protect client, institution and practitioner.

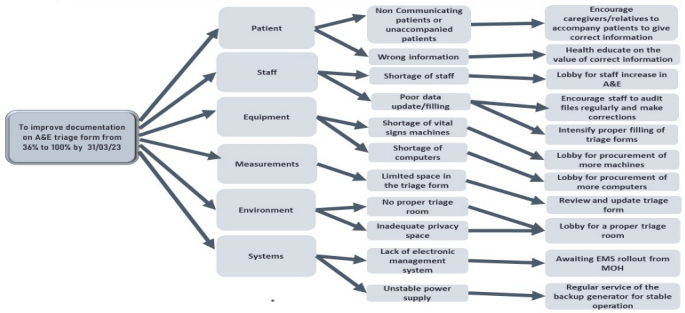
AIM (TARGET)

To improve documentation of A&E triage form from 36% to 100% by March 2023 at KAH.

GRAPH OR FLOW MAP OF PRESENT STATE



CHANGE IDEA GENERATION



PLAN, DO, STUDY, ACT CYCLE (PDSA)

PLAN

-Prioritization done using multi voting method.

- Root cause analysis- Using fish bone, flow chart ,driver diagram.
- Change idea was done using driver diagram.
- Change idea Prioritization was done using Prioritization matrix.

-Hypothesis/Prediction: educating, motivating and monitoring of staff will improve documentation on the Triage form

DO

Sensitize staff on the importance of documentation
Weekly audit done on the triage form
Monthly analysis of audits

STUDY

13 out of 14 staff members have been sensitized on complete documentation of a triage form.

- Out of every 10 sampled and audited triage forms 8 were correctly completed

ACT

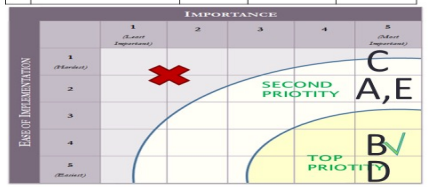
- In the year 2023/24 to date, there is great improvement of documentation on the triage form at KAH A & E.
- Staff responded positively to the sensitisation on documentation.

Appendix 7.0: PRIORITIZATION MATRIX

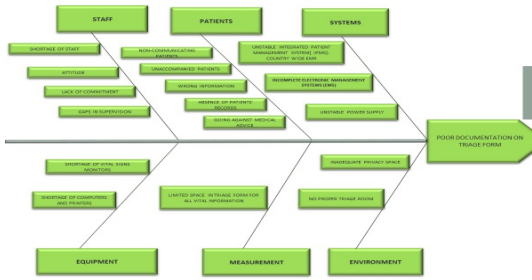
Note - Rank change ideas based on following criteria:

- **Importance Scale 1 – 5:** 1 (Least) – 5 (Most) important
- **Ease of Implementation Scale 1 – 5:** 1 (Hardest) – 5 (Easiest) to implement

SER	CHANGE IDEA	IMPORTANCE (1 – 5)	EASE OF IMPLEMENTATION (1 – 5)	COMMENT
A	Staff motivation	5	2	10
B	Intensify on proper filling of triage forms	5	4	20
C	Lobby for EMS	5	1	5
D	Health Education	5	5	25
E	Strengthen monthly and system audits	5	2	10



FISH BONE DIAGRAM:



RESULTS

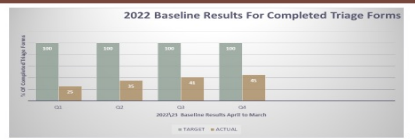


Figure 1: % Completed Triage Forms at KAH A&E in 2022\23

Figure 1 above shows that the target of 100% of completed triage forms was not attained.

Figure 2 : % audited variables at KAH A&E after implementation of the change idea.

Figure 2 above shows improvement of audited variables at KAH A&E post implementation of change ideas.

SUMMARY

1. Lessons Learned.
   - There is great improvement of documentation on triage form.
   - Improved management of patient data system.
   - Improvement in accuracy of diagnosis of patient
2. Impact on Quality of service.
   - Improved A&E triage form documentation has brought proper diagnosis and management of clients at KAH.
   - Resulted in improvement of patients prioritization need and improved patient outcomes and safety
   - Proper coordination of work flow and reduced customer complaints.
   - Client, family and community are able to understand the importance of providing information in the triage form, therefore has resulted in reduced customer complaints
3. Challenges
   - Shortage of staff
   - Unreliable EMR systems
   - Lack of proper triage room
   - Inadequate vital signs equipment

FUTURE STEPS/ WHAT'S NEXT?

1. Way forward.
   - To continue with triage form audits.
   - To continue involving caregivers when collecting data.
   - Lobby for more staff.
2. Commitment.
   - We commit to continue maintaining the standard of documenting accurately in triage form.

3.ACRONYMS

- KAH- Kanye Adventist Hospital
- A&E- Accident& Emergency
- MOH- Ministry Of Health
- EMRs- Electronic Medical Records System

2023

Pre-ordering Surgical Supplies : Improving Patient experience

Dr. Sujan Raj Paudel[1], Dr Angela Basnet[2] Dr. Hector Gayares Jr[3]
1. Director of surgical services, SMAH; 2. Vice President for Medical Affairs, SMAH; 3. Chief Executive Officer SMAH

THE PROBLEM

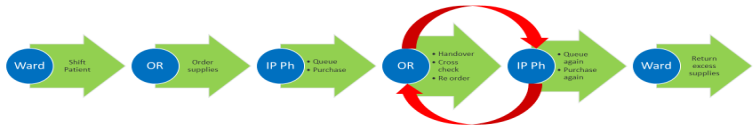
- Surgical supplies are ordered after patients arrive in the preoperative room.
- The surgical supplies pack requires large number of items. So it takes a lot of time for the pharmacists to prepare the bills and pack the supplies.
- There is already a long queue of patients in the inpatient pharmacy to purchase daily supplies for the inpatients, and also to purchase medicines as per discharge prescriptions.
- Increased waiting times for patients. Increased risk of dispensing errors. Poor relationship between pharmacist, patient parties and theatre staff.
- Patients visitors have to move to and fro (from Operation Theatre to inpatient pharmacy) multiple times during the duration of surgery to receive correct supplies. Return of excess supplies.

AIM

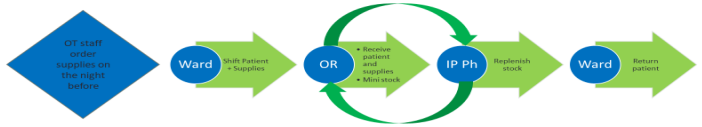
To improve patient experience on the day of surgery by:

- **Starting surgery early**
- **Improve theatre utilization rate**

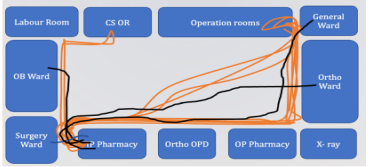
FLOW MAP OF PRESENT STATE



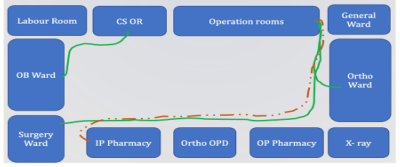
FLOW MAP OF FUTURE STATE



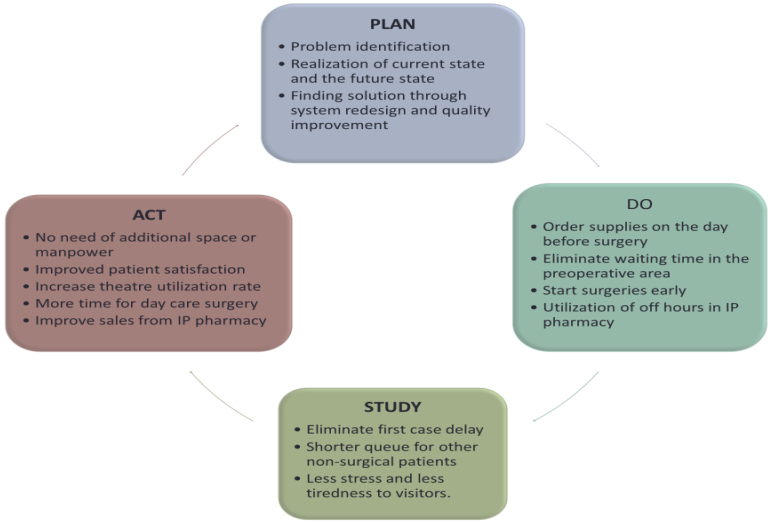
SPAGHETTI DIAGRAM OF CURRENT STATE



SPAGHETTI DIAGRAM OF FUTURE STATE:

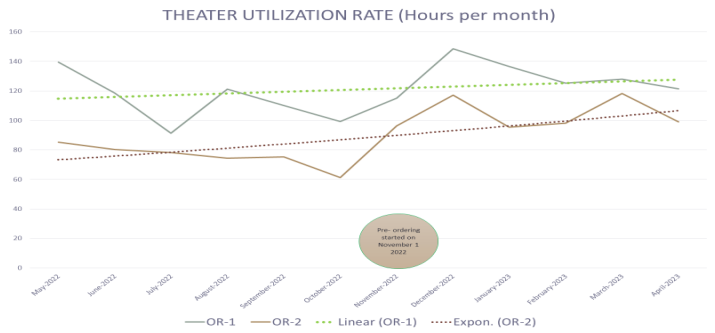


PLAN DO ACT STUDY CYCLE

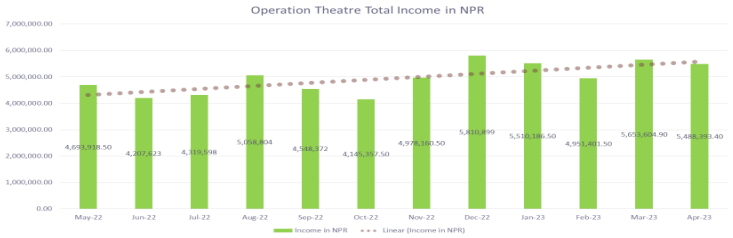


DATA

- After initiation of preordering in early November, the starting time for the first case in each room has been fixed at 8:30 AM.
- Theatre utilization rate for major operation rooms has improved by 23.29 percent.
  - OR 1 : Improved by 14.02%
  - OR 2: Improved by 37.21%



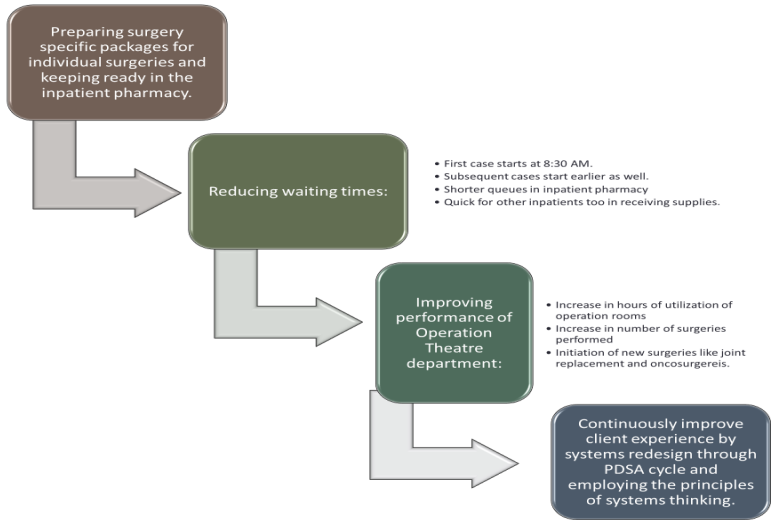
RESULTS



SUMMARY

- Ordering surgical supplies from the theatre itself was causing delays in starting the first case and underutilization of operation theatre.
- Patient's visitors to and fro movement between operation room and inpatient pharmacy added more stress and gave them a bitter experience.
- After initiation of preordering of the surgical supplies one day before the planned date of surgery, the patient party's movement has reduced.
- Inpatient pharmacy queues have shortened.
- Operation theatre utilization and revenue generated has improved.

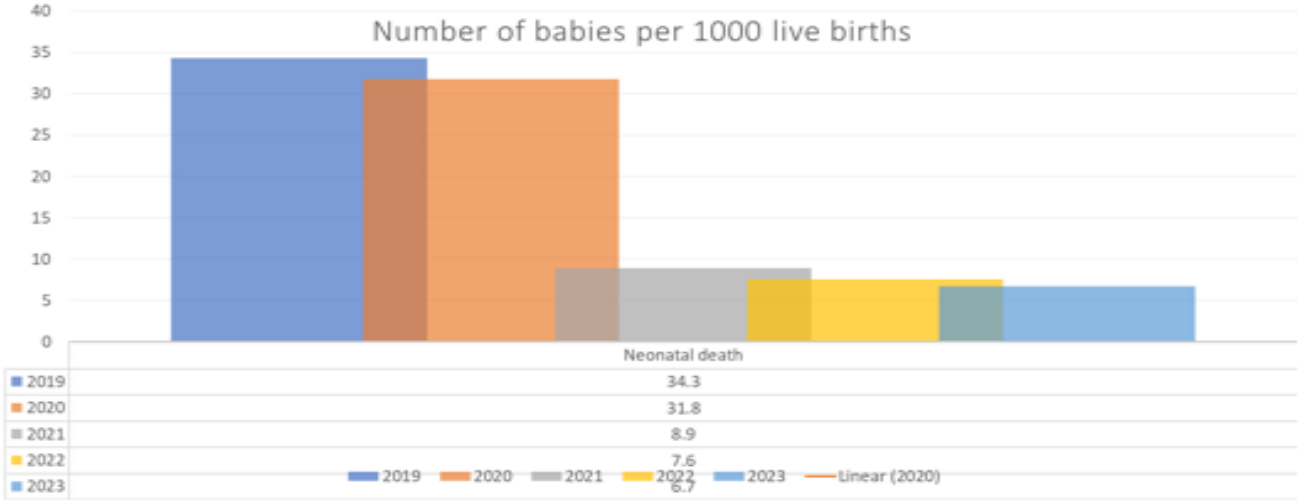
FUTURE STEPS/ WHAT'S NEXT?



Ishaka Adventist Hospital
Reducing Neonatal Mortality at IAH

DR BRIAN Medical Director IAH |
| Dr Kajoba Dickson, Dr Twesigomwe Godfrey, Dr Paul Ssempebwa, Sr Awacango Joyce, Sr Itungho Jovia, Sr Jemima Kajoba

RESULTS 11



Current status 12

- 90% of the babies are NICU services:
- We still refer babies with severe congenital anomalies.
- We have successfully managed prematures of 26 weeks and above.
- Neonatal mortality rate has reduced to 6.7 babies per 1000 live births
- Full time paediatrician with a whole dedicated team on paediatric and NICU wa
- Continuous professional development in NICU care.

FUTURE PROSPECTS. 13

- Expand our NICU and paediatric wards
- Qualified neonatal nurses
- Have a neonatologist
- Recruit a paediatric surgeon

Lessons learnt 14

- TBAs have a close bond with their clients.
- In order to solve the TBA challenge we need to them to be integrated in the hospital care system as linkage facilitators.
- NICU clinics and follow up and community engagements help to reduce on bad cultural practices especially in the new couples.
- Positive attitude is key to change.
- Celebrating every small success is a strong motivator.
- We have learnt that indeed neonatal mortality is not a lion but just a hyena.
- Improvement in one department improves other associated departments too. Maternal mortality has greatly reduced, mortality below 5 has also greatly reduced.

ACKNOWLEDGEMENT 15

- Mr Noble for funding lower health and community engagement and TBAs incorporation as linkage facilitators.
- Health for Uganda for equipping NICU with patients monitor, pulse oximeter, incubator, baby warmer, oxygen concentrators.
- Health for Uganda offering the first Neonatal care skills training led by DR Duncan and Ms Laura Bautler.
- Absolute charity Uganda for equipping NICU with an incubator, radiant warmer, phototherapy machine.
- Dr Joudy Cousins for an infusion pump.
- Dr Kajoba Dickson for CPAP machine.
- Maristopes Uganda for CQI mentorships.
- Government of Uganda for support supervision in CQI, MDPSR and Immunisation.
- Hospital staff and management.

MWAMI ADVENTIST HOSPITAL - IMPROVING THE QUALITY OF NEONATAL CARE AND REDUCING NEONATAL DEATHS AND FRESH STILL BIRTHS IN OBSTETRICS WARD

[Sing`ombe Isaac – Nursing and Midwifery College Director, George Siamuzoka - Hospital Administrator; Ronilo Ang - Chief of Medical Staff, Gift Chimya Mulenga Sing`ombe - Nursing Services Director, Jane Simwanza - Labour Ward In-charge]

THE PROBLEM

Mwami Adventist Hospital is situated 30 km from Chipata City, in the rural area. The hospital has a catchment population of more than 100,000. The health care services provided at Mwami Hospital include the following: Maternal and Child Health, Obstetrics, Medical, Surgical, Radiology, Laboratory, Physiotherapy, Pharmacy, Dental, ENT, ART, and Eye services. The hospital has also in-house clinics such as: Men's clinic, Cervical cancer clinic, ART clinic and Eye clinic. Over the past 3 years the hospital observed an increase in the number of neonatal deaths in the obstetrics or labour ward. Some of the reasons for these deaths could be attributed to: lack of equipment, inadequate doctors and midwives, mothers coming late for delivery, inadequate knowledge in resuscitation, stock out of drugs, medical and surgical supplies, and no independent neonatal unit. The table below shows the number of deliveries and neonatal deaths for a period of 3 and half years.

	2020	2021	2022	JAN – JULY 2023
Normal Deliveries	1444	1638	1393	670
Caesarian Section	396	297	294	229
Assisted Deliveries	74	120	90	57
Total Deliveries	1904	2055	1777	956
Maternal Deliveries	1	1	2	0
Neonatal deaths	24	35	25	1
Fresh Still Birth	19	23	11	2
Macerated Still Birth	12	12	9	6

Sub-Saharan Africa has the highest neonatal mortality rate in the world (27 deaths per 1000 live births) with 43% of global newborn deaths. In 2021, neonatal mortality rate for Zambia was 24.6 deaths per 1,000 live births. The infant mortality rate for Zambia in 2022 was 40.606 deaths per 1000 live births. WHO recommends, 12 or fewer third trimester (late) stillbirths per 1,000 total and 10 neonatal deaths per 1,000 live births by 2030.

The number of neonatal deaths and still births are as follows: 2020 (55), 2021 (70), and 2022 (45) for Mwami Hospital. The numbers of neonatal and still births were high as compared to WHO standards and it is for this reasons that measures were put in place to reduce the numbers and improve neonatal care in the obstetrics or labour ward starting the year 2023.

AIM

To reduce the number of neonatal deaths and improve neonatal care within six (6) months of implementing the agreed action points in maternity or obstetrics ward.

RENOVATED KANGAROO ROOM

RENOVATED NEONATAL INTENSIVE CARE UNIT WITH RESUSCITAIRE, INCUBATOR, PHOTOTHERAPY, CRIBS AND CPAP MACHINE

PLAN DO ACT STUDY CYCLE

PLAN

Guarantee quality in operation

Mwami Adventist Hospital started planning in 2021 to buy equipment and renovate the kangaroo room and NICU. This was precipitated by the increased numbers of neonatal deaths and FSB. The hospital sourced for funds and received from PEACE HEALTH, an NGO after coming up with an action plan. This plan was put in place to reduce on neonatal deaths and to improve neonatal care. Maintenance actions included the following; renovating the NICU and kangaroo and to purchase equipment

ACT

Minimize & Control

- every day a midwife visited the waiting shelter where high risk pregnant mothers wait for delivery to evaluate and monitor these mothers, treatment protocols have been placed in the NICU and Kangaroo room for easier reference when attending to a patient, review meetings of cases by doctors and midwives and admission of all neonatal patients to NICU.

DO

Implementation

Between January and February 2023 the following were done after receiving funds; renovated kangaroo room and the Neonatal Intensive Care Unit, bought equipment (phototherapy machine, resuscitaire, cribs, CPAP machine, blankets and bed sheets. Review meetings of every death that occurred in NICU, monitoring of every pregnant woman that came to the ward or was in the waiting shelter. Monitoring of women resulted in detecting complications early

STUDY

Evaluation and Assessment

-medical staff and nursing staff observed a high number of neonatal deaths and fresh still births from 2020 to 2022 and this could have been due to few midwives, lack of medical equipment and few

DATA

FIGURE1: SHOWING MWAMI ADVENTIST HOSPITAL LABOUR WARD DELIVERIES FROM 2020 TO 2023

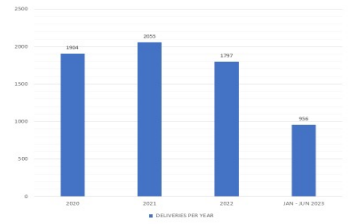
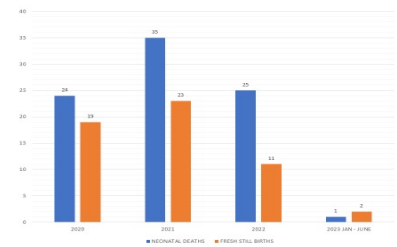


FIGURE 2: SHOWING MWAMI ADVENTIST HOSPITAL NUMBER OF NEONATAL DEATHS AND FRESH STILL BIRTHS - 2020 – 2023. From January – June 2023 neonatal mortality rates reduced



RESULTS

Mwami Adventist Hospital recorded a total number of deliveries (normal deliveries, caesarian sections, assisted deliveries 2020 to 2022) as follows: 2020; 1,904 deliveries, 2021; 2,055 deliveries, 2022; 1,777 deliveries, January to June 2023 has recorded 956 deliveries. The number of neonatal deaths and still births are as follows; 2020 (55), 2021 (70), and 2022 (45). For January to June 2023, the hospital has recorded 0 maternal deaths, 1 neonatal deaths, 2 still births and 6 macerated still births. In 2022 the number of neonatal deaths and still births was 45 and 2021 was 70 and comparing to half of 2023 the number is 1 neonatal deaths and 2 Fresh Still Births. This shows that they is a reduction in neonatal deaths and still births in comparison with the previous or past years.

The hospital has managed to reduce the number of neonatal deaths, still births and recorded no maternal deaths in the 6 months of 2023. Mwami Adventist Hospital management managed to do the following to improve neonatal care and reduce neonatal deaths and still births in the labour ward;

1. Bought 2 phototherapy machines through partners (Peace Health)
2. Bought 1 resuscitaire through partners (SIDA)
3. Bought 3 heaters through partners (Peace Health)
4. Bought CPAP machine for the NICU through partners (Peace Health)
5. Renovated the kangaroo room and NICU – painting
6. Printed out neonatal protocols for managing neonatal conditions and complications
7. Received 2 cribs from Churches Health Association of Zambia for the NICU
8. Allocated more midwives and nurses to labour ward and every shift, there are two midwives
9. Established a Kangaroo room for managing premature babies
10. Improvised a small neonatal intensive care unit within labour ward for managing neonatal complications such as birth asphyxia
11. Having peri-natal neonatal and maternal review meetings for every death that occur
12. 4 midwives have been trained in neonatal resuscitation and the trainings are continuing to ensure all are trained
13. The hospital has also intensified the supervision of midwives, doctors and support staff in the labour ward through the Chief of Medical Staff, Director of Nursing Services and Ward In-charge.
14. Labour ward has allocated one midwife in the mothers waiting shelter for the purpose of reviewing, examining and monitoring high risk pregnant mothers (with complications) on a daily basis. This is done to ensure that complications are detected, prevented and treated early.

SUMMARY

As Mwami Adventist Hospital, we have learnt that having adequate trained skilled human resource, equipment (Resuscitaire, Incubators, Oxygen Machine, heaters, Phototherapy) and good supervision is essential for providing quality, good and standard neonatal care and reduces neonatal mortality rates and Fresh Still births. Undertaking this activity or project has helped the hospital to reduce neonatal deaths and Fresh Still births (FSB). In the first half of 2023 (January – June) the hospital recorded only 1 neonatal death, 2 Fresh still Births and 0 Maternal deaths as compared to the past years of 2022 (Neonatal deaths - 25, FSB - 11), 2021 (Neonatal deaths - 35, FSB - 23), 2020 (Neonatal deaths - 24, FSB - 19). This positive reduction of neonatal deaths and good neonatal care will attract more pregnant mothers to come and deliver in our hospital and contribute to development of Zambia.

FUTURE STEPS / WHAT'S NEXT?

Printing Your Poster

- A hospital can take the ".ppt" framework for an "A-3" and fill in each box – and then email this as a PowerPoint presentation to GHI for viewing by your peers
- If your hospital does not have a printer that is large enough to print a poster of 91 cm by 371 cm (or 36 by 28 inches):

  A Hospital can also take the 9 boxes of an A-3 and make each box a page (regular size) and then tack the 9 pages (boxes) on a bulletin board to show the story of how this QI project developed