Opportunities for Improvement Report 2022

Quality Management Department - Jeddah

مستشفى الملك فيصل التخصصي ومركز الأبحاث
King Faisal Specialist Hospital & Research Centre
Gen. Org. مؤسسة عامة

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Acknowledgment

Quality Management Department – Jeddah would like to express its appreciation and gratitude to all Hospital Departments and staff who participated in Performance Improvement projects to improve the work process in their areas. This report will set the road for Hospital Departments to choose from identified areas for improvements based on their priorities. Special thanks to Dr. Nasser Mahdi - General Manager KFSH&RC – Jeddah and Dr. Hisham Al-Omran - Chief Quality Officer for their relentless support and commitment to improving healthcare quality and patient safety.

Also, we would like to thank the Performance Improvement Section who organized and gathered the improvement opportunities from various Departments, resources and compiled them into a single report.

Furthermore, continuous improvement is a joint effort by Quality Management Department, all Hospital departments and staff. We would like to thank you once again for your hardwork and enthusiam.

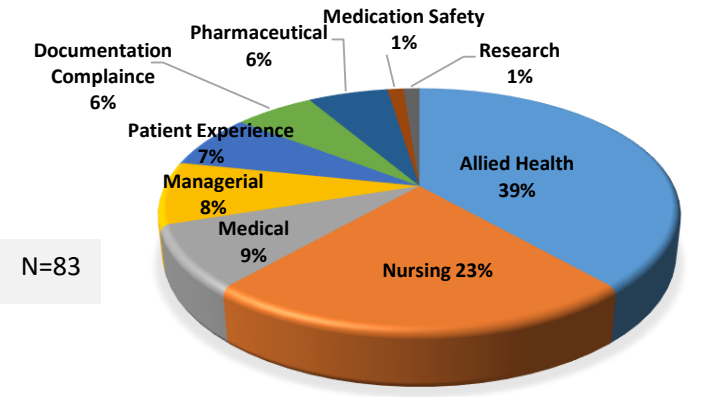
Executive Summary

The Opportunities for Improvement (OFI) Report for the year 2021 (1442/1443 AH) shed light and fulfilled its mission of providing the highest level of specialist healthcare in an integrated educational and research setting.

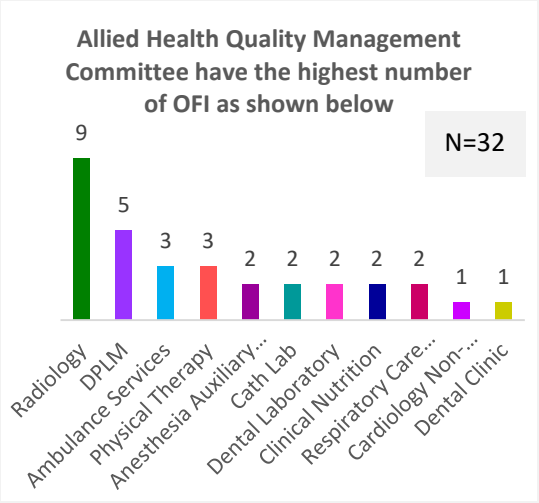
The above-mentioned report is released by the Quality Management Department – Jeddah annually, which reflects identified areas for improvement in Divisions and Committees, utilizing several resources as follows:

- Board of Director Reports
- Zero Harm Scorecard
- Hospital Scorecard Reports
- Infection Control Report
- Nursing Quality Indicators Report
- Patient Experience Report
- Medication Safety Report

Note: 83 areas for improvement were identified through the above reports.



OPPORTUNITIES FOR IMPROVEMENT PER QUALITY COMMITTEES



It also serves as a parameter to work on the identified areas and prioritize them as necessary in alignment with the Hospital's strategic objectives and priorities. KFSH&RC, in collaboration with Press Ganey, developed "I.A.C.T" and "Just-Do-It" to serve as a PI methodology for project execution.

In addition, we have included eighteen (18) Actionable Patient Safety Solutions (APSS) that we received from the Patient Safety Movement of whom is in a partnership with the Saudi Patient Safety Center (SPSC) to eliminate preventable patient deaths in hospitals. It is a global non-pofit organization that is dedicated to ZERO HARM and SAFER HEALTHCARE FOR ALL. It engages with all stakeholders, including patients, medical professionals, government, employers and private payers, such as insurance companies.

Furthermore, the Quality Management Department, working with the Robust Process Improvement Coaches, will assist with projects initiated by Divisions and Departments, as well as provide support to help achieve Hospital strategic objectives.

Opportunities for Improvement per Quality Committees Reporting to Performance Improvement Council

Allied Health Quality Management Committee

Opportunity for Improvement	Owner	Data Source
1. Radiology procedures waiting time for outpatient	Radiology	Radiology Dashboard
2. DEM Patient Reports TAT for MRI exams (The time from when the exam is completed until a preliminary report is available in ICIS.)	Radiology	Radiology Dashboard
3. Radiology Machine (US, CT& MRI) Downtime (in Hours)	Radiology	Radiology Dashboard
4. Number of Days for next 3rd available appointment slot - Outpatient (MRI Neuro / MRI under GA)	Radiology	Clinical Services Scorecard
5. Number of Total Downtime Hours for Radiology Equipment Failures	Radiology	Clinical Services Scorecard
6. Number of Reported Incidents in QIS (by Radiology)	Radiology	Clinical Services Scorecard
7. Number of Days for next 3rd available appointment slot - MRI under GA - Pediatric Cardiac	Radiology	Clinical Services Scorecard
8. Number of Publications / Abstracts	Radiology	Clinical Services Scorecard
9. Total cost of Expired Medical Stock per month	Radiology	Clinical Services Scorecard
10. Number of Vehicle failures during operation	Ambulance Services	Clinical Services Scorecard
11. Number of Total Downtime Hours for Ambulance Equipment Failures	Ambulance Services	Clinical Services Scorecard
12. % of Patients Transport Time within 60 minutes of scheduled transport	Ambulance Services	Clinical Services Scorecard
13. Number of Monthly Episodes or Critical Supplies Shortages	Anesthesia Auxiliary Services	Clinical Services Scorecard

14. Number of Monthly Episodes for Anesthesia Equipment Failures	Anesthesia Auxiliary Services	Clinical Services Scorecard
15. % Patients Door to Balloon Time for ST-Elevation MI Patients within 90 minutes (After hours)	Cath Lab Department	Clinical Services Scorecard
16. Number of Complications post sheath removal	Cath Lab Department	Clinical Services Scorecard
17. Number of Monthly Episodes for Critical Supplies Shortages	Cardiology Non-Invasive Services	Clinical Services Scorecard
18. % Non-Eligible Referrals to Dental Clinic	Dental Clinic	Clinical Services Scorecard
19. Number of Monthly Episodes for Dental Lab Equipment Failures	Dental Laboratory	Clinical Services Scorecard
20. Number of Monthly Episodes for Critical Supplies Shortages	Dental Laboratory	Clinical Services Scorecard
21. Number of Monthly Episodes for Critical Supplies Shortages	Clinical Nutrition	Clinical Services Scorecard
22. Total cost Expired Medical Stock per month	Clinical Nutrition	Clinical Services Scorecard
23. Number of Monthly Episodes for DPLM Equipment Failures	DPLM	Clinical Services Scorecard
24. Number of Total Downtime Hours for DPLM Equipment Failures	DPLM	Clinical Services Scorecard
25. Number of Overdue SRSs	DPLM	Clinical Services Scorecard
26. Number of Monthly Episodes for Critical Supplies Shortages	DPLM	Clinical Services Scorecard
27. Total cost Expired Medical Stock per month	DPLM	Clinical Services Scorecard
28. Number of Total Downtime Hours for Physical Therapy Failures	Physical Therapy	Clinical Services Scorecard
29. Number of Monthly Episodes for Critical Supplies Shortages	Physical Therapy	Clinical Services Scorecard
30. % Total Knee Replacement (TKR) Pathway Compliance	Physical Therapy	Clinical Services Scorecard

31. Number of Monthly Episodes for Respiratory Equipment Failures	Respiratory Care Services	Clinical Services Scorecard
32. Number of Total Downtime Hours for Respiratory Equipment Failures	Respiratory Care Services	Clinical Services Scorecard

Medical Quality Management Committee

Opportunity for Improvement	Owner	Data Source
1. ER waiting time to be seen "min"	Department of Emergency Medicine (DEM)	Performance Score Card – Access to Care
ER boarding time "hrs."	DEM	Performance Score Card – Access to Care
2. Bed Occupancy Rate	Medical & Clinical Affairs (MCA)	Performance Score Card – Access to Care
3. Venous Thromboembolism VTE – JES 1	1 South (Neuroscience)	Zero Harm Scorecard
4. Venous thromboembolism VTE - JRT	Renal Transplant	Zero Harm Scorecard
5. Medication-related incidents • Medication Prescribing Error	MCA	Medication Safety QIS Dashboard
6. Readmission Rate < 7 days	MCA	Board of Directors Report

Nursing Quality Committee

Opportunity for Improvement	Owner	Data Source
1. Pressure Injury Rate	Nursing Affairs	Performance Score Card – Quality of Care
2. Pressure Injury Rate - JCCU	Nursing Affairs	Zero Harm Scorecard
3. Pressure Injury Rate - JCSU	Nursing Affairs	Zero Harm Scorecard
4. Pressure Injury Rate - JICU	Nursing Affairs	Zero Harm Scorecard
5. Pressure Injury Rate - JEN 4 / JES 4	Nursing Affairs	Zero Harm Scorecard
6. Pressure Injury Rate - JES 5	Nursing Affairs	Zero Harm Scorecard

7. Pressure Injury Rate - JEN 3 / JES 3	Nursing Affairs	Zero Harm Scorecard
8. Pressure Injury Rate - JOR	Nursing Affairs	Zero Harm Scorecard
9. Falls with Injury - JEN 5 / JES 5	Nursing Affairs	Zero Harm Scorecard
10. Falls with Injury - JES 1	Nursing Affairs	Zero Harm Scorecard
11. Central line-associated bloodstream infection (CLABSI) - JCSU	Nursing Affairs	Zero Harm Scorecard
12. CLABSI- JICU	Nursing Affairs	Zero Harm Scorecard
13. Surgical site infection (SSI) - Cardiac Surgery	Nursing Affairs	Zero Harm Scorecard
14. SSI - Colorectal Surgery	Nursing Affairs	Zero Harm Scorecard
15. SSI - General Surgery	Nursing Affairs	Zero Harm Scorecard
16. SSI - Orthopedic	Nursing Affairs	Zero Harm Scorecard
17. SSI - Transplant Surgery	Nursing Affairs	Zero Harm Scorecard
18. SSI - Urological Surgery	Nursing Affairs	Zero Harm Scorecard
19. SSI - Vascular Surgery	Nursing Affairs	Zero Harm Scorecard

Managerial Quality Management Committee

Opportunity for Improvement	Owner	Data Source
1. Nursing voluntary turnover rate	Nursing * HR	Performance Scorecard - HR
2. Average International Recruitment Turnaround Time (Days)	HR	Performance Scorecard - HR
3. Average Local Recruitment Turnaround Time (Days)	HR	Performance Scorecard - HR
4. Collections - Days Sales Outstanding (DSO Ratio)	Finance Department	Managerial KPIs Report for C-SUITE
5. Denials - Percentage of Claims Rejected	Finance Department	Managerial KPIs Report for C-SUITE
6. Bad Debt Rate	Finance Department	Managerial KPIs Report for C-SUITE
7. % of AR Debt >180 Days	Finance Department	Managerial KPIs Report for C-SUITE

Additional Classification for Opportunities for Improvement per Ownership

Documentation Compliance (CBAHI Requirements)

Opportunity for Improvement	Owner	Data Source
1. Psychological Assessment documentation in the Admission Note	MCA	Open Medical Record Report
2. Consultation Order documentation	MCA	Open Medical Record Report
3. Documentation of follow up clinic appointments in the Discharge Notes	MCA	Open Medical Record Report
4. Physician handover documentation	MCA	Quality Rounds Report
5. Documentation of education on the risk, benefits, and alternatives of Anesthesia procedural sedation (consent)	Anesthesia	Closed Medical Record Report

Pharmaceutical Care Services

Opportunity for Improvement	Owner	Data Source
1. Satisfaction of discharged patients with discharge instructions	Pharmaceutical Services	HCAHPS Report
2. Number of eligible patients for medication reconciliation that have medication history documented in the system	Pharmaceutical Services	Pharmaceutical Care Division KPIs 2021
3. Number of eligible patients for medication reconciliation that have medication reconciliation completed upon admission in the system	Pharmaceutical Services	Pharmaceutical Care Division KPIs 2021
4. Number of eligible patients for medication reconciliation that have medication reconciliation completed upon discharge in the system	Pharmaceutical Services	Pharmaceutical Care Division KPIs 2021
5. % Medication errors (reached the patient) documented in the patient file	Pharmaceutical Services	IPSG/ESR Report

Medication Safety Committee

Opportunity for Improvement	Owner	Data Source
1. Reduce medication-related incidents: • High-Alert Related Medication Error • Preparation Medication Error • Dispensing Medication Error)	Pharmaceutical Services	Medication Safety QIS Dashboard

Patient Experience Committee

Opportunity for Improvement	Owner	Data Source
1. Overall Hospital Rating (HCAHPS)	Patient Experience Office	Performance Scorecard
2. Outpatient Experience	Patient Experience Office	Performance Scorecard
3. Emergency Room Experience	Patient Experience Office	Performance Scorecard
4. Ambulatory Care Experience	Patient Experience Office	Performance Scorecard
5. Dental Services Experience	Patient Experience Office	Performance Scorecard
6. Patient Complaints	Patient Experience Office	Performance Scorecard

Research

Opportunity for Improvement	Owner	Data Source
1. Active Research Project	Research	Performance Scorecard - Research

Appendix A: Actionable Patient Safety Solutions

APSS	Sub APSS
1 Creating a Culture of Safety	
2 Healthcare-associated Infections	2A Hand Hygiene 2B Catheter-Associated Urinary Tract Infections 2C Surgical Site Infection 2D Ventilator-Associated Pneumonia 2E Clostridioides Difficile Infection 2F Central Line-Associated Bloodstream Infections 2G Non-Ventilator Hospital-Acquired Pneumonia
3 Medication Errors	3A Medication Errors 3B Antimicrobial Stewardship 3C Severe Hypoglycemia 3D Pediatric Adverse Drug Events 3E Standardizing & Safeguarding Medication Administration 3F Drug Shortage
4 Monitoring for Opioid-Induced Respiratory Depression	
5 Patient Blood Management	
6 Hand-off Communications	
Neonatal Safety	7A Optimal Neonatal Oxygen Targeting 7B Critical Congenital Heart Disease in Newborns
8 Airway Safety	8A Safer Airway Management 8B Unplanned Extubation 8C Safer Airway Management in Neonates and Children
9 Sepsis	9A Early Detection and Treatment of Sepsis
10 Cardiac Arrest	10A In-Hospital Cardiac Arrest
11 Obstetric Safety	11A Postpartum Hemorrhage 11B Severe Hypertension in Pregnancy and Postpartum 11C Reducing Unnecessary C-Sections
12 Embolic Events	12A Venous Thromboembolism (VTE) 12B Air Embolism

13 Collaborative Care Planning in Mental Health	
14 Falls	14A Falls in Adults 14B Mother/Baby Falls
15 Nasogastric Tube Placement and Verification	
16 Person and Family Engagement	
17 Patient Safety Curriculum	
18 Postoperative Delirium in Older Adults	

Appendix B: I.A.C.T. & Just-Do-It Form

KFSH&RC's Robust Process Improvement

I.A.C.T. Charter

Identify

Improvement Project Name:	Strategic Objective (select one):	Department
Click or tap here to enter text.	Strategic Objective SO1	Click or tap here to enter text.

Project Status	Improvement Site:	Project Start Date	Project End Date
Choose an item.	Choose an item.	Enter Start date	Enter End Date

Executive Sponsor	Team Lead	RPI Coach
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Problem: *Why is this project needed?*
(State: 1) The Reality 2) The Consequences 3) The Ideal.)
Click or tap here to enter text.

Quality Domain: Which Healthcare Quality Domain does this project support:
Choose an item.

Baseline (Flow): Map the current process/ problem (Value Stream Mapping (VSM), Timeline, Flow diagram, etc.)
(Create a flow chart and determined value for each step of the process: This will help better understand the Gap from expected performance)

Baseline (Data): Determine the baseline of the problem that has been identified
(Write down the last data points captured)
Click or tap here to enter text.

Benefit/Impact: What is the main impact/Benefit?
(Please check only one)

- ☐ Contained or reduced costs
- ☐ Improved productivity
- ☐ Improved work process
- ☐ Improved cycle time
- ☐ Increased customer satisfaction
- ☐ Other (please explain)

Click or tap here to enter text.

SMART Aim statement: What will the project achieve?
(3-4 words each)

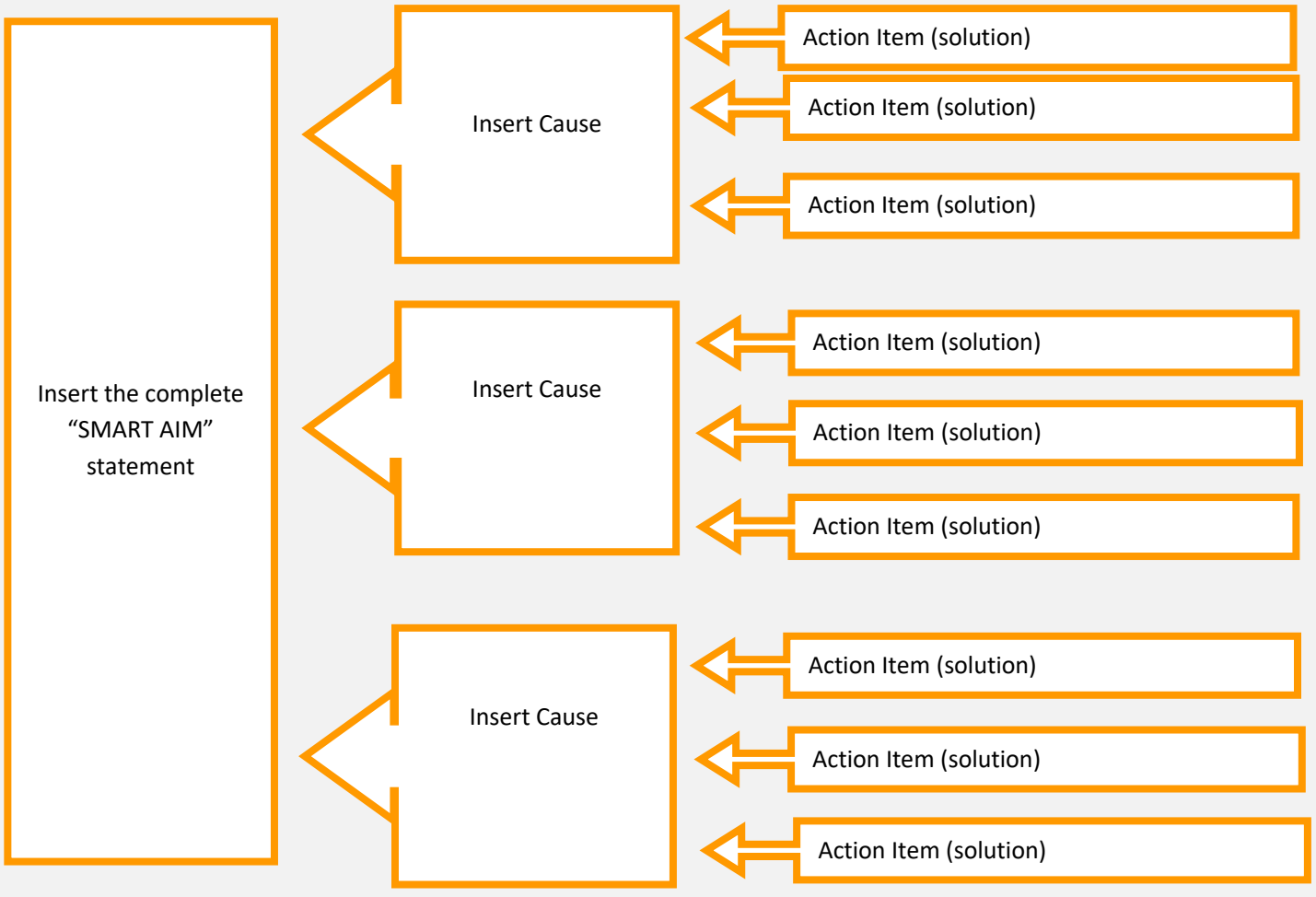
1. What will the project increase or decrease?
   a. Click or tap here to enter text.
2. What is the Group or population affected?
   a. Click or tap here to enter text.
3. Baseline (From what) and goal (To what)?
   a. Click or tap here to enter text.

	4. What is the time frame (By when (Date) & sustain)? a. Click or tap here to enter text.

Analyze

Drivers Diagram: Brainstorm the possible root causes and solutions to the problem; organize and distribute as needed:

(Drivers are written to start with a 'noun' and are derived from the causes | Interventions are written to start with a verb and are solutions to the causes)



Is education / training one of your interventions / actions? ☒ Yes ☐ No

If Yes, please e-mail the form to ATA: jcme@kfshrc.edu.sa

Change

Data Management Plan: What are the measures to ensure the improvement is moving in the right direction?

(Development of the measures is critical to ensure that the interventions are correct and making a difference towards the outcomes)

Outcome Measures: (only one) *(The measure that highlights the main problem; i.e. baseline)*	Target/Goal
1. Click or tap here to enter text.	1. Click or tap here to enter text.
Process Measures: (measure for each driver) *(The measure that highlights the drivers and interventions)*	**Target/Goal**
1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text.	1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text.
Balance Measures: *(The counter-measure of the outcome measure; i.e. indirect measure)*	**Target/Goal**
1. Click or tap here to enter text.	1. Click or tap here to enter text.

Change Ideas were tested/ piloted before implementation: ☒ Yes ☐No ☐NA

Results: Insert relevant graphs and charts to illustrate improvement over time.

(Insert relevant graphs, data, charts, etc. | Include the baseline and final outcome measure | include at least one process and balance measure)

Transform

Monitoring methods ***(monitoring method to ensure the improvement work is fixed)***	**Sustainment plan** ***(How will the work continue to be governed? What is the plan if outcome measure returns?)***
☐ New developed indicator (please specify KPI title) Click or tap here to enter text. ☐ Tracking on the local 'Daily Huddle Board' ☐ Other (please Specify Click or tap here to enter text.	Click or tap here to enter text.
Lessons learned ***(lessons learned that others can benefit from this type of project)***	**Team members** ***(Please specify team members)***
1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text. 4. Click or tap here to enter text. 5. Click or tap here to enter text. 6. Click or tap here to enter text.	1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text. 4. Click or tap here to enter text. 5. Click or tap here to enter text. 6. Click or tap here to enter text.

Note: When starting new project, please complete page 1 (The identification phase) then e-mail it to pipj@kfshrc.edu.sa

KFSH&RC's Robust Process Improvement Just-Do-It Form

Intervention Title:

Lead Name: **Date :**

Step 1. What are you trying to achieve?

Current practice Current Problem / situation in two words	Targeted Practice Enter target practice
Click or tap here to enter text.	Click or tap here to enter text.

1. What will the improvement increase or decrease?
Click or tap here to enter text.

2. Group or population improvement will affect?
Click or tap here to enter text.

3. Baseline (From what) and goal (To what)? (Optional)
Click or tap here to enter text.

4. Time frame Written as date (by when & sustain for how long)?
Click or tap here to enter text.

Step 2. Classify the root cause (reason) of the gap using 5 whys:

What is the: Problem/issue/ Pain	Click or tap here to enter text.
Why?	Click or tap here to enter text.
Why?	Click or tap here to enter text.
Why?	Click or tap here to enter text.
Why?	Click or tap here to enter text.
Root cause	Click or tap here to enter text.

Step 3. Choose the solution to solve the most common reason/ cause:		
Actions **List all actions taken to solve the problem (one action per bullet)**	**Involved Person** **List the assigned person for each action**	**Time Frame** **List the estimated time frame for each action**
1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text. 4. Click or tap here to enter text. 5. Click or tap here to enter text. 6. Click or tap here to enter text.	1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text. 4. Click or tap here to enter text. 5. Click or tap here to enter text. 6. Click or tap here to enter text.	1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text. 4. Click or tap here to enter text. 5. Click or tap here to enter text. 6. Click or tap here to enter text.

Step 4. List the lessons learned and the standard work to prevent reoccurrence:	
Lessons Learned **List the impact of this improvement and how it might affect other sections /units/departments**	**Standard Work** **Education and monitor any incident or complaint related to**
1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text. 4. Click or tap here to enter text. 5. Click or tap here to enter text. 6. Click or tap here to enter text.	1. Click or tap here to enter text. 2. Click or tap here to enter text. 3. Click or tap here to enter text. 4. Click or tap here to enter text. 5. Click or tap here to enter text. 6. Click or tap here to enter text.

Note: Upon completion, please share the form with your Quality Coordinator / Designee.

For more information, contact Quality Management Department

Thank you