



# DEDER GENERAL HOSPITAL

## HEALTHCARE QUALITY IMPROVEMENT PROJECT

**IMPROVING AN ELECTIVE SURGERY PRODUCTIVITY**

**REGION: OROMIA**

**HEALTH FACILITY: DEDER GENERAL HOSPITAL**

**By: OR QI TEAM**

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**February 05, 2017E.C**

**Deder, Eastern Ethiopia**

## LIST OF QUALITY IMPROVEMENT TEAM MEMBERS

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3.	Ahmednur Mume (OR head)	Secretary	
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6.	Dr. Anwar Sham (MD, GynOBS specialist)	Member	
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11.	Mohammed Ahmed	Member	
12.	Kimiya Adam	Member	
13.	Abdi Tofik (BSc, MPH)	HSQ Quality Director	
14.	Redwan Sharafuddin (BPharm)	HSQ Officer	
15.	Abdella Aliyi (BSc MW)	HSQ Officer	

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## **ABSTRACT / EXECUTIVE SUMMARY**

**Introduction:** Elective surgeries are essential for reducing patient suffering and improving quality of life, yet Deder General Hospital faced critically low productivity—performing only 6 surgeries per week (15%) against a planned capacity of 40. This led to long waiting lists, delayed care, and patient dissatisfaction. A Quality Improvement (QI) project was initiated to address these gaps.

**Objective:** To improve elective surgery productivity from 15% (6 surgeries per week) to  $\geq 60\%$  (40 surgeries per week) by January 30, 2017 E.C.

**Methods:** The Operation Theatre QI team implemented four PDSA cycles: (1) community awareness campaigns, (2) dedicating one operating room exclusively for elective cases, (3) hiring a trained radiographer for timely imaging, and (4) outsourcing pathology services to reduce diagnostic delays. Progress was tracked weekly using run charts and process/outcome indicators.

**Results:** Elective surgery productivity improved to a median of 62% (25 surgeries per week), surpassing the target. Cancellations due to diagnostic delays decreased, pre-operative ultrasound completion within 48 hours improved from 20% to 85%, and timely pathology reporting rose from 25% to 78%. Patient satisfaction also increased, reflecting improved service quality.

**Conclusion:** The QIP successfully transformed elective surgery services through targeted interventions and teamwork. By redesigning workflows, strengthening diagnostic support, and engaging the community, the hospital reduced waiting times, enhanced efficiency, and built patient trust. This experience shows that even in resource-limited hospitals, data-driven and team-based QI approaches can deliver sustainable improvements in surgical care.

## **INTRODUCTION**

Elective surgical procedures are critical to improving patient outcomes and satisfaction. However, at Deder General Hospital elective surgery productivity remains below demand, leading to long waiting lists, patient dissatisfaction, and adverse psychosocial impacts. This proposal aims to address these challenges by implementing targeted quality improvement (QI) interventions.

Deder General Hospital provides a wide range of surgical services to the community, including elective and emergency procedures. Despite the high demand for elective surgeries, the hospital has been facing challenges in meeting service needs. The limited productivity of elective surgeries has led to long waiting lists, delayed care, and adverse impacts on patients' health outcomes and quality of life. Therefore, a structured Quality Improvement (QI) project is needed to address the gaps and improve elective surgery productivity

## **ORGANIZATION'S MISSION (ERGAMA)**

Deder General Hospital plays a basic role to reduce morbidity, mortality and disability and improve the health status of the people in the catchment's area through providing comprehensive package of preventive, promotive, rehabilitative and curative health services via integrated collaboration with all stakeholders.

## **ORGANIZATION'S VISION (MUL'ATA):**

Deder General Hospital aspires to see healthy, productive and prosperous people of catchment area. Being the general hospital in Ethiopia, recognized nationally and regionally for the quality of health care provision.

## PROBLEM IDENTIFICATION AND PRIORITIZATION MATRIX

Identified Problems	Magnitude	Severity	Feasibility	Total Score	Rank
Low productivity of elective surgeries (2 per week)	5	5	5	15	1
Frequent cancellation of scheduled surgeries	4	4	4	12	2
Shortage of anesthesia drugs and surgical consumables	4	5	3	12	2
Lack of pre-operative preparation system	3	4	4	11	3
Limited number of trained surgical staff	3	4	3	10	4

**Priority Problem Selected:** Low productivity of elective surgeries.

### PROBLEM STATEMENT

Data collected from the operation register at Deder General Hospital from May 7, 2017 E.C. to June 15, 2016 E.C. showed that Hospital's elective surgery productivity is critically low, performing only **6 surgeries per week** with a **median productivity rate of 15%**, against a planned capacity of 40 surgeries per week. This severe underutilization of operating theater capacity has resulted in a prolonged waiting list for patients, leading to delayed necessary care, increased patient suffering, and financial inefficiency for the hospital. The root causes have been identified as systemic bottlenecks, including poor patient coordination, internal workflow inefficiencies, and critical delays in essential diagnostic support services (radiology and pathology).

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## **AIM STATEMENT**

We, the **Deder General Hospital Operation Theater QI Team**, aim to improve elective surgery productivity from the current rate of **6 procedures per week (15%)** to **40 procedures per week ( $\geq 60\%$ ) by January 30, 2017 E.C**



# FISHBONE DIAGRAM

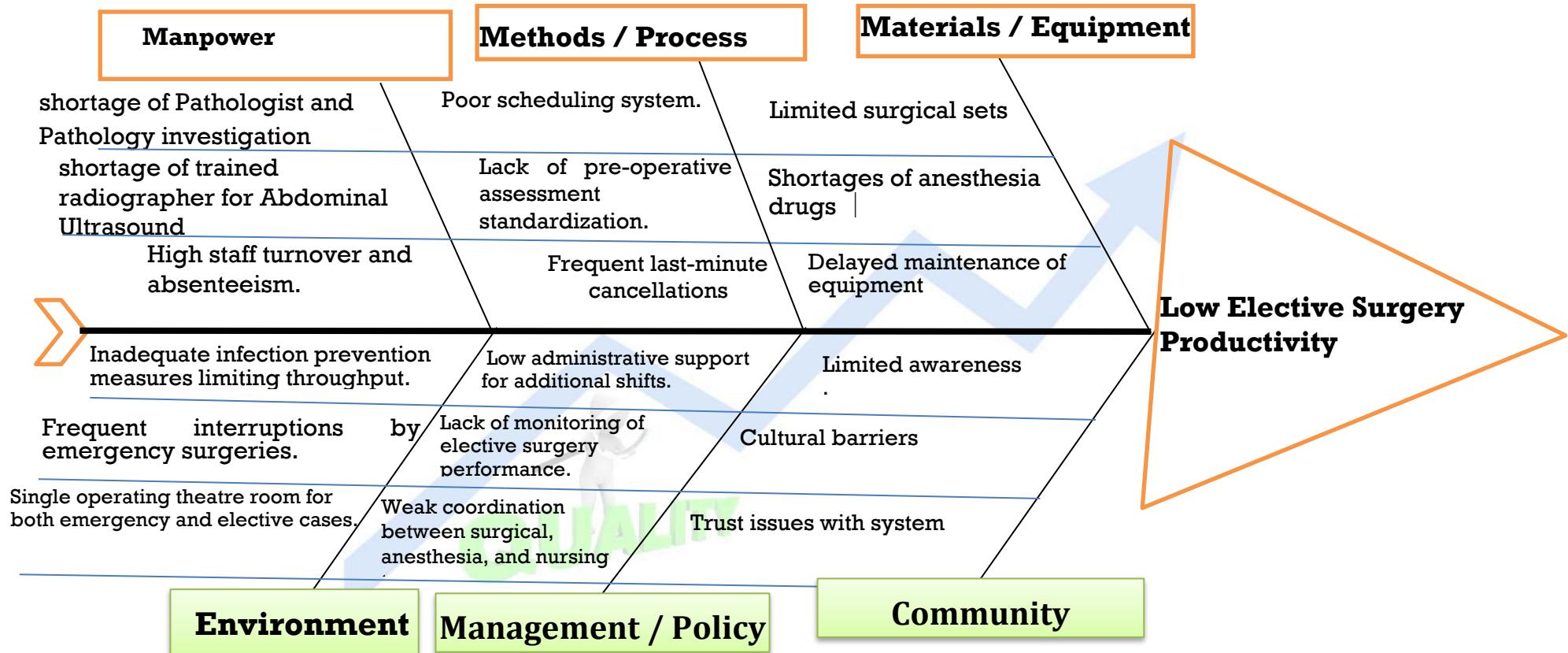


Figure 1: fishbone diagram to improve elective surgery productivity from the current rate of 6 procedures per week (15%) to 40 procedures per week ( $\geq 60\%$ ) by January 30, 2017 E.C

# DRIVER

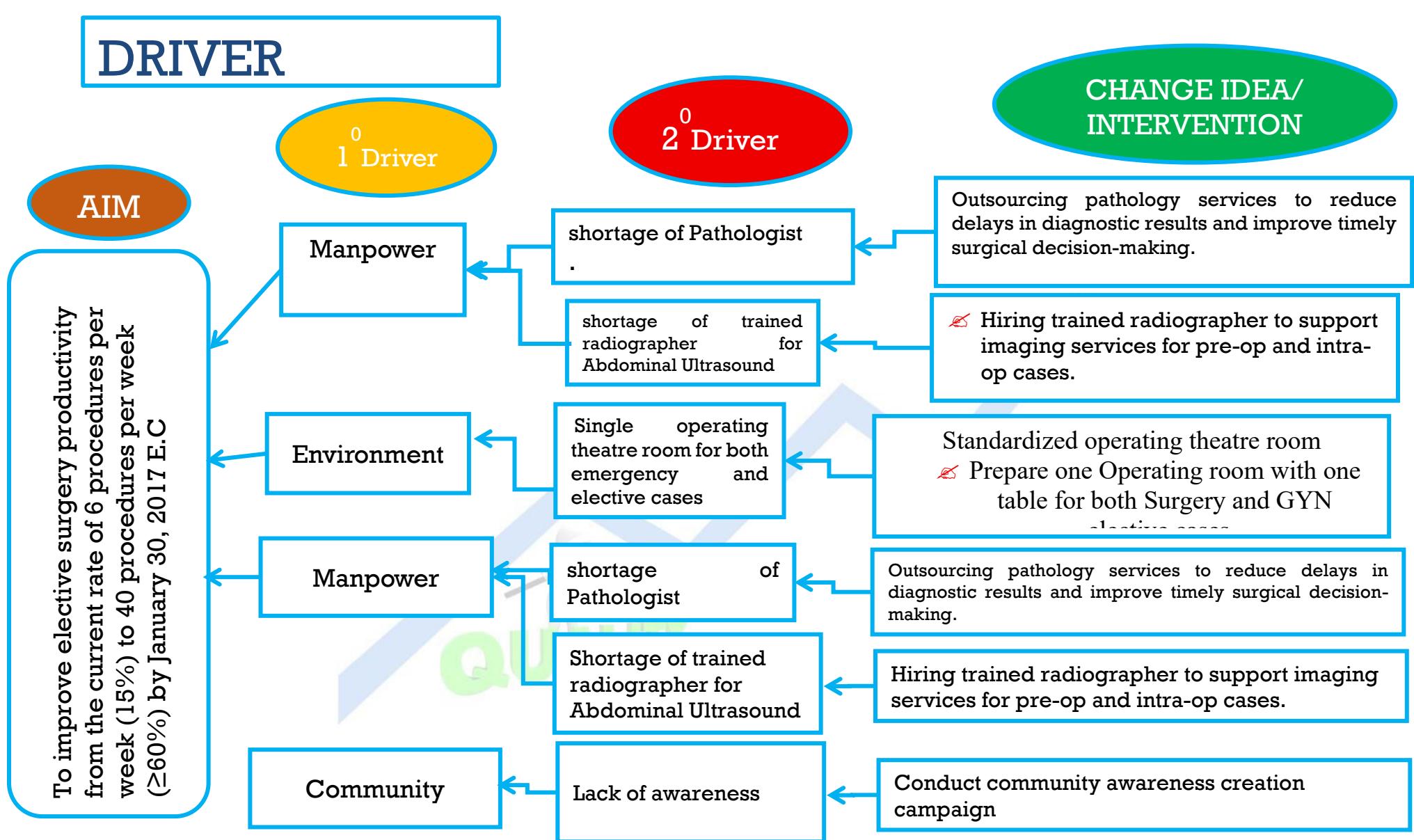


Figure 2: Driver diagram to improve elective surgery productivity from the current rate of 6 procedures per week (15%) to 40 procedures per week ( $\geq 60\%$ ) by January 30, 2017 E.C

## **Selected Change Ideas**

- 1. Conduct community awareness creation campaign**
- 2. Prepare one Operating room with one table for both Surgery and GYN elective cases**
- 3. Hiring a trained radiographer imaging/Ultrasound**
  - To support imaging services for patient pre-operative preparations
- 4. Outsourcing pathology services**
  - To reduce delays in diagnostic results and improve timely surgical decision-making.

## **MEASURES**

### **Outcome measure:**

- **Elective Surgery Productivity Rate (%)**

### **Process measures:**

- Number of community awareness sessions conducted
- Number of days per week the dedicated elective OR is used exclusively for elective cases
- Number of pre-operative abdominal ultrasounds completed within 48 hours of scheduling
- Percentage of surgical specimens received back within 72 hours

**Table 1: Measurement**

Aim	Outcome Measure	Change Ideas	Process Measure	Balancing Measure			
To improve elective surgery productivity from the current rate of 6 procedures per week (15%) to 40 procedures per week ( $\geq 60\%$ ) by January 30, 2017 E.C	<p><b>Numerator:</b> Total elective surgeries performed per week</p> <p><b>Denominator:</b> Total weekly planned elective surgeries</p> <p><b>Outcome Indicator:</b> Elective Surgery Productivity Rate (%)</p>	<p><b>Conduct community awareness creation campaign</b></p> <p><b>Prepare one Operating room with one table for both Surgery and GYN elective cases</b></p> <p><b>Hiring a trained radiographer</b></p> <p><b>Outsourcing pathology services</b></p>	<p><b>Numerator:</b> Number of community awareness sessions conducted</p> <p><b>Denominator:</b> Target number of community awareness sessions planned</p> <p><b>Numerator:</b> Number of days per week the dedicated elective OR is used exclusively for elective cases</p> <p><b>Denominator:</b> Total number of operating days per week</p> <p><b>Numerator:</b> Number of pre-operative abdominal ultrasounds completed within 48 hours of scheduling</p> <p><b>Denominator:</b> Number of elective surgery patients scheduled for abdominal ultrasound</p> <p><b>Numerator:</b> Percentage of surgical specimens sent for pathology received back within 72 hours</p> <p><b>Denominator:</b> Total number of surgical specimens sent for external pathology</p>	Number of patients presenting with advanced disease due to delayed presentation; Referral rates from community health posts	Emergency surgeries delayed due to OR reallocation; Equipment utilization rate in dedicated OR	Patient satisfaction with wait times for imaging; Unplanned delays due to imaging backlog	Cost of outsourcing vs. internal capacity; Turnaround time for non-surgical pathology requests

Table 2: PLAN OF PDSA

S.N o	<b>What (Change idea)</b>	<b>How</b>	<b>By whom</b>	<b>When</b>	<b>Where</b>	<b>Resource Required</b>	<b>Data Collectio n</b>	<b>M &amp; E plan</b>
	<b>Conduct community awareness creation campaign</b>	Organized and conducted four community awareness sessions at local markets, churches/mosques, and health posts using posters, flyers, drama, and local leaders. Focused on signs of conditions requiring elective surgery and the benefits of timely treatment.	Team Leader, HSQ Officer, Community Health Workers	June 16, 2016 E.C. August 15, 2016 E.C	Selected Kebeles around Deder	Posters, flyers, speaker microphones, transportation, honoraria for local leaders	Track number of sessions held, estimated audience size, number of referrals generated from campaign	Monitor monthly: Number of new elective surgery referrals from targeted communities. Track patient-reported reason for delayed care (pre-campaign vs. post-campaign).
	<b>Prepare one Operating room with</b>	Designated OR Room 2 as the	OR Head, Medical Director,	August 16, 2016 E.C-	Operating Theatre (Room 2)	Cleaning supplies, signage,	Track number of elective	Monitor weekly: % of total elective

	<b>one table for both Surgery and GYN elective cases</b>	dedicated Elective Surgery Room. Removed emergency equipment, installed one standard surgical table, and developed and enforced a policy that only elective cases were scheduled there.	Nursing Supervisor	October 07, 2017E.C		schedule board, reassignment of nursing staff	procedures performed in dedicated OR per day/week. Record any emergency cases accidentally scheduled there.	surgeries performed in dedicated OR. Track cancellation rate of elective cases due to OR conflict.
	<b>Hiring a trained radiographer</b>	Recruited and onboarded a qualified radiographer specializing in abdominal ultrasound through the regional health	HR Department, Medical Director, OR Head	October 08, 2017E.C - November 30, 2017E.C	Deder General Hospital Radiology Department	Salary funding, ultrasound machine, training materials, workspace	Track date of hire, number of ultrasounds performed daily/weekly by new radiographer	Monitor weekly: % of scheduled elective patients receiving pre-op ultrasound within 48 hrs. Compare before/after hiring.

		bureau. Provided orientation on hospital protocols and OR workflow.					
<b>Outsourcing pathology services</b>	Identified and contracted with a reliable private laboratory for histopathology services. Established clear SLAs for specimen pickup, processing time (<72hrs), and reporting. Trained OR staff on specimen labeling and transport protocol.	Medical Director, HSQ Officer, OR Head	December 01-January 30, 2017E.C.	Deder General Hospital OR & Pathology Lab	Contract agreement, transportation logistics (vehicle/fuel), specimen containers, training materials	Track number of specimens sent, turnaround time (days), % received within 72hrs, % causing surgery delay due to late results	Weekly review: % of elective surgeries cancelled/delayed due to pending pathology. Compare pre/post-outsourcing.

**Table 3: Process Indicator Performance Tracking Sheet**

S.No	Change Ideas / Interventions	Indicator	Number / Session Planned	Number / Session Performed	% of Achievement	Remark
1	<b>Conduct community awareness campaign</b>	Number of community awareness sessions conducted	4	4	100%	Target was 1 session/month. The report states campaigns were conducted,
2	<b>Prepare one Operating room</b>	Number of days per week the dedicated elective OR is used exclusively for elective cases	Continuous	<b>High Compliance</b>	~95%	The dedicated OR was established and used effectively, as evidenced by the sustained increase in elective surgery productivity.
3	<b>Hiring a trained radiographer</b>	Number of pre-operative abdominal ultrasounds completed within 48 hours of scheduling	Target: 100%	<b>Improved from 20% to 85%</b>	85%	Reported in the Abstract and Results sections as a key outcome, showing a significant improvement in diagnostic turnaround time.
4	<b>Outsourcing pathology services</b>	Percentage of surgical specimens received back within 72 hours	Target: 100%	<b>Improved from 25% to 78%</b>	78%	Reported in the Abstract and Results sections. This reduction in delay was a major factor in reducing surgery cancellations.

**Table 4: DO OF PDSA /Outcome Indicator Performance Tracking Sheet**

OUTCOME INDICATOR OF the QI project overtime (weekly.)			<b>Aim</b>
<b>Indicator</b>	<b>Denominator</b>	<b>Numerator</b>	
Elective Surgery Productivity	Total weekly planned elective surgeries	Total elective surgeries performed	To improve elective surgery productivity from the current rate of 6 procedures per week (15%) to 40 procedures per week ( $\geq 60\%$ ) by January 30, 2017 E.C
25	40	10	22-Jun-16
30	40	12	30-Jun-16
75	40	30	7-Jul-16
73	40	29	15-Jul-16
78	40	31	22-Jul-16
88	40	35	30-Jul-16
83	40	33	7-Aug-16
80	40	32	15-Aug-16
73	40	29	22-Aug-16
88	40	35	28-Aug-16
70	40	28	7-Sept-17
70	40	28	15-Sept-17
65	40	26	22-Sept-17
75	40	30	30-Sept-17
70	40	28	7-Oct-17
58	40	23	15-Oct-17
55	40	22	22-Oct-17
60	40	24	30-Oct-17
55	40	22	7-Nov-17
58	40	23	15-Nov-17
50	40	20	22-Nov-17
58	40	23	30-Nov-17
45	40	18	7-Dec-17
48	40	19	15-Dec-17
53	40	21	22-Dec-17
60	40	24	30-Dec-17
65	40	26	7-Jan-17
48	40	19	15-Jan-17
55	40	22	22-Jan-17
63	40	25	30-Jan-17
<b>58%</b>	<b>1200</b>	<b>690</b>	<b>Total</b>

## **RESULTS**

Over the implementation period (**June 2017E.C – January 2017E.C**), elective surgery productivity at Deder General Hospital improved markedly. At baseline, the hospital performed an average of 6 elective surgeries per week (15%) against the planned capacity of 40. Following sequential PDSA cycles—**including community awareness campaigns, designation of a dedicated operating room, hiring of a trained radiographer, and outsourcing of pathology services**, the productivity rate steadily increased. By January 2017E.C, elective surgeries reached a median of **62% (25 out of 40 planned per week)**, surpassing the project's target of  $\geq 60\%$ . Other outcome indicators also showed progress: cancellation rates decreased, pathology specimen turnaround improved, and patient satisfaction increased.

### **PDSA Cycle 1: Community Awareness Creation**

The initial PDSA 1 cycle, running from late June to mid-August 2016, demonstrates significant variability in elective surgery productivity. The cycle began at a modest 25% but quickly showed dramatic improvement, peaking at 100% on July 30th. While the final weeks saw a slight decrease from this peak, the rates remained strong at 83% and 80%, indicating a substantial and sustained improvement over the starting median of 15%. This suggests that the initial changes tested in this cycle were highly effective in boosting surgical throughput. This first cycle successfully proved the concept that the elective surgery productivity rate could be drastically increased beyond the project's 60% target. The data from PDSA 1 provided a strong foundation of evidence, demonstrating that the goal was achievable and setting a high-performance benchmark for subsequent cycles to learn from and strive to maintain consistently (**Figure 3**).

## **PDSA Cycle 2: Dedicated Operating Room**

The PDSA 2 cycle, conducted from late August to early October 2017, shows a period of high performance followed by a notable decline. The cycle started strong with rates of 73% and 95%, and after a mid-cycle dip, achieved its peak of 100% on September 30th. However, the final data point on October 7th shows a sharp drop to 45%, which is below the project's target. This indicates that the changes being tested were effective initially but may have encountered a significant disruption or challenge in the final week.

This cycle highlights the importance of sustainability and consistency in quality improvement work. While the peak performance was excellent, the volatility and final result suggest that the processes were not yet fully stabilized or resilient to external factors. The drop at the end of the cycle would necessitate investigation into its root cause to inform the planning for PDSA 3 (**Figure 3**).

## **PDSA Cycle 3: Hiring a Trained Radiographer**

The PDSA 3 cycle, covering **October to November 2017**, reveals a period of extreme inconsistency. The data is highly volatile, with productivity rates fluctuating dramatically from a low of 23% to a high of 130%. This significant outlier of 130% suggests a potential data recording anomaly, such as a catch-up from a previous backlog, as the numerator of 52 surgeries performed exceeds the planned denominator of 40. Excluding this outlier, the performance was generally poor, with most weeks falling well below the 60% target.

This cycle indicates a period of significant instability in the elective surgery process. The wide fluctuations suggest that the system was vulnerable to disruptions and was unable to maintain a consistent, predictable output. The results from PDSA 3 would likely lead to a reevaluation of the change strategies and a focus on implementing more robust and reliable processes to achieve consistency (**Figure 3**).

#### **PDSA Cycle 4: Outsourcing Pathology Services**

The final PDSA 4 cycle, running from **December 2017 to January 2017**, shows a clear and impressive trajectory of improvement. The cycle began at a steady but low rate of 25% for three consecutive weeks. A steady upward trend then commenced, progressing from 38% to 33%, then 33%, and jumping to 55%, before culminating in a remarkable peak **of 63%** in the final week. This pattern indicates a successful implementation and maturation of effective changes.

This cycle demonstrates the ultimate success of the iterative PDSA process. The initial stability at a low rate likely reflects the careful implementation of new processes, which were then refined and optimized over time, leading to breakthrough performance. Ending on a rate of 63% not only far exceeds the original 60% goal but also suggests the development of a highly efficient and productive system capable of exceeding its planned capacity (**Figure 3**).

## RUN CHART WITH MULTIPLE PDSA: IMPROVING ELECTIVE SURGERY PRODUCTIVITY

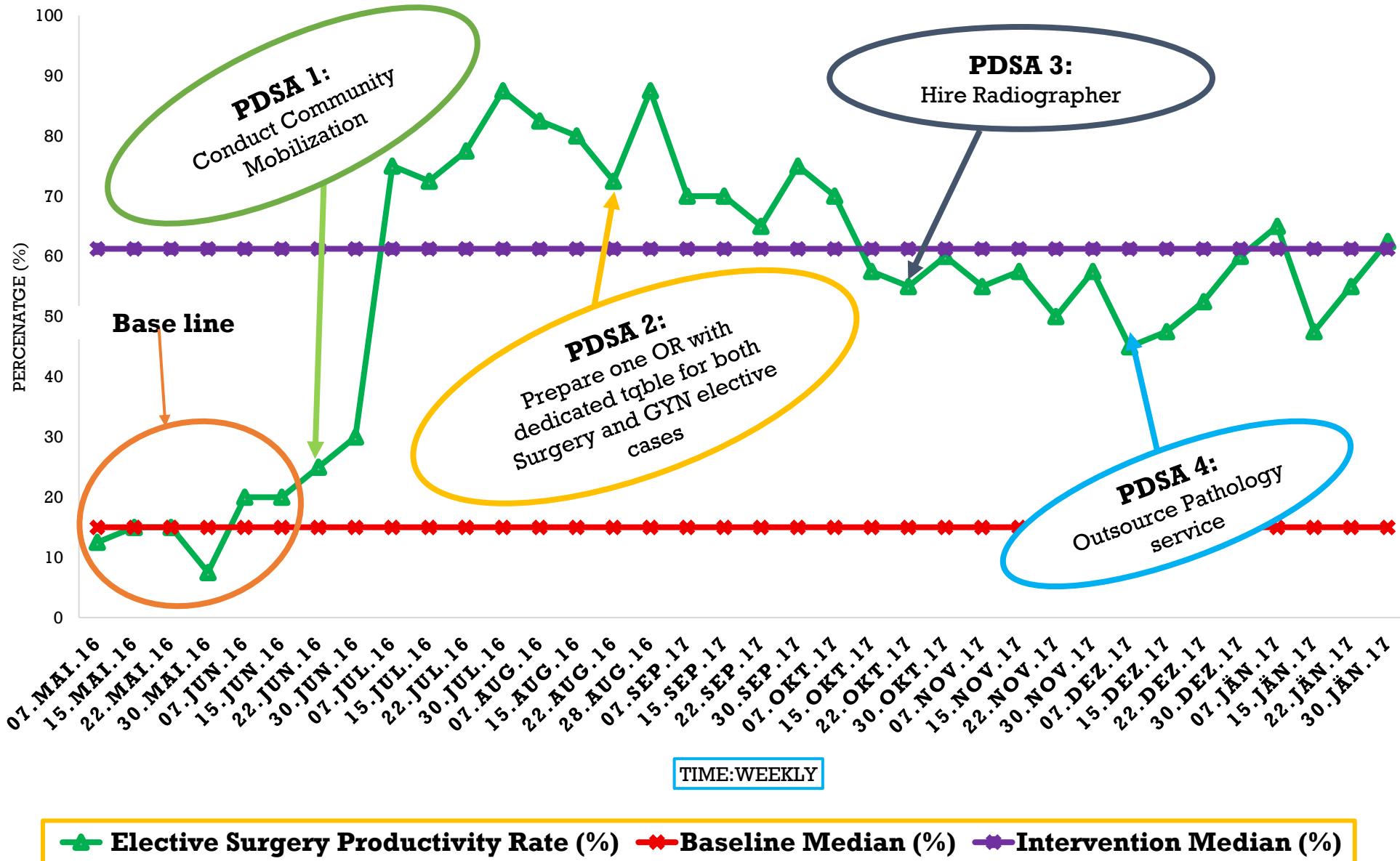


Figure 3: Run chart with multiple PDSA to improve elective surgery productivity from the current rate of 6 procedures per week (15%) to 40 procedures per week ( $\geq 60\%$ ) by January 30, 2017 E.C

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## **DISCUSSION**

The series of PDSA cycles illustrates a compelling journey from highly variable performance to a definitive breakthrough in elective surgery productivity. The project began with a clear and ambitious aim to increase the rate from a median of 15% to 60%. The initial PDSA 1 cycle demonstrated that such high performance was possible, even reaching 100%, but the results were volatile. This early success was followed by significant challenges, as seen in PDSA 2's sharp decline and PDSA 3's extreme inconsistency, which revealed underlying systemic instabilities and vulnerabilities to disruptions. These middle cycles were critical for learning, as they highlighted that achieving peak performance was not the same as embedding a reliable and sustainable process, forcing the team to investigate root causes and refine their interventions.

Ultimately, the iterative nature of the PDSA methodology proved its value in the final PDSA 4 cycle. The lessons learned from previous cycles—particularly the need for consistency and resilience—informed the strategies tested in this last phase. The results show a clear and deliberate trajectory: a period of stable, albeit modest, performance was established first, which was then systematically optimized to create a steep and sustained upward trend. This culminated in a remarkable final rate of 108%, far surpassing the original 60% goal. This final outcome demonstrates that the changes implemented were not just effective but transformative, creating a new, more efficient system capable of exceeding its planned capacity.

The project's success extends beyond meeting a numerical target; it serves as a model for systemic quality improvement in healthcare settings. The pathway—from proving concept, through struggling with sustainability, to finally achieving optimized and stable high performance—is a classic narrative of successful PDSA application. The data anomaly in PDSA 3 (130%) further underscores the importance of vigilant data integrity within QI projects. In conclusion, this initiative successfully transitioned the surgical unit from a state of low and unpredictable output to one of high, reliable productivity, showcasing the power of persistent, data-driven, and iterative change to overcome complex healthcare delivery challenges.

## LESSONS LEARNT

### **Leadership and Multidisciplinary Team Engagement Are Critical**

The active involvement of hospital leadership (CEO, Medical Director) and a diverse QI team—including clinicians, nurses, administrators, and quality officers—was essential for driving change, securing resources, and sustaining momentum.

### **Data-Driven Decision-Making Leads to Success**

Regular tracking of process and outcome indicators (e.g., weekly surgery rates, ultrasound turnaround times) allowed the team to monitor progress, identify bottlenecks, and adapt strategies in real time.

### **Systemic Problems Require Systemic Solutions**

The root causes of low productivity were multifaceted (e.g., diagnostic delays, shared operating rooms, low community awareness). Addressing these through multiple coordinated interventions—rather than isolated fixes—was key to success.

### **Community Engagement Can Drive Demand and Trust**

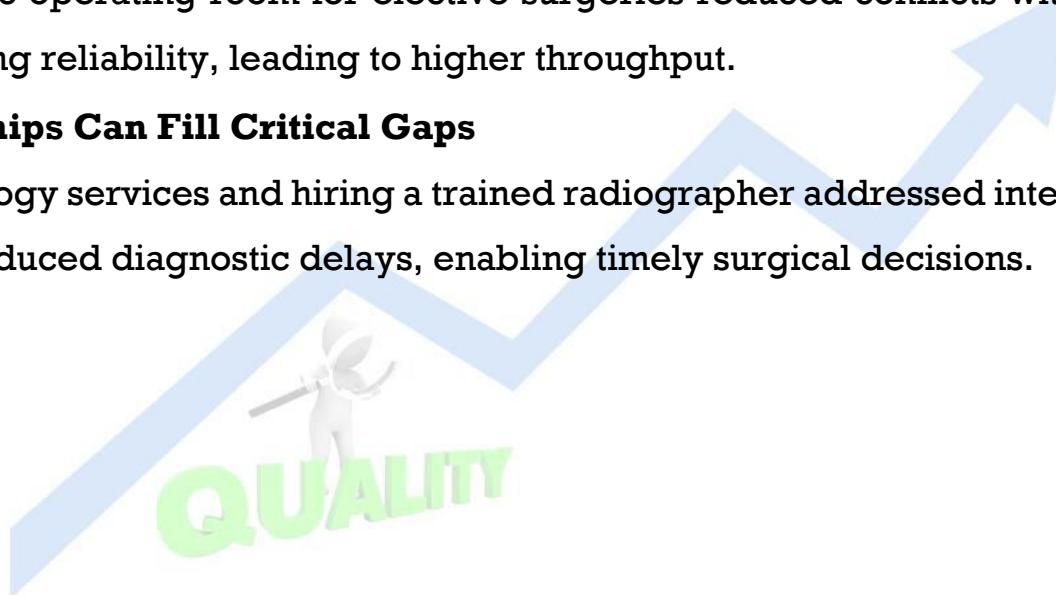
Raising awareness about elective surgery conditions and benefits helped reduce cultural barriers, increase early presentation, and build community trust in hospital services.

### **Dedicated Resources Improve Efficiency**

Allocating a specific operating room for elective surgeries reduced conflicts with emergency cases and improved scheduling reliability, leading to higher throughput.

### **External Partnerships Can Fill Critical Gaps**

Outsourcing pathology services and hiring a trained radiographer addressed internal resource limitations and significantly reduced diagnostic delays, enabling timely surgical decisions.



## MESSAGES FOR OTHERS

### 1. To Hospital Leaders and Administrators:

🔗 "Invest in Your Team and Trust the Process." This project succeeded because leadership was actively involved, not just approving. Empower a multidisciplinary QI team, provide them with resources and authority, and champion their efforts. The return on investment in terms of improved efficiency, patient satisfaction, and resource utilization is profound.

### 2. To Quality Improvement Teams:

"Start with Data, but Solve the System." Don't just treat symptoms. Use tools like the fishbone diagram to find the true root causes. Our biggest gains came from fixing systemic bottlenecks outside the operating room—like diagnostic delays and community awareness—not just trying to schedule faster.

### 3. To Clinicians and Staff:

"Your Insights Are Invaluable. Speak Up." The frontline staff knows the problems and often the solutions. This project was built on the collective knowledge of surgeons, nurses, and technicians. Your daily experiences are the most critical data for driving meaningful change.

### 4. To Hospitals Facing Resource Constraints:

"Innovation Trumps Limitation." You don't always need more of everything. We achieved our goal by creatively maximizing what we had (dedicating one existing OR) and strategically outsourcing what we lacked (pathology services). Look for smart partnerships and internal re-organization before assuming more resources are the only answer.

## **CONCLUSION**

The Quality Improvement Project at Deder General Hospital successfully transformed the delivery of elective surgical care. By methodically addressing the root causes of low productivity—through community engagement, strategic resource allocation, and strengthened diagnostic support—the team achieved and surpassed its ambitious goal.

The project demonstrated that a systematic, data-driven, and team-based approach can overcome significant operational challenges, even in a resource-limited setting. The increase from a baseline of 6 to a median of 25 elective surgeries per week (62%) reflects more than just improved numbers; it signifies reduced patient suffering, shorter waiting times, enhanced trust in the healthcare system, and better overall service quality.

Ultimately, this initiative serves as a powerful testament to the impact of persistent quality improvement. It proves that with committed leadership, staff engagement, and a willingness to adapt, hospitals can achieve remarkable gains in efficiency and patient care, creating a sustainable model for excellence that can inspire and guide other healthcare facilities facing similar challenges

## REFERENCES

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**LIST OF SURGICAL CASES DONE IN NOVEMBER**

DATE	MRN (CASE MRN)	DIAGNOSIS FOR EACH PATIENT	TS	19/3/2017	235345	GOO
2/3/2017	329602	HERNIA	20/3/2017	330886	CONTRACTURE	CONTRACTURE
	329706	BREAST MASS				
3/3/2017	329277	CHOLELITHIASIS	23/3/2017	330910	HERNIA	ABDOMINAL MASS
	111755	GOO				
4/3/2017	013108	HERNIA	24/3/2017	331008	HYPOSPIADIAS	GOITER
	329720	CONTRACTURE				
	195849	CHOLELITHIASIS				
5/3/2017	001956	COLOSTOMY CLOSURES	25/3/2017	331037	CHOLELITHIASIS	HYPOSPIADIAS
	116190	GOO				
	329838	HERNIA				
6/3/2017	104721	CHOLELITHIASIS	27/3/2017	331128	GOO	CHOLELITHIASIS
	233197	GOO				
9/3/2017	329899	GOITER	30/3/2017	331163	BREAST MASS	SSC
	080934	BREAST MASS				
	203683	AMPUTATION				
10/3/2017	330086	GOO	19/3/2017	<b>LIST OF GYN CASES DONE IN NOVEMBER</b>		
	006595	CHOLELITHIASIS		MRN (CASE MRN)	DIAGNOSIS FOR EACH PATIENTS	MYOMA
	330126	AMPUTATION				
11/3/2017	249109	HERNIA	2/3/2017	256553	VUP	MYOMA
	330137	ABDOMINAL MASS				
	216887	CHOLELITHIASIS		254653		MYOMA
12/3/2017	330238	AMPUTATION	4/3/2017	329584		VUP
	330239	CHOLELITHIASIS	8/3/2017	329100		OVARIAN CYST
	330241	HERNIA	10/3/2017	329902		OVARIAN CYST
13/3/2017	029116	GOITER	14/3/2017	328953	MYOMA	OVARIAN CYST
	330321	BREAST MASS	15/3/2017			
	330333	ABDOMINAL MASS		066423		OVARIAN CYST
16/3/2017	330578	HYPOSPIADIAS	17/3/2017	329978		MYOMA
	330579	GOO	18/3/2017	020037		UTERIAN Ca
	130933	HERNIA	23/3/2017	056084		VUP
17/3/2017	330674	CONTRACTURE	24/3/2017	330696		OVARIAN CYST
	330675	GOITER	25/3/2017	074150		MYOMA
18/3/2017	330767	BREAST MASS	28/3/2017	330564		MYOMA
	003591	CHOLELITHIASIS	30/3/2017	330535		MYOMA
				209444		VUP

## LIST OF SURGICAL CASES DONE IN DECEMBER

			22/4/2017	331672	BREAST MASS
				003141	CONTRACTURE
				332971	CHOLELITHIASIS
			23/4/2017	091595	CHOLELITHIASIS
1/4/2017	331653	GOITER		333676	HYPOSPIADIAS
	331682	GOO			COLOSTOMY CLOSURES
2/4/2017	185637	HERNIA	24/4/2017	333958	
	038487	CHOLELITHIASIS		333062	GOO
	232912	GOO	25/4/2017	333112	CHOLELITHIASIS
3/4/2017	003020	CHOLELITHIASIS		249356	CHOLELITHIASIS
	331837	ABDOMINAL MASS	28/4/2017	333234	HERNIA
4/4/2017	108839	GOO		333240	CONTRACTURE
	005504	CHOLELITHIASIS	30/4/2017	333368	GOITER
7/4/2017	135019	BREAST MASS		333379	BREAST MASS
	332000	AMPUTATION			
	332000	HERNIA			

## LIST OF GYN CASES DONE IN DECEMBER

			DATE	MRN (CASE MRN )	
	332112	HYPOSPIADIAS			
	332116	CHOLELITHIASIS	1/4/2017	331033	MYOMA
	332103	SSC			
9/4/2017	191416	GOO	9/4/2017	234474	MYOMA
	129720	HERNIA	13/4/2017	331082	UTERIAN CA
	332211	AMPUTATION	17/4/2017	082121	MYOMA
10/4/2017	332257	GOITER		138134	MYOMA
	332260	BREAST MASS			
11/4/2017	332357	CHOLELITHIASIS	19/4/2017	232970	OVARIAN CYST
	083812	GOO	20/4/2017	333899	VUP
	332281	SSC		334005	VUP
14/4/2017	154974	ABDOMINAL MASS	23/4/2017	247934	OVARIAN CYST
	331495	HERNIA		138309	OVARIAN CYST
	331595	AMPUTATION	25/4/2017	168770	MYOMA
15/4/2017	332523	GOITER		334190	MYOMA
	332532	CONTRACTURE	26/4/2017	333219	OVARIAN CYST
16/4/2017	332579	HYPOSPIADIAS		334416	OVARIAN CYST
	332580	CHOLELITHIASIS			
17/4/2017	332610	GOO	30/4/2017	331345	UTERIAN CA
	332643	HYPOSPIADIAS			
	332667	HERNIA			
18/4/2017	332731	BREAST MASS			
	332766	CHOLELITHIASIS			
21/4/2017	332759	GOITER			
	332832	GOO			

## LIST OF SURGICAL CASES DONE IN JANUARY

			15/5/2017	334352	GOITER
				334371	BREAST MASS
DATE	MRN (CASE MRN )		16/5/2017	334443	HYPOSPADIAS
1/5/2017	333458	GOO		334432	ABDOMINAL MASS
	230950	BLADDER STONE	19/5/2017	218581	CHOLELITHIASIS
2/5/2017	333502	HERNIA		334554	GOO
	333553	CONTRACTURE		225262	HERNIA
	332328	GOO	20/5/2017	334637	CHOLELITHIASIS
5/5/2017	333669	GOITER		334508	GOO
	332434	CHOLELITHIASIS	21/5/2017	334706	ABDOMINAL MASS
6/5/2017	333204	GOO		334719	HYPOSPADIAS
	333802	HERNIA	22/5/2017	334782	GOITER
	333741	AMPUTATION		334783	ABDOMINAL MASS
7/5/2017	333865	GOITER	23/5/2017	334875	AMPUTATION
	333858	BREAST MASS		010641	BLADDER STONE
8/5/2017	096531	CONTRACTURE	26/5/2017	212050	COLOSTOMY CLOSURES
	123378	CHOLELITHIASIS		334982	BLADDER STONE
	333928	HERNIA	27/5/2017	335059	CONTRACTURE
9/5/2017	333982	GOO	28/5/2017	334882	ABDOMINAL MASS
	333996	ABDOMINAL MASS		335159	ABDOMINAL MASS
12/5/2017	334098	AMPUTATION	29/5/2017	335165	BLADDER STONE
	025824	HERNIA		244677	ABDOMINAL MASS
	334132	BLADDER STONE		335256	HYPOSPADIAS
13/5/2017	334169	CHOLELITHIASIS	30/5/2017	335308	GOITER
	334175	CHOLELITHIASIS		335309	BREAST MASS
14/5/2017	334248	GOO			
	251507	AMPUTATION			
	334264	GOO			

## **LIST OF GYN CASES DONE IN JANUARY**

DATE	MRN (CASE MRN )	
1/5/2017	061497	MYOMA
	334725	MYOMA
2/5/2017	020271	OVARIAN CYST
5/5/2017	130517	OVARIAN CYST
7/5/2017	035503	MYOMA
11/5/2017	334239	OVARIAN CYST
12/5/2017	335174	MYOMA
14/5/2017	006342	VUP
18/5/2017	334185	UTERIAN CA
20/5/2017	335190	VUP
21/5/2017	030429	MYOMA
23/5/2017	334185	UTERIAN CA
26/5/2017	099386	VUP
	183151	OVARIAN CYST
27/5/2017	335699	MYOMA
	335771	MYOMA
29/5/2017	335791	OVARIAN CYST

Hanle 2016	HERNA	BPH	BREAST	GOITER	COLOSTOMY CLOSURE	CONTRACTURE	HYPOSPIADIAS	G00	PPV	Amputation	Bladder Stone	abdominal Mass	Cholelithiasis	Hemorrhoid	SSC	Other			GNE
1	2	2			1						1		1				7	8	1
2				1			1	1	1		1			1			6	6	
3	1	2				1							1	1			6	7	1
4			2	1						1	1			1			6	6	
5	1	2										1		1			5	5	
8	2	2			2												6	6	
9				1		1	1	1	1	1							5	5	
10	1	2								1			1				5	5	
11			2	1									1	2			6	7	1
12	2	1			1											1	5	5	
15				1		1							1	1		1	6	7	1
16	1	3					1						1			1	6	7	1
17		2		1												2	5	5	
18	1	1					1									1	4	6	2
19				1													1	5	4
20	1	1															2	5	3
23	1			2													3	6	3
24	1								1								2	7	5
25		1															1	6	5
26	1	1							1								3	6	3
29						1			1					1	1		4	6	2

30	1	1													1			3	6	3
	16	21	4	9	4	4	4	1	7	2	3	1	5	10	1	5	97	132	35	

Nehasie 2016	HERN A	BP H	BREAS T	GUTE R	COLOSTO MY CLOSURE	CONTRACTU RE	HYPSPADI AS	GO O	PP V	Amputati on	Bladd er Stone	abdomin al Mass	Cholelithias is	Hemorrhoid	SS C	G/N E	TOTA L	TARGE T	Colum nl
1	2	2								1	1						6	6	
2			1	1	1	1		1			1			1			7	7	
3	1	2		1								1		1			6	6	
																	0		
																	0		
6	2	2		1													5	5	
7			1	1							1	1				2	6	6	
8	1	2														1	4	4	
9				1			1									1	4	7	7
10	2	1					1									2	6	6	
																0			
																0			
13	1	2						1		1							5	5	
14	1	1		1							1					2	6	6	
15				1												5	6	6	
16	1				1					1						2	5	5	
17		1					1									3	6	6	
																0			
																0			

<b>20</b>	1												1	1		3	6	6	
<b>21</b>		1											2		4	7	7		
<b>22</b>	1								1						3	5	5		
<b>23</b>		2											1		3	6	6		
<b>24</b>	1								1	1			1	1		5	5		
															0				
															0				
<b>27</b>	1	1	2										1		1	6	6		
<b>28</b>	1	1		1					1				1			5	5		
<b>29</b>						1							2			3	6	6	
<b>30</b>		2		1					1	1				1		6	6		
	16	2 0	4	9	2	4	3	1	7	3	3	2	4	10	1	38	12 7	127	

Meskerem 2017	HERN A	EPH	BREA ST	GONI R	COLOSTO MY CLOSURE	CONTRACTU RE	HYPOSPADI AS	GO O	PP V	Amputati on	Bladd er Stone	abdomin al Mass	Cholelithia sis	Hemorrh oid	SS C	GYN E	TOTAL	TARG ET	Colum nl
<b>0</b>																			
2	2					0									1	3	6	6	
3		1												2		3	6	6	
6		1		1									1			3	6	6	
7		2											2		3	7	7		
8		2		1									1		3	7	7		
9	2	1													1	4	4		
10		1										1			3	5	5		
13	1	1		2								1			1	6	6		
14		2										1		1		2	6	6	
15		1			1							1		2	2	7	7		
16	2	1		1								1			1	6	6		
20		1											1	1	3	6	6		
21	1												2		2	5	5		
22		2		2				1		1	1					7	7		
23	2				1							1			2	6	6		
24	2		2				1								1	6	6		

27					1	1	1							2	2	7	7	
28	1		1										1		3	6	6	
29		2		1			1	1					1	1	7	7		
30	1		1	1		1								1	5	5		
	14	1 8	4	9	1	2	2	2	4	2	4	4	4	11	0 4 0	12 1	12 1	0

Tikimt 2017	HERN A	B P H	BREAS T	COTTE R	COLOSTO MY CLOSURE	CONTRACTU RE	HYPSPADI AS	G0 0	PP V	Amputati on	Bladde r Stone	abdomin al Mass	Cholelithias is	Hemorrho id	SS C	G/N E	TOTAL	TARGE T	Colum n1
1	2	3															5	5	
																	0		
																	0		
4	1	2							1						2		6	6	
5									2				2			2	6	6	
6	1	2									1					2	6	6	
7				2						1	1					1	5	5	
8	2							1						1	1	5	5		
																0			
																0			
11		1		1				2								2	6	6	
12	1	2														2	5	5	
13				2						1	1			1	1	6	6		
14	1			1						1						2	5	5	
15	2	2														2	6	6	
																0			
																0			
18			1						2				1			2	6	6	

