

Project Quality Management - Case Study Analysis

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EXECUTIVE SUMMARY

In the Southern Care Hospital Six Sigma project, quality is a key focus of the project team. After a brief overview of the budget, schedule, resource allocation and stakeholder needs, this presentation addresses the project's need for a quality management plan.

Key topics include:

- Project Quality Goals
- Integrating Quality
- Implementing Quality Assurance
- Ensuring Effective Quality Control
- Fostering a Culture of Continuous Improvement

The project aims to use a holistic approach to optimize project delivery and align with the hospital's commitment to enhancing healthcare processes.

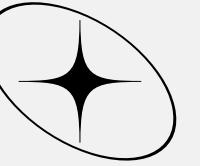
VALUES



At Southern Care Hospital, we're dedicated to delivering high-quality healthcare services, optimizing processes, and promoting a culture of continuous improvement. Our mission is to enhance patient care and operational efficiency, ultimately ensuring the well-being and satisfaction of our community.

Leading healthcare excellence for healthier lives

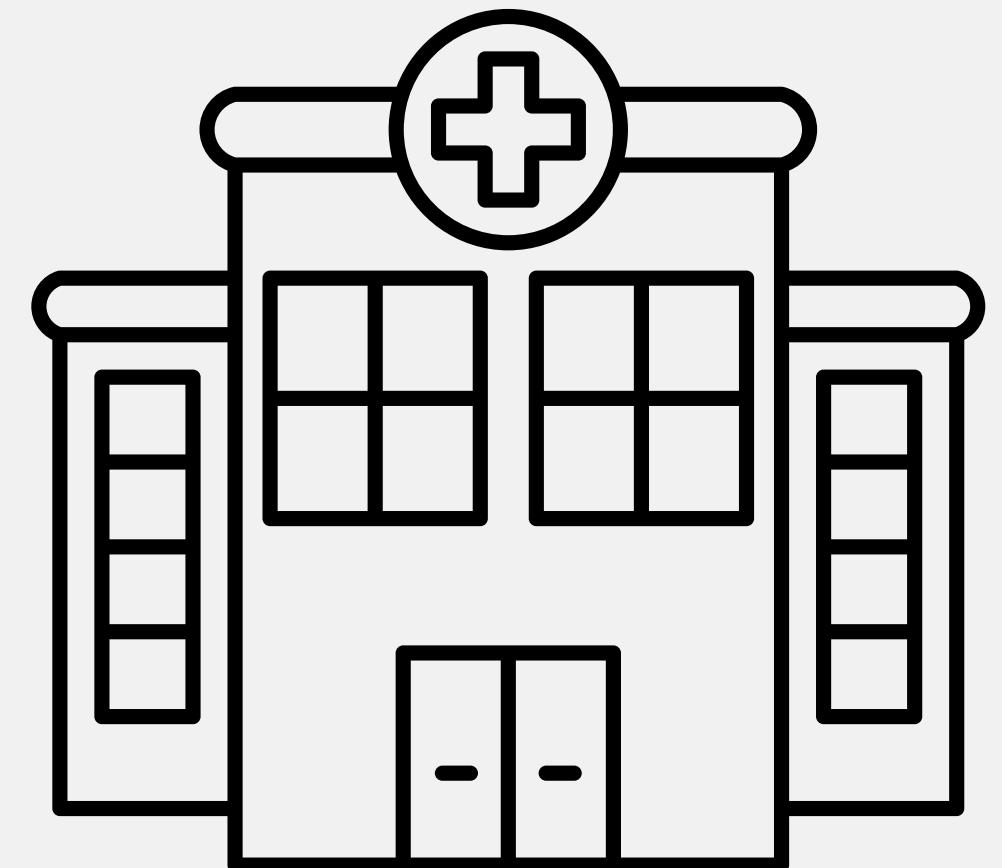




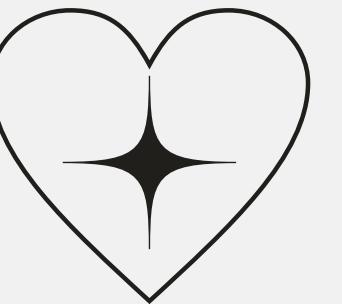
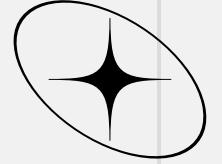
INDUSTRY: HEALTHCARE AND HOSPITAL SERVICES

Core Function:

- **Patient Care:** Hospitals provide medical services, treatment, and care to individuals requiring various levels of healthcare assistance.
- **Services Offered:** Consultations, Treatment and interventions, Emergency care
- **Diagnostic Services:** Examinations, scans, and diagnostic procedures (such as blood tests, MRIs, and X-rays).

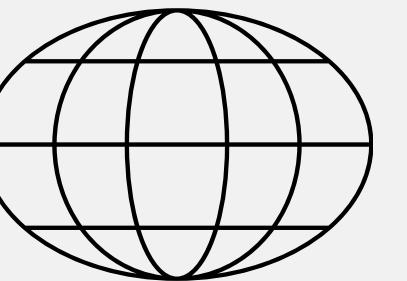


SOUTHERN CARE HOSPITAL- PROJECT OVERVIEW



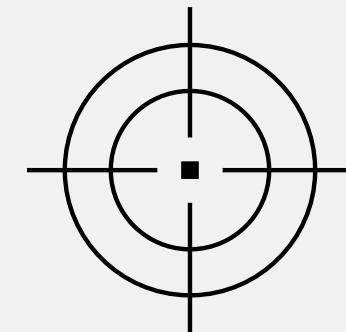
GOALS

- 1.Optimize laboratory testing process by reducing turnaround time from 3 days to 1.5 days
- 2.Improve quality
- 3.Ensuring compliance with healthcare regulations.



STAKEHOLDERS

Medical staff, Management, Regulatory Authorities, and Patients



TIME FRAME

25+/-4 Weeks

OBJECTIVES

ENHANCE SPEED IN REPORTING STRESS TEST RESULTS

- Reduce lead times from 3 to 1.5 days.
- Implement automation tools.
- Achievable with the available resources within 6 months.

IMPROVE THE QUALITY OF STRESS TEST RESULTS

- Maintain or improve quality scores.
- Implement quality control measures.
- Realistic with staff training within 6 months.

OPTIMIZE RESOURCE ALLOCATION

- Allocate resources efficiently based on workload.
- Implement a resource allocation strategy.
- Achievable within budget within 3 months.

SUMMARY BUDGET AND SCHEDULE

Project Phase	Phase Length	Phase Totals
Define	4 weeks	\$5,436.00
Measure	7 weeks	\$9,513.00
Analyze	5 weeks	\$6,795.00
Improve	5 weeks	\$6,795.00
Control	4 weeks	\$5,436.00
Total	25 weeks	\$33,975.00

RESOURCES AVAILABLE

Member Name	Avg. Proj. Savings	Hourly Rate	Weekly Avail. (%)	Weekly Avail. (hrs)	Weekly Cost (Salary)
Hazel Vaughn	\$74,000.00	\$40.00	30%	12	\$480.00
Ken Inman	\$95,000.00	\$25.00	50%	10	\$250.00
Nick Rogers	\$211,000.00	\$33.00	50%	13	\$429.00
Peggy Moss	\$240,000.00	\$40.00	50%	5	\$200.00
Total				40	\$1,359.00

STAKEHOLDER NEEDS

Medical Staff

Receive stress test results quickly for timely treatment decisions and enhanced patient care.

Patients

Receive prompt and quality healthcare with minimized delays and a focus on wellbeing.

SCH Management

Efficient hospital operations and patient satisfaction.

Nuclear Med Dept

Deliver timely and accurate results.

Project Team

Successfully complete the project within scope, time, and budget.

Regulatory Bodies

Ensure compliance with healthcare regulations.

External Labs

Maintain quality service and meet contractual obligations.

QUALITY MANAGEMENT PLANNING



“Quality in health is doing the right things for the right people at the right time, and doing them right the first time and every time.”

KEY QUALITY STANDARDS

Fulfill Project Requirements

- Reduce stress test lead times by 50% within 6 months to enhance reporting speed.
- Maintain or improve the quality scores of the stress tests within 6 months.
- Implement an optimized resource allocation strategy within budget and 6-month time period

Satisfy Stakeholder Expectations

Satisfy patients, medical staff, SCH administration, project team, regulatory bodies.

Meet Acceptance Criteria for Deliverables

- Reduced Lead Time (1.5 days)
- Improved Patient Care Documentation and Training
- Legal and Regulatory Compliance

Ensure Project Processes are Appropriate and Effective

Periodically review project processes and performance to ensure optimization

INTEGRATING QUALITY

Does the deliverable function as intended?

The project should result in an improvement plan to reduce stress test lead times (to 1.5 days) and optimize the testing process.

The training materials produced should be accessible and effective.

PERFORMANCE

Is the deliverable fit for use?

The improved testing process should function within SCH's existing operations and be applicable to how stress tests are generally conducted.

CONFORMITY

Does the deliverable produce consistent metrics each time?

The project should result in a reliable and clearly defined stress testing procedure. The new stress tests should consistently deliver a reduced lead time (1.5 days).

RELIABILITY

INTEGRATING QUALITY

Is the deliverable able to cope with unforeseen failures and recover quickly?

The new stress tests should turn around results in 1.5 days even in times of high demand or reduced personnel and equipment.

RESILIENCE

Does it show parity with other deliverables produced in the same manner?

The improved stress test process should comply with the accepted standard of care across other regional hospitals of a similar type and scale.

UNIFORMITY

Does the deliverable elicit positive feedback?

Medical staff and patients should feel positively impacted by the project results and more satisfied with SCH's quality of healthcare.

SATISFACTION

ROLES AND RESPONSIBILITIES

TEAM MEMBER	ROLE	RESPONSIBILITY
Deepthi, Chitika, Para, Praneetha, Thada	Project Manager	<ul style="list-style-type: none">• Oversee project quality management planning• Oversee QA/QC processes and implementation• Ensure project produces quality deliverables.
Ken Inman, Nick Rogers, Peggy Moss	Black Belt Personnel	<ul style="list-style-type: none">• Lead efforts to reduce variation in projects processes and improve results• Ensure project team and executives understand how to minimize variations and deliver improved outcomes.
Nick Rogers	Admin of Special Projects	<ul style="list-style-type: none">• Set framework for project quality management• Periodically review project for quality performance• Collaborate with project managers to identify and correct quality issues.
Peggy Moss	Quality Assurance Officer	<ul style="list-style-type: none">• Develop and implement quality control plan for the entire project lifecycle.• Administer scheduled quality check processes• Analyze project for quality performance using established metrics• Support project executives in tracking project quality and implementing necessary improvements.

QUALITY ASSURANCE

QUALITY ASSURANCE

QA Planning



Checkpoints and
Inspections



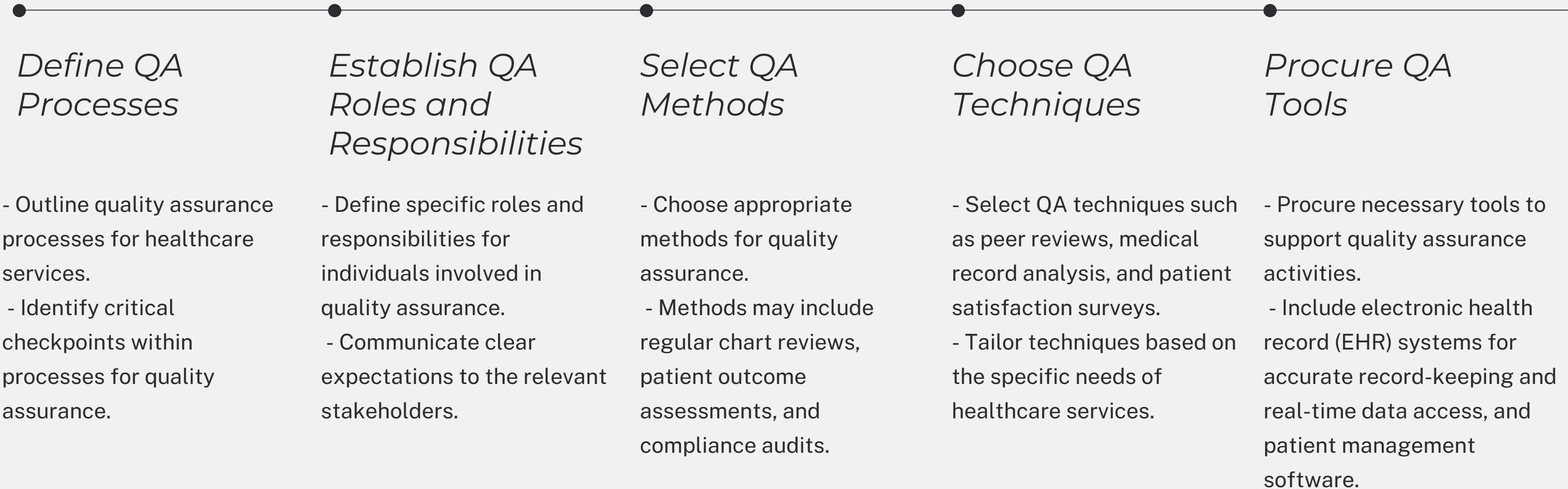
Quality Metrics



Documentation and
Reporting



QUALITY ASSURANCE



QUALITY ASSURANCE

<i>Conduct Process Audits</i>	<i>Implement Process Improvements</i>	<i>Utilize Quality Standards and Methodologies</i>	<i>Implementing Six Sigma</i>	<i>Documentation and Reporting</i>
<ul style="list-style-type: none">- Conduct regular audits of healthcare processes.- Evaluate the effectiveness of processes using predefined checklists.	<ul style="list-style-type: none">- Identify areas for improvement based on audit findings.- Continuously refine processes to enhance efficiency and quality.	<ul style="list-style-type: none">- Adhere to established healthcare quality standards and accreditation requirements.- Implement Six Sigma methodologies for process improvement.	<ul style="list-style-type: none">- Apply Six Sigma principles to streamline administrative processes.- Utilize the DMAIC (Define, Measure, Analyze, Improve, Control) methodology for structured improvement projects.	<ul style="list-style-type: none">- Maintain detailed documentation of quality assurance activities.- Generate regular reports to monitor and communicate adherence to quality standards.

QUALITY ASSURANCE



Training and Skill Development

- Provide training sessions for healthcare professionals on quality assurance processes and tools.
- Foster a culture of continuous learning to keep staff updated on industry practices.

Feedback Mechanism

- Establish a structured feedback mechanism for staff to report issues and suggest improvements.
- Encourage open communication to foster a culture of learning and improvement.

QUALITY CONTROL

ROLE OF KPIS IN MONITORING AND EVALUATING PROJECT PROGRESS

Performance Measurement:
Quantitative measures against objectives

Objective Evaluation:
Standardized, unbiased assessment

Early Issue Identification:
Timely detection of potential problems

Resource Allocation:
Optimization of resource utilization

Decision-Making Support:
Data-driven insights for informed decisions

Communication Tool:
Common language for stakeholders

Continuous Improvement:
Analysis for ongoing refinement

Alignment with Objectives:
Reflect organizational goals

Motivation and Accountability:
Encourages responsibility

Client and Stakeholder Confidence:
Enhances trust and understanding

KEY PERFORMANCE INDICATORS

Patient Satisfaction Index

Measures patient satisfaction with the hospital's services, including care quality, communication, and overall experience.

Average Length of Stay (ALOS)

Indicates the average number of days patients spend in the hospital, reflecting efficiency in healthcare delivery and resource management.

Readmission Rate

Measures the percentage of patients readmitted within a specific period, reflecting the effectiveness of treatment and post-discharge care.

Medical Errors Rate

Tracks the occurrence of medical errors, ensuring patient safety and the quality of healthcare services.

Staff-to-Patient Ratio

Evaluates the balance between hospital staff and patients, providing insights into resource allocation and patient needs.

KEY PERFORMANCE INDICATORS

Compliance with Standards

Assesses adherence to industry standards, regulations, and accreditation requirements for maintaining healthcare quality.

Emergency Dept. Waiting Time

Measures the time patients spend waiting in the emergency department, reflecting the hospital's efficiency in handling urgent cases.

Revenue Cycle Mgmt Metrics

Includes accounts receivable days, billing accuracy, and denial rates, assessing the financial health and efficiency of the hospital's revenue cycle.

Employee Satisfaction

Gauges staff satisfaction and tracks turnover rates, emphasizing the importance of employee well-being in maintaining healthcare quality.

Operational Efficiency Index

An aggregate metric considering resource utilization, patient flow, and cost-effectiveness to assess the overall operational efficiency of the hospital.

METRICS FOR PROJECT PERFORMANCE AND QUALITY

METRIC	INTEGRATION INTO PROJECT MONITORING
Patient Wait Times	Monitored regularly to optimize resource allocation and maintain quality care.
Diagnostic Accuracy Rate	Regular assessment to ensure and improve the quality of healthcare services.
Resource Utilization Efficiency	Monitored for optimizing resource allocation and ensuring cost-effectiveness.
Compliance with Standards	Regular audits to ensure compliance and identify areas for improvement.
Staff Training Rates	Monitored to ensure staff readiness and compliance with industry standards

TOOLS

- Six Sigma Database Program
- Project Management Software
- Statistical Process Control (SPC) Software
- Communication Platforms
- Video Conferencing
- Gantt Charts
- KPI Dashboard
- Control Charts
- Issue Tracking Systems
- Stakeholder Communication Tools

HANDLING DEVIATIONS

Issue Tracking System:

- Implement a system for tracking and documenting deviations promptly.

Issue Reporting System:

- Establish an efficient project issue reporting system to ensure quick reporting, structured resolution, and continuous improvement.

Change Management Process:

- Utilize a structured change management process to evaluate deviations from the project plan and implement necessary corrections.

Periodic Reviews:

- Conduct periodic reviews to identify trends and patterns, enabling timely corrective actions.

Open Communication Culture:

- Foster a culture of open communication, encouraging team members to promptly report and address deviations.

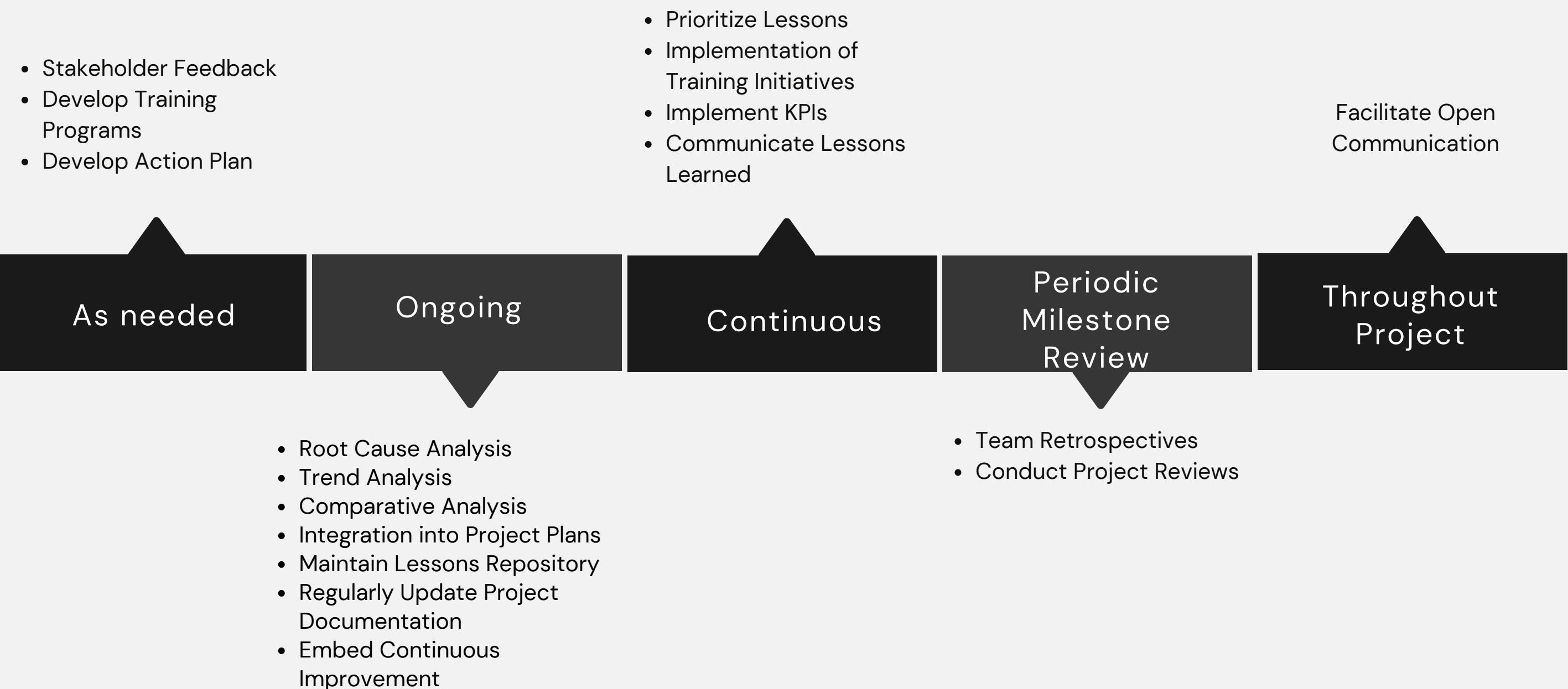




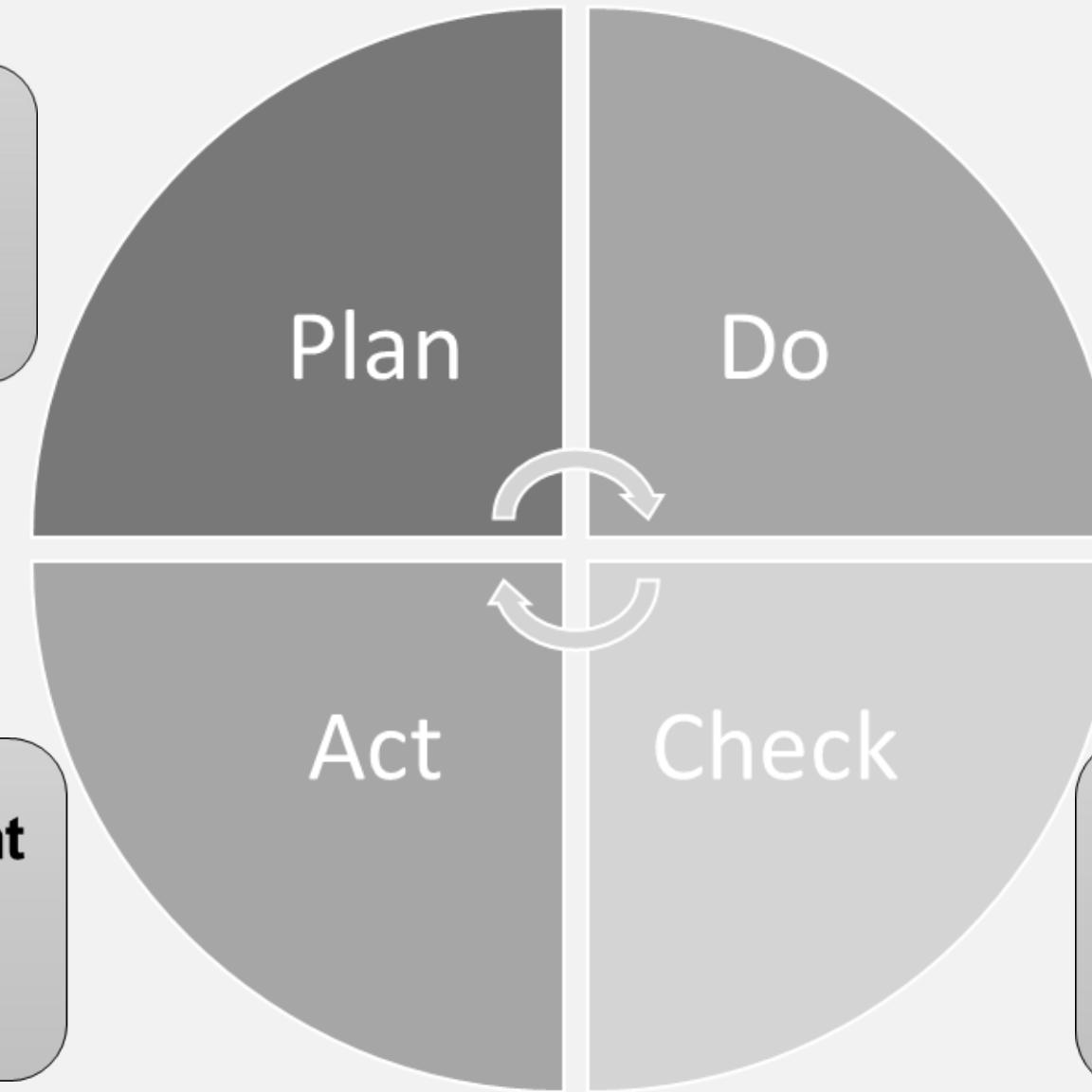
ENSURING DELIVERABLES MEET QUALITY STANDARDS

- Define Clear Standards
- Quality Assurance Processes
- Regular Inspections
- Feedback Loops
- Testing and Validation
- Peer Reviews
- Documentation
- Client Approval
- Continuous Monitoring
- Training and Skill Development

CONTINUOUS IMPROVEMENT



STAGES OF CONTINUOUS IMPROVEMENT



Identify an opportunity and plan for change

- Customers satisfaction feedback
- Healthcare staff feedback

Implement the change on a small scale

- Simultaneously generating multiple reports
- Analyze the risk from existing data and minimize the failure

If the change was successful, implement it on a wider scale and continuously assess the results

Use data to analyze the results of the change and determine whether it made a difference



CONCLUSION

Southern Care Hospital aims to accelerate stress test result availability to 1.5 days without compromising on its high standards for quality. Quality management is a key strategy to ensure this desired project outcome. This includes:

- Setting clear quality goals and defining roles upfront
- Using Six Sigma processes for enhancements
- Vigilant monitoring and continuous improvement

As a result, SCH and its project will experience these positive outcomes:

- Optimized processes involving staff, patients, and management
- Swift handling of deviations and quality issues
- Enhanced long-term services
- High levels of stakeholder satisfaction
- Improved test handling and patient care

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