

"The ANICE Score Card:

A Framework for Nursing Quality Benchmarking and Patient Safety in Apollo Hospitals"

"From Insights to Impact: The ANICE Way"

Focuses on the transformation of data into meaningful clinical change.

Name of 1st Author- Capt. (Dr) Usha Banerjee, Group Director, Nursing, Apollo Hospital, India

Name of 2nd Author- Ms. Jyoti Gosain, Sr. Manager, Nursing Corporate, Apollo Hospital, India

Name of 3rd Author- Ms. Maryline Flinsi, Principal, SON, Indraprastha Apollo Hospital, Delhi

Abstract:

The ANICE (Apollo Nursing Integrated Clinical Excellence) Score Card is a landmark initiative by Apollo Hospitals Group, designed to standardize and enhance the quality of nursing care across its network. Introduced in 2005 and rebranded as ACE (Apollo Clinical Excellence) 01 in 2015, the scorecard comprises 51 critical nursing quality indicators rooted in patient safety, accreditation requirements, evidence-based practices, and clinical excellence. These parameters enable data-driven benchmarking against international standards and support continuous quality improvement.

By systematically monitoring and comparing clinical outcomes across all Apollo hospitals, ANICE fosters accountability, transparency, and a culture of excellence. It plays a vital role in advancing nursing practices through ongoing education, advanced training, and technological integration. The initiative reflects Apollo's unwavering commitment to delivering high quality, patient-centered care.

As the first corporate hospital group in India to implement such a clinical performance-benchmarking tool, Apollo has set a national precedent in nursing and clinical governance. The ANICE Score Card also supports broader quality and safety initiatives, including mandatory staff safety training, structured patient safety education, adverse event reporting, and the monitoring of key patient safety indices such as hospital-acquired infections, patient falls, skin injuries, needle stick injuries, and medication errors.

Ultimately, the ANICE Score Card demonstrates that the true measure of a hospital's quality lies in its outcomes—what truly matters to patients. By measuring and publishing clinical outcomes, Apollo reinforces its mission of continuous improvement and positions itself as a leader in value-based, transparent healthcare delivery.

KEYWORDS

Apollo Hospital, ANICE, Nursing, Indicators, Needle stick Injury, Safety, Patient's Safety, Monitoring, Assessment, Training, Errors, Analysis, Education, Healthcare, Clinical, Medical, Bench marking, Score Card, Standards, Hospital Acquired, improvement, Initiative, Adverse, Outcome, Excellence, Quality, Policy, Compliance

I. INTRODUCTION

The Apollo Hospitals Group is dedicated to maintaining the highest standards of quality and clinical excellence for its patients. Our top priority is to ensure that all patients receive care that is both safe and efficient. We strive to deliver high-quality services to achieve the optimal clinical outcomes.

Apollo Hospitals is renowned for its commitment to clinical excellence, which extends to its nursing services. Apollo's approach aims to create a supportive and innovative environment for nurses, ultimately leading to better patient outcomes and a higher standard of healthcare.

To effectively measure and compare the key clinical outcome processes across all hospitals in the Group, Apollo Hospitals developed and successfully uses the ANICE scoring system. We take pride in being the first corporate hospital group in India to benchmark and monitor clinical performance outcomes since 2005 through the ANICE dashboard, and to publish this data in the Annual Excellence Report since 2009.

Originally known as ANICE, this scorecard was renamed ACE (Apollo Clinical Excellence) 0.1 in 2015, featuring updated indicators and benchmarks. The Apollo Nursing Integrated Clinical Excellence (ANICE) is a clinical balanced scorecard that emphasizes clinical excellence and includes 51 parameters critical to our organization's clinical environment.

Each parameter is benchmarked against the best international institutions in the respective areas.

The document outlines the requirements for the Apollo Nursing Indicators for Clinical Excellence application, which aims to capture monthly data from nursing by selecting 51 Nursing Quality indicators. These indicators have been identified from the core COE specialties and are critical for patients' safety/quality/accreditation requirements. Selection of indicators is also based on the occurrence of events/ results of scientific literature review and requirements of routine Nursing operations.

The Apollo Nursing Integrated Clinical Excellence (ANICE) Score Card initiative focuses on enhancing the quality of nursing care through continuous education, advanced training, and the integration of modern technology.

II. OBJECTIVE

The ANICE (Apollo Nursing Integrated Clinical Excellence) Score Card is a strategic initiative developed to elevate the quality of nursing and clinical practices across the Apollo Hospitals network. By establishing a standardized system for evaluating key performance indicators, ANICE aims to drive excellence in patient care, promote safety, and ensure alignment with international healthcare benchmarks. The objectives outlined below reflect Apollo's commitment to quality, accountability, and continuous improvement in clinical governance.

- To ensure high standards of clinical care across all hospitals within the Apollo group.
- To employ a structured and comprehensive system for evaluating nursing and clinical performance.
- To enable uniform measurement and assessment of clinical outcomes across all facilities.
- To compare key clinical parameters with those of leading international institutions to support continual improvement.
- To track and enhance patient care quality and safety through consistent monitoring.
- To position Apollo Hospitals as a pioneer and leader in clinical performance benchmarking in India.

III. METHODOLOGY

The Apollo Nursing Integrated Clinical Excellence (ANICE) balanced scorecard is developed online with live capabilities using the Apollo Lighthouse platform for monthly data inputs, utilizing a Net architecture hosted on a central server at one of the locations. This system is designed to maintain the integrity and confidentiality of data for each Apollo Hospital. ANICE drives superior clinical outcomes by minimizing preventable complications.

- For ANICE reporting, Group hospitals are categorized into three groups based on their bed strengths, locations, and services offered: Group A, B, and C.
- Each indicator is clearly defined, with specified numerators and denominators, and Inclusion & Exclusion criteria.
- Benchmarking sets the group's expectations by weighing scores for outcomes.
- The scoring system ensures that segments meet statistically significant ranges, color-coded as Green reflects an Achievement and Red reflects a Deviation.
- The maximum achievable score is capped at 100.
- The defined target, numerator, and denominator for each indicator are auto-populated with logic-based final scoring and ready for reference at a click.
- The Final score is auto-calculated based on logic and the formula.
- Color-coding and validation mechanisms are integrated.
- Data once submitted is saved and locked, preventing further edits.
- Designated users, with strict cut-off dates, mandate monthly data entry.

3.1 Key Indicators

Under the ANICE Score Card, 51 nursing quality indicators are tracked. Each indicator is mapped to patient outcomes, risk prevention, or compliance performance.

These cover a wide range of safety, quality, and efficiency metrics such as:

- 1. Patient identification error
- 2. Medication errors
- 3. Patient falls
- 4. Needle stick & Sharp injuries
- 5. Skin Injuries
- 6. Hospital-acquired infections
- 7. Sentinel events
- 8. Tracheostomy incidents
- 9. Accidental removal of lines, tubes, and Drains
- 10. Sepsis response times
- 11. Surgical safety & procedural Compliance
- 12. CRM (IP & OP patients)

3.2 Timeline & Data Management

<u>FORMULATED DATA</u>: The application supports both business and administrative users with dashboards, real-time reporting, and Excel-based export features. This application includes the following navigation links for both business users and admin users: 1. Entry Page 2. Dashboard 3. Admin User.

Hospital-wide nursing indicators are displayed under the mapped elements across emergency, inpatient, and operative departments. The Indicators for the entry page are attached in the Excel document below. A setup page is available to configure them under different measurable indicators.

Each indicator is scored on a 3-point scale:

- NA Not applicable
- No Compliance 0 points
- Full Compliance 5 points

Non-compliance prompts mandatory comment entry. Reports are filtered and exported with built-in visual color coding.

3.3 Scoring Criteria

<u>HOW TO REPORT IN THE PORTAL</u>: The Dashboard is accessible by corporate administrative and configured unit members. The indicator wise final score report is displayed for the financial year or with a date range (Data Applicable: Group / Region/Location/ Indicator). When the user selects all indicators and clicks the 'Export' button, the data matching the applied filters is extracted with the file name and downloaded as an Excel sheet with color coding.

3.4 Analysis & Governance

At Apollo Hospitals, the Quality Steering Committee—comprising senior hospital leadership and key representatives from medical and nursing teams—provides continuous strategic direction for quality improvement initiatives. Complementing this effort, the Clinical Outcome & Quality Review (COQR) Committee conducts monthly reviews of performance data to assess compliance with key quality indicators.

Based on these insights, individual hospitals are responsible for developing and executing targeted action plans to address areas of underperformance. Performance trends for each indicator are carefully analysed on a monthly, biannual, and annual basis to assess consistency, identify improvements or declines, and detect any irregular patterns. Any sustained low scores, regressions, or performance fluctuations are prioritized for focused intervention and corrective measures, reinforcing a culture of accountability and continuous quality enhancement.

IV. ANICE DASHBOARD



V. ANICE MASTER SHEET

S. No	1	2	3	4	5	6	7	8	9	10
Name of parame ters	Medication error - Administratio n error	Patient fall	Patient falls leading to serious harm	Needle Stick Injury (NSI)	Sentinel events	Percentage of patients administered Thrombolytic agent (TPA-Tissue plasminogen plasminogen activator) in 15 minutes for Stroke Patients Patients (Prescription to administration)	Percentage of sepsis patients who received antibiotics in 20 minutes – Prescription to Administration	Percentage of critical tests dispatched within 15 minutes of the time of the order.	Discrepancy in counts (needles, sponges, instruments, and any incident that is reported with a retained object)	Chemo port blockage/ infection
Definiti on	This is defined as a measure to monitor the incidence of medication administration errors among the total hospitalized patients.	This is defined as a measure to monitor the incidence of the number of patient falls during hospitalization.	This is defined as a measure to monitor the incidence of patient falls that lead to serious harm during hospitalization.	This is defined as a measure to monitor the incidence of needle stick injuries (NSI) among nursing staff in the hospital.	A sentinel event is defined as: "An unexpected occurrence involving death or serious physical or psychological initury, or the risk thereof (includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome)" — The Joint Commission (TJC)	This is defined as the percentage of stroke patients who received a thrombolytic agent (TPA) within 15 minutes from prescription to administration in the hospital.	A measure to monitor the percentage of sepsis patients who received antibiotics within 20 minutes from prescription to administration in the emergency department.	A measure to monitor the percentage of critical tests dispatched within 15 minutes from the time of order in the Emergency department.	A measure to monitor the number of surgeries with discrepancies in counts of needles, sponges, instruments, or reported retained objects.	This is defined as a measure to monitor the incidence of chemo port blockage or infection in hospitalized patients.
Numer ator Statem ent	No. of administration errors	No. of patient falls	The number of incidents led to serious harm due to a patient's fall	Total No. of NSI	No. of sentinel events	Number of patients received Thrombolytic agent (TPA - Tissue plasminogen activator) in 15 minutes for Stroke Patients (Prescription to Administration)	No. of sepsis patients who received antibiotics within 20 minutes from the time of prescription	No. of critical tests dispatched in 15 minutes from the time of order	No. of cases reported discrepancy in counts	Number of patients who developed infection/blockage of the Chemo port
Denomi nator Statem ent	Total number of discharges & deaths	Total number of inpatient days	Total no. of patient falls.	Not applicable	Not Applicable	Total number of stroke patients who received thrombolytic agents	Total number of samples checked	Total number of samples checked	Total surgeries performed	Total number of patients with Chemo-port
Ein Inclusi on Criteria	Administration emore made by the Nursing staff	a) The patient falls within the hospital premises b) Assisted Falls c) Falls with or without Witnesses d) Falls Related to Medical Conditions	Suturing, fracture, applying a cast, surgery, subdural haematoma, or any major harm	a) Percutaneous Exosoire - Puncture or laceration caused by a needle, stalpel, or other sharp medical instruments. b) Sharp injury occurred during the patient care / Disposal of westle/ Improper Handling or Passing of Sharps/ exposure to blood- borne pathogens (HIV, HEV, HCV) due to needle stock injuries/splash from used medical devices or white performing the procedures. c) Injury from glass vials, capillary tubes, and other sharp objects used in a healthcare setting. d) Needle Stock	a) Any unexpected events that result in: *Death (not related to the natural course of illness or condition) *Permanent harm (loss of limb or organ function) *Severe bemporary harm requiring inherention to sustain life b) Surgery on the wrong site, wrong patient, or wrong procedure c) Unintended retention of a foreign object after a procedure d) Petient suicide while under care e) Intravascular air embolism f) Naternal death related to labor or delivery, q) Infant abduction, discharge to the wrong family, or switch, h) Severe medication errors () Haemolytic transfusion reaction involving the	agents was not administrated within 15 minutes of prescription.	Sepsis patients not receive antibiotics in the Emergency department within 20 minutes of prescription	Critical test samples not dispatched within 15 minutes from the time of the order	Discrepancy in counts/ retained object, and the wound is closed	a) Inability to flush or aspirate blood from the Chemo Port b) Thrembotic occlusion c) Chemical blockage due to drug precipitation d) Malfunction requiring medical inhanvention
				Injuries occurred to the Nursing staff	administration of blood or blood products having major blood group incompatibilities j) Events that have the potential or the potential serious harm.					
Exclusi on Criteria	a) Administration errors due to wrong prescription b) Administration errors made by other stakeholders (Doctors, Annesthetist, etc.)	None	Application of dressing for a minor wound, bruises, and bandaging due to a sprain.	a) Injuries from Blunt Objects b) Needle Sbck Injuries occurred to other health care staff	a) Outcomes where harm is minor or temporary, not requiring significant intervention b) Events that do not result in death, permanent harm, or severe temporary harm, and carry no risk of recurrence with serious consequences	Deley due to other stakeholders	None	None	Identified and rectified before the closure of the wound	a) Temporary blockage due to patient positioning b) Resolved without medical intervention c) Minor flow resistance without functional impairment d) Leakage or breakage of the catheter without an internal obstruction
Bench Mark	a) s 0.3% of total medication administrations b) 0.12/100 discharges	< 3 / 1,000 inpatient days	No benchmark available. Since it is a critical parameter, the target is fixed as 0	1 / 1,000 healthcare workers	Zero	s 10-15 minutes after the physician's order	Time from prescription to antibiotic administrations ≤ 60 minutes (with the goal of ≤ 20 minutes for septic shock or severe sensis!	Ortical test dispatch in emergency cases: ≤ 15 minutes from order to test dispatch	0	<2-3%
Target	≤ 0.25 / 100 discharges	0.3 / 1000 in- patient days	0	0	0	0.95	0.98	0,98	0	2%
Unit of outcome s measure ment	Number	Number	Number	Number	Number	Percentage	Percentage	Percentage	Number	Percentage

VI. UNIT PRESENTATION



VII. RESULTS AND DISCUSSION

The implementation of the ANICE Score Card has had a transformative impact on Apollo Hospitals. It has elevated the standard of nursing care and clinical practice by introducing uniform performance benchmarks across the network. By focusing on 51 critical indicators, ANICE has significantly contributed to improving patient safety, minimizing clinical errors, and enhancing care outcomes.

Hospitals across the group have seen measurable reductions in hospital-acquired infections, patient falls, and medication errors. The system's real-time data tracking and performance monitoring have empowered nursing leaders and administrators to proactively address challenges and implement timely corrective actions. The structured approach to benchmarking has also strengthened Apollo's compliance with national and international accreditation standards.

Additionally, the culture of transparency and accountability fostered by ANICE has improved team engagement and collaboration. It has positioned Apollo Hospitals as a national leader in nursing excellence and clinical governance, while reinforcing its reputation for delivering high quality, patient-centered care. The initiative continues to serve as a model for other institutions aspiring to drive quality through data-driven decision-making and systemic clinical performance improvements.

VIII. CONCLUSION

The true benchmark of a hospital's quality is reflected in the outcomes that genuinely matter to patients. For an organization committed to quality and value-based care, measuring healthcare delivery outcomes is essential.

Systematic measurement and transparent reporting of these outcomes not only drive continuous improvement but also promote the adoption of evidence-based best practices. Publishing clinical outcomes demonstrates an organization's dedication to transparency and quality enhancement.

To support this vision, Apollo Hospitals has implemented the following foundational practices:

- Appointing a Patient Safety Officer in every hospital, responsible for overseeing safety initiatives.
- Establishing a multidisciplinary Patient Safety Committee, comprising representatives from medical services, nursing, engineering, housekeeping, pharmacy, and infection control, convening at least once every quarter.
- Providing mandatory training for all staff on patient safety principles and practices.
- Educating patients on safety awareness and engagement.
- An established policy and system for reporting adverse events, enabling timely interventions and learning.
- Consistent tracking and reporting of key patient safety indicators, including:
 - Hospital-acquired infections
 - Patient falls
 - Skin Injuries
 - Needle stick & Sharp injuries
 - Medication errors

These practices reinforce a culture of accountability and continuous improvement, positioning Apollo as a leader in nursing and clinical governance. These measures form the foundation of a safe, responsive, and accountable healthcare environment at Apollo Hospitals.

IX. x. REFERENCES

- [1] Nursing Quality Indicators: What You Need to Know NursingNotes
- [2] Clinical Quality & Outcomes: Measuring Outcomes Apollo Hospitals Apollo Hospitals
- [3] List of Key Performance Indicators as per the 5th edition NABH Standards QS Healthcare