Quality and Performance Improvement Across Nebraska

NHA | NEBRASKA HOSPITALS

Plan-Do-Study-Act (PDSA)

PDSA is part of the IHI Model for Improvement, which is a framework to guide improvement work. This is a simple, yet powerful tool for accelerating improvement. This model is not meant to replace change models that organizations may already be using, but rather to accelerate improvement.

PLAN

Define objective, questions, goals; Plan Who? What? Where? When?; Plan data collection to answer those questions.

DO

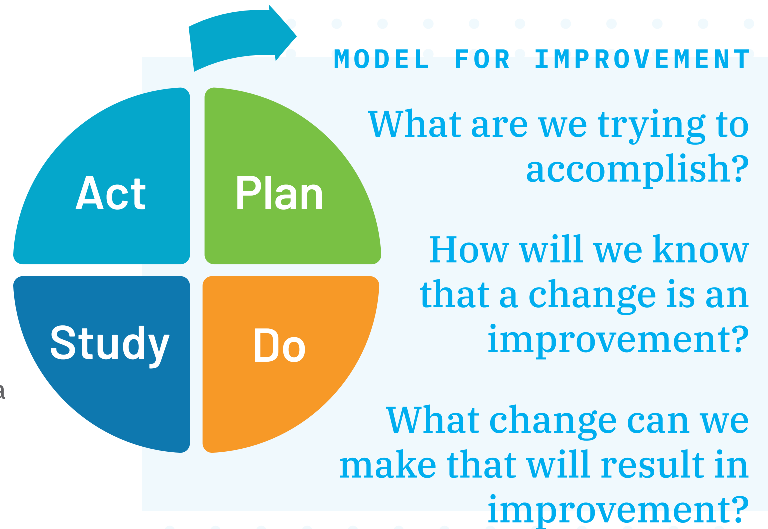
Carry out the plan to collect the data and answer the questions; Begin analysis of the data.

STUDY

Complete the analysis of the data; Compare the data to predictions; Summarize what is learned.

ACT

Plan the next cycle (if needed); Decide whether the change can be implemented.



WANT TO LEARN MORE?

Margaret Woeppel, MSN, RN, CPHQ, FACHE
Vice President, Quality & Data
mwoeppel@nebraskahospitals.org

Dana Steiner BSN, MBA
HQIC Quality & Performance Improvement Director
dsteiner@nebraskahospitals.org

Amber Kavan BSN, RN
HQIC Quality & Performance Improvement Advisor
akavan@nebraskahospitals.org

DMAIC

A Six Sigma Initiative Define, measure, analyze, improve, and control (DMAIC) is a data driven quality strategy used to improve processes. The letters in the acronym represent the five phases that make up the process. This is part of a Six Sigma initiative, but in general can be implemented as a standalone quality improvement procedure or as part of other process improvement initiatives such as lean.

Launch Team
Establish Charter
Plan Project
Gather the Voice of the Customer
Plan for Change

Document the Process
Collect Baseline data
Narrow Project Focus

Control the Process
Validate Project Benefits

Generate Solutions
Evaluate Solutions
Optimize Solutions
Pilot
Plan and Implement

Analyze Data
Identify Root Cause
Identify and Remove Wastes

Rapid Cycle Improvement Projects

Rapid-cycle improvement is a "quality improvement method that identifies, implements and measures changes made to improve a process or a system." Rapid-cycle improvement implies that changes are made and tested over periods of three or months or less.

HQIC Process Improvement

- Provide education and project management assistance following the IHI model for improvement.
- Learning cohorts typically last 3-5 months and follow a rapid cycle improvement methodology to make quick and meaningful changes.
- Process Improvement cycles (PDSA or DMAIC) are used to standardize improvement.
- Sustainability practices are reviewed and implemented as well as followed up on approximately 6 months after the completion of a learning cohort.

Hospital Quality Improvement Contractor

- CMS funded quality grant focused on decreasing harm
- NHA is partnering with Telligen QI Connect on the HQIC grant
- Goal: to improve the effectiveness, efficiency, economy, and quality of healthcare services delivered

o Reduce opioid related adverse events including deaths by 7%

o Reduce all-cause harm by 9%

o Reduce readmissions by 5%

*** 2019 baseline; 2021 – 2024 improvement period

- Data Collection (3 sources of data): Medicare Fee-for-Service (FFS), National Health Safety Network (NHSN), and Self-Reported.

1. Improve behavioral health outcomes with a focus on reducing opioid misuse.

2. Increase patient safety by reducing all-cause harm by preventing ADEs and C. difficile.

3. Increase quality of care transitions with a focus on reducing hospital readmissions.

NHA Quality Project Support

Project management is an art and a science – doing what you have never done before or changing a process that has been in place. Process implementation and process improvement are critical to the evolution of health care organizations.

However, project management can also be time-consuming and overwhelming. Whether you are attempting to rescue a project that is off course or developing new plans – let the NHA Quality team assist you in this journey.

*At no expense to HQIC participants, the NHA Quality Team will come on-site to assist you in the barriers you are encountering with your project. This could include but is not limited to:

CREATE PROJECT INFRASTRUCTURE

- AIM Statements
- Baselines and Goals
- Change Initiatives
- Testing
- Data Collection

EDUCATE THE TEAM

- Let an outside voice help sell the "why behind the what"

SUSTAINABILITY PLANS

- On-site Auditing
- Team Coaching

Hospital Quality Improvement Program

- Provides targeted, no-cost quality improvement assistance and support to rural, critical access, and hospitals serving vulnerable populations in several states across the country
- Supports the specific needs of hospitals during the COVID-19 pandemic and other public health emergencies
- Addresses the unique needs of hospital staff and patient populations in rural communities
- Utilizes quality improvement science to positively impact patient safety initiative INSIDE hospital walls

QIN-QIO

- Provides targeted, no-cost quality improvement assistance and support to nursing homes and community care partners
- Supports the specific needs of nursing homes during the COVID-19 pandemic and other public health emergencies
- Addresses the unique needs of staff and patients within nursing homes and outpatient settings in both rural and urban communities
- Utilizes quality improvement science to positively impact patient safety initiatives OUTSIDE hospital walls

HQIC Measure Reporting

Medicare FFS Claims

- Opioid Prescribing Practices
- Opioid Related Adverse Drug Events
- Glycemic Related Adverse Drug Events
- Anticoagulation Related Adverse Drug Events
- Postoperative Sepsis Rate
- Sepsis Mortality
- Pressure Ulcer Rate
- All-Cause Readmission Rate
- Unplanned All-Cause 30-Day Readmission Rate
- Falls
- PE/DVT Rate

NHSN or Self-Reported

- Catheter Utilization Ratio
- Catheter Associated Urinary Tract Infection Rate (CAUTI)
- Central Line Utilization Ratio
- Central Line Associated Blood Stream Infection Rate (CLABSI)
- Methicillin-Resistant Staphylococcus Aureus Rate (MRSA)
- Clostridium Difficile Rate (C. Diff)
- Surgical Site Infection Rate (SSI)

Self-Reported

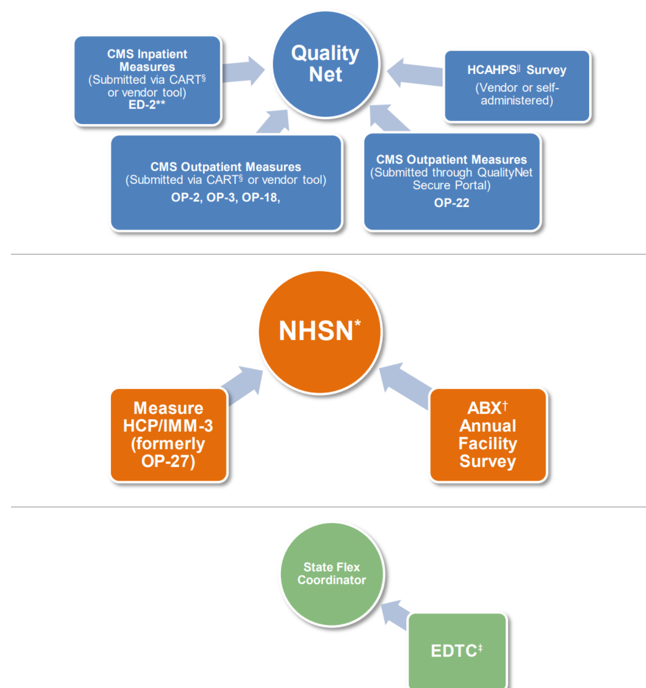
- Glycemic Management Adverse Drug Events
- Opioid Related Adverse Drug Events
- Falls
- Readmissions

Medicare Beneficiary Quality Improvement Project

- Quality improvement activity under the Medicare Rural Hospital Flexibility program of the Health Resources and Services Administration's (HRSA) Federal Office of Rural Health Policy (FORHP).
- Goal of MBQIP: improve the quality of care provided in critical access hospitals, by increasing quality data reporting by CAHs and then driving quality improvement activities based on the data.

Historically, CAHs have been exempt from national quality improvement reporting programs due to challenges related to measuring improvement in low volume settings and limited resources.

Some CAHs are not only participating in national quality improvement reporting programs but are excelling across multiple rural relevant topic areas.



Medicare Beneficiary Quality Improvement Project

Patient Safety/Inpatient

CORE MEASURES

HCP/IMM-3
Influenza Vaccination Coverage Among Healthcare Personnel (HCP)

Antibiotic Stewardship:
Measured via CDC NHSN Annual Facility Survey

ADDITIONAL MEASURES

Healthcare-Associated Infections
- CLABSI, CAUTI, MRSA, CDI, SSIs

Perinatal Care
- PC-01: Elective Delivery
- PC-05: Exclusive Breast Milk Feeding (eCQM)

Falls
- Falls with Injury
- Patient Fall Rate
- Screening for Future Fall Risk

Adverse Drug Events
- Opioids
- Glycemic Control
- Anticoagulant Therapy

Patient Safety Culture Survey

Inpatient Influenza Vaccination

eCQMs
- **VTE-1:** Venous Thromboembolism Prophylaxis
- **Safe Use of Opioids:** Concurrent Prescribing
- **ED-2:** Median Admit Decision Time to ED Departure Time for Admitted Patient

Patient Engagement

CORE MEASURES

HCAHPS
The HCAHPS survey contains 21 patient perspectives on care and patient rating items that encompass 8 key topics

ADDITIONAL MEASURES

Emergency Department Patient Experience

Outpatient

CORE MEASURES

HCAHPS
AMI
OP-2: Fibrinolytic Therapy Received within 30 minutes
OP-3: Median Time to Transfer to another Facility for Acute Coronary Intervention

ED Throughput
OP-18: Median Time from ED Arrival to ED Departure for Discharged ED Patients
OP-22: Patient Left Without Being Seen

ADDITIONAL MEASURES

Chest Pain/AMI
- Aspirin at Arrival
- Median Time to ECG

ED Throughput
- Door to Diagnostic Evaluation by a Qualified Medical Professional

Care Transitions

CORE MEASURES

Emergency Department Transfer Communication (EDTC)

ADDITIONAL MEASURES

Discharge Planning

Medication Reconciliation

Claims-Based Measures
- Readmissions
- Complications
- Hospital Return Days

Find more tools and resources at:
nebraskahospitals.org

Nebraska HQIC Scorecard CY2021

Data as of 4/21/2022

	Measure(s)	Nebraska Average	Nebraska Goal	Definition
Self-Reported	Nebraska Glycemic Management Adverse Drug Event	2.38	2.01	# of discharges in the denominator, with one or more glycemic ADEs, including deaths -- # of acute care discharged patients
Self-Reported	Nebraska Opioid Related Adverse Drug Event	0.30	0.28	# of discharges in the denominator, with one or more opioid ADEs, including deaths -- # of acute care discharged patients
Self-Reported	Nebraska Fall Rate	3.97	3.76	Total # of assisted and unassisted falls with or without injury among bedded patients -- # of patient days
Self-Reported	Nebraska All-Cause Readmission Rate	4.71	4.53	Inpatients returning as an acute care inpatient within 30 days of date of an inpatient discharge, to any facility with the same state -- All patients discharged from the hospital (excluding discharged due to death)
NHSN or Self-Reported	Urinary Catheter Utilization Ratio	14.50	11.86	Total number of indwelling urinary catheter days for bedded inpatient care locations under surveillance -- Total number of patient days for bedded inpatient care locations
NHSN or Self-Reported	Catheter-Associated Urinary Tract Infection Rate	0.17	0.53	Total number of observed healthcare associated CAUTI among patients in bedded inpatient care locations -- Total number of indwelling catheter days for each location under surveillance for CAUTI during the data period
NHSN or Self-Reported	Clostridioides difficile Rate	0.02	1.08	Total number of observed hospital-onset C. difficile lab identified events among all inpatients facility-wide -- Patient days (facility-wide)
NHSN or Self-Reported	Central Line-Associated Blood Stream Infection (CLABSI) Rate	0.07	0.64	Total number of observed healthcare associated CLABSI among patient in bedded inpatient care locations -- Total number of central line days for each location under surveillance for CLABSI during the data period
NHSN or Self-Reported	Central Line Utilization Ratio	12.30	10.41	Total number of central line days for bedded inpatient care locations under surveillance -- Total number of patient days for bedded inpatient care locations under surveillance
NHSN or Self-Reported	Methicillin-resistant Staphylococcus aureus (MRSA) Rate	0.08	0.06	Total # of observed hospital-onset unique blood source MRSA lab identified events among all inpatients in the facility -- Total patient days
NHSN or Self-Reported	Surgical Site Infection Rate Total Hip Replacement	1.07	0.12	Total # of observed surgical site infections based on CDC NHSN definition -- # of specific operative procedures included in the selected NHSN operative procedure category
NHSN or Self-Reported	Surgical Site Infection Rate Total Knee Replacement	1.21	1.35	Total # of observed surgical site infections based on CDC NHSN definition -- # of specific operative procedures included in the selected NHSN operative procedure category
NHSN or Self-Reported	Surgical Site Infection Rate Colon Surgeries	5.12	3.61	Total # of observed surgical site infections based on CDC NHSN definition -- # of specific operative procedures included in the selected NHSN operative procedure category
HHS Protect	Healthcare Personnel COVID-19 Vaccination Rate	80.94		Current healthcare personnel who have received a completed series of a COVID-19 vaccination or a single-dose vaccination -- Total # of current healthcare personnel

Nebraska HQIC Scorecard CY2021

Data as of 4/21/2022

Measure(s)		Nebraska Average	Nebraska Goal	Definition
Claims	Adverse Drug Event Rate	0.39	0.43	# of discharges in the denominator, with one or more Adverse Drug Events ---------- # of acute care discharged patients
	Anticoagulation Related Adverse Drug Event	0.09	0.09	# of discharges in the denominator, with one or more anticoagulation ADEs, including deaths ---------- # of acute care discharged patients
	Glycemic Management Adverse Drug Event	0.01	0.02	# of discharges in the denominator, with one or more glycemic ADEs, including deaths ---------- # of acute care discharged patients
	Opioid Related Adverse Drug Event	0.30	0.34	# of discharges in the denominator, with one or more opioid ADEs, including deaths ---------- # of acute care discharged patients
	Opioid Prescribing Practices	0.09	0.09	Patients discharged (inpatient, ED, and OBS) who filled a prescription on the date of discharge or within 7 days after hospital discharge, for an opioid >90 MME/Day, prescribed by the attending or operating NPI. ---------- Total discharged patients per month (inpatients, ED, OBS)
	Falls	0.01	0.07	Total # of assisted and unassisted falls with or without injury among bedded patients ---------- # of patient days
	Pressure Ulcer Rate Stage 3+	0.02	0.02	Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary diagnosis codes for pressure ulcer and any secondary diagnosis codes for pressure ulcer stage III or IV (or unstageable) ---------- Surgical or medical discharges
	All Cause Readmission Rate	11.94	11.18	Inpatients returning as an acute care inpatient within 30 days of date of an inpatient discharge, to any facility with the same state ---------- All Medicare patients discharged from the hospital (excluding discharged due to death)
	All Cause Unplanned Readmissions	11.19	10.56	Inpatients returning as an acute care inpatient within 30 days of date of an inpatient discharge, to any facility, with the exception of certain planned admissions ---------- Patients, age 65+, discharged alive from the hospital with continuous Medicare FFS Coverage
	Post-Operative Sepsis Rate	1.00	0.40	Discharges among cases meeting the inclusion and exclusion rules for the denominator, with any AHRQ designated secondary ICD-10 diagnosis codes for sepsis ---------- Elective surgical discharges for patients ages 18 years and older, with any listed ICD-10-PCS procedure codes for an operating room procedure
	Sepsis Mortality Rate	22.75	18.76	Patient discharges in the denominator where the patient died within 30 days of discharge ---------- Medicare FFS hospital inpatient discharges for patients ≥18 yrs of age, with a diagnosis of sepsis in any position
	Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate	0.51	0.37	# of patients meeting inclusion and exclusion rules for the denominator, with a secondary ICD-10 CM diagnosis codes for proximal deep vein thrombosis or a secondary ICD-10 CM diagnosis code for pulmonary embolism ---------- All surgical discharges age 18 and older defined by specific DRGs or MS-DRGs and a procedure code for an operating room procedure

MBQIP Data Submission Deadlines

Measure ID	Description	MBQIP Domain	Reported To	Encounter Period and Due Date			
				Q2/2021 April 1 – June 30	Q3/2021 July 1 – Sep 30	Q4/2021 Oct 1 – Dec 31	Q1/2022 Jan 1 – Mar 31
Population & Sampling	Population & Sampling Submission	Inpatient and Outpatient	QualityNet via Secure Log in	November 1, 2021	February 1, 2022	May 2, 2022	August 1, 2022
HCP/ IMM-3	Influenza vaccination coverage among health care personnel	Patient Safety/ Inpatient	(NHSN)	N/A	N/A	May 16, 2022 (Q4 2021/Q12022 aggregate)	
Antibiotic Stewardship	CDC NHSN Annual Facility Survey	Patient Safety/ Inpatient	(NHSN)	March 1, 2022 (Calendar year 2021 data)			March 1, 2023 (Calendar year 2022 data)
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems	Patient Engagement	QualityNet via Vendor	October 6. 2021	January 5, 2022	April 6, 2022	Early June 2022
EDTC	Emergency Department Transfer Communication	Care Transitions	As directed by state Flex program	July 31, 2021	October 31, 2021	January 31, 2022	April 30, 2022
OP-2	Fibrinolytic therapy received within 30 minutes	Outpatient	QualityNet via Secure Log in	November 1, 2021	February 1, 2022	May 2, 2022	August 1, 2022
OP-3	Median time to transfer to another facility for acute coronary intervention	Outpatient	QualityNet via Secure Log in	November 1, 2021	February 1, 2022	May 2, 2022	August 1, 2022
OP-18	Median time from ED arrival to ED departure for discharged ED patients	Outpatient	QualityNet via Secure Log in	November 1, 2021	February 1, 2022	May 2, 2022	August 1, 2022
OP-22	Patient left without being seen	Outpatient	QualityNet via Secure Log in	May 16. 2022 (Calendar year 2021 aggregate)			May 15, 2023 (Calendar year 2022 aggregate)