ASCP NPQR

NATIONAL PATHOLOGY QUALITY REGISTRY

NPQR 2021 Qualified Clinical Data Registry (QCDR) Measures

21-210117-JB

MEASURE TITLE: Notification to the Ordering Provider Requesting Myoglobin or CK-MB in the Diagnosis of Suspected Acute Myocardial Infarction (AMI).

MEASURE DESCRIPTION: Percentage of ordering providers who have ordered a myoglobin or CK-MB for greater than 10% of the patients who have a diagnosis of suspected AMI, that were informed by the laboratory these tests are not beneficial for patients with a diagnosis of suspected AMI.

INSTRUCTIONS: This measure is to be reported each time a CK-MB or myoglobin is ordered on a patient with a suspected AMI.

DENOMINATOR: All providers who have ordered troponin I or T, CK-MB, or myoglobin in adult patients (18 years and older) who have a suspected diagnosis of AMI where the CK-MB or myoglobin testing exceeds 10% of the patients tested.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Trauma, myositis, myopathy.

NUMERATOR: The number of providers notified who have exceeded testing for CK-MB and/or myoglobin with a diagnosis of suspected acute myocardial infarction who were notified by the laboratory these tests are not beneficial for patients with a diagnosis of suspected AMI.

RATIONALE: Unlike CK-MB and myoglobin, the release of troponin I or T is specific to cardiac injury. Troponin is released before CK-MB and appears in the blood as early as, if not earlier than, myoglobin after AMI. Approximately 30% of patients experiencing chest discomfort at rest with a normal CK-MB will be diagnosed with AMI when evaluated using troponins. Single-point troponin measurements equate to infarct size for the determination of the AMI severity. Accordingly, there is much support for relying solely on troponin and discontinuing the use of CK-MB and other markers.

MEASURE TYPE: Process

NQS DOMAIN: Effective Clinical Care

MEANINGFUL MEASURE AREA: Appropriate Use of Healthcare

MEASURE TITLE: Notification to the Ordering Provider Requesting Thyroid Screening Tests other than only a Thyroid Stimulating Hormone (TSH) in the initial screening of a patient with a suspected thyroid disorder.

MEASURE DESCRIPTION: Percentage of ordering providers who ordered thyroid screening tests other than a TSH in greater than 10% of their patients for the evaluation of a patient with suspected non-neoplastic thyroid disease, who were informed by the laboratory these tests are not beneficial for the initial diagnosis of thyroid disease.

INSTRUCTIONS: This measure is to be reported each time a patient has a thyroid laboratory test performed.

DENOMINATOR: All providers who have ordered any of the following thyroid laboratory tests (CPT – 80070, 80071, 80091, 80092, 84432, 84434, 84435, 84436, 84437, 84439, 84442, 84479, 84481) performed alone or in combination with (CPT – 84443), where (CPT – 80070, 80071, 80091, 80092, 84432, 84434, 84435, 84436, 84437, 84439, 84442, 84479, 84481) testing exceeds 10% of the patients tested.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Any patient with a diagnosis of head and/or neck trauma or neoplastic thyroid disease. Any patient who had a previous TSH that was abnormal.

NUMERATOR: The number of providers who have ordered the following tests (CPT – 80070, 80071, 80091, 80092, 84432, 84434, 84435, 84436, 84437, 84439, 84442, 84479, 84481) in adult patients (18 years and older) with a suspected thyroid disorder and were notified by the laboratory these tests are not beneficial for patients with a suspected thyroid disorder.

RATIONALE: The TSH test can detect subclinical thyroid disease in patients without symptoms of thyroid dysfunction. A TSH value within the reference interval excludes the majority of cases of primary overt thyroid disease. If the TSH is abnormal, confirm the diagnosis with free thyroxine (T4).

MEASURE TYPE: Process

NQS DOMAIN: Effective Clinical Care

MEANINGFUL MEASURE AREA: Appropriate Use of Healthcare

MEASURE TITLE: Notification to the ordering provider requesting amylase testing in the diagnosis of suspected acute pancreatitis.

MEASURE DESCRIPTION: Percentage of ordering providers who ordered an amylase test in greater than 10% of their patients for the evaluation of a patient with acute pancreatitis, who were informed by the laboratory this test is not beneficial for the diagnosis of pancreatitis.

INSTRUCTIONS: This measure is reported each time a patient with a suspected diagnosis of acute pancreatitis has an amylase performed.

DENOMINATOR: The number of providers who ordered amylase in greater than 10% of adult patients (18 years and older) with a suspected diagnosis of acute pancreatitis.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Non-chemistry pathology blood tests, non-blood tests, point of care testing, abdominal trauma.

NUMERATOR: The number of providers who ordered an amylase in greater than 10% of adult patients with a suspected diagnosis of acute pancreatitis and were notified by the laboratory these tests are not beneficial for patients with a suspected diagnosis of acute pancreatitis.

RATIONALE: Amylase and lipase are digestive enzymes normally released from the acinar cells of the exocrine pancreas into the duodenum. Following injury to the pancreas, these enzymes are released into the circulation. While amylase is cleared in the urine, lipase is reabsorbed back into the circulation. In cases of acute pancreatitis, serum activity for both enzymes is greatly increased.

Serum lipase is now the preferred test due to its improved sensitivity, particularly in alcohol-induced pancreatitis. Its prolonged elevation creates a wider diagnostic window than amylase. In acute pancreatitis, amylase can rise rapidly within 3–6 hours of the onset of symptoms and may remain elevated for up to five days. Lipase, however, usually peaks at 24 hours with serum concentrations remaining elevated for 8–14 days. This means it is far more useful than amylase when the clinical presentation or testing has been delayed for more than 24 hours. Current guidelines and recommendations indicate that lipase should be preferred over total and pancreatic amylase for the initial diagnosis of acute pancreatitis and that the assessment should not be repeated over time to monitor disease prognosis. Repeat testing should be considered only when the patient has signs and symptoms of persisting pancreatic or peripancreatic inflammation, blockage of the pancreatic duct or development of a pseudocyst. Testing both amylase and lipase is generally discouraged because it increases costs while only marginally improving diagnostic efficiency compared to either marker alone.

MEASURE TYPE: Process

NQS DOMAIN: Effective Clinical Care

MEANINGFUL MEASURE AREA: Appropriate Use of Healthcare

MEASURE TITLE: Time Interval: Critical Value Reporting for Chemistry.

MEASURE DESCRIPTION: Measurement of the time interval beginning with the time results are verified for any of the following Sodium, Potassium, Chloride, Calcium-total, Bicarbonate – CO2, Ammonia, Total Bilirubin – Newborn, Arterial Blood Gases – pH, PO2, PCO2, Glucose, Glucose – Newborn tests until the critical value is reported by the laboratory. (Reporting done via phone, or secure electronic transmission, such as text messaging, messaging through Laboratory Information Systems, Electronic Health Records systems, or email with read receipt functionality). When notification is sent by email, performance met is contingent on read receipt received. If a read receipt is not received, this should be considered as performance not met.

INSTRUCTIONS: This measure is reported for the laboratory tests in the numerator and denominator statements.

DENOMINATOR: All chemistry tests ordered in which time intervals are recorded and a critical value is reported by the laboratory via phone, or secure electronic transmission, such as text messaging, messaging through Laboratory Information Systems, Electronic Health Records systems, or email with read receipt functionality. When notification is sent by email, performance met is contingent on read receipt received. If a read receipt is not received, this should be considered as performance not met. Chemistry tests include the following: Sodium, Potassium, Chloride, Calcium-total, Bicarbonate – CO2, Ammonia, Total Bilirubin – Newborn, Arterial Blood Gases – pH, PO2, PCO2, Glucose, Glucose – Newborn.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Point of care testing.

NUMERATOR: The time interval in minutes as noted in the measure description in which the critical value was reported by the laboratory. Laboratory tests include the following: Sodium, Potassium, Chloride, Calcium-total, Bicarbonate – CO2, Ammonia, Total Bilirubin – Newborn, Arterial Blood Gases – pH, PO2, PCO2, Glucose, Glucose – Newborn.

RATIONALE: Critical results of laboratory tests that fall significantly outside the normal range may indicate a life- threatening situation. The objective of this measure is to provide the responsible licensed caregiver these results within an established time frame so that the patient can be promptly treated, and encourages pathologists to work closely with clinicians to close the loop on follow-up for critical values and other abnormal results.

OUTCOME OR HIGH PRIORITY: High Priority

MEASURE TYPE: Process

NQS DOMAIN: Communication and Care Coordination

MEANINGFUL MEASURE AREA: Preventable Healthcare Harm

MEASURE TITLE: Time Interval: Critical Value Reporting for Cerebrospinal Fluid - White Blood Cells (CSF - WBC).

MEASURE DESCRIPTION: Measurement of the time interval beginning with the time results are verified until the critical value is reported by the laboratory for CSF-WBC. Reporting done via phone, or secure electronic transmission, such as text messaging, messaging through the Laboratory Information System, the Electronic Health Record, or email with read receipt functionality. When notification is sent by email, performance met is contingent on read receipt received. If a read receipt is not received this should be considered as performance not met.

INSTRUCTIONS: This measure is to be reported for the laboratory tests in the numerator and denominator statements.

DENOMINATOR: All CSF-WBC tests ordered in which time intervals are recorded and a critical value is reported by the laboratory.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Point of care testing.

NUMERATOR: The time interval in minutes as noted in the measure description in which a critical value for CSF-WBC was reported by the laboratory via phone, or secure electronic transmission, such as text messaging, messaging through the Laboratory Information System, Electronic Health Records systems, or email with read receipt functionality. When notification is sent by email, performance met is contingent on read receipt received. If a read receipt is not received this should be considered as performance not met.

RATIONALE: Critical results of laboratory tests that fall significantly outside the normal range may indicate a life- threatening situation. The objective of this measure is to provide the responsible licensed caregiver these results within an established time frame so that the patient can be promptly treated, and encourages pathologists to work closely with clinicians to close the loop on follow-up for critical values and other abnormal results.

OUTCOME OR HIGH PRIORITY: High Priority

MEASURE TYPE: Process

NQS DOMAIN: Communication and Care Coordination

MEANINGFUL MEASURE AREA: Preventable Healthcare Harm

MEASURE TITLE: Time Interval: Critical Value Reporting for Toxicology.

MEASURE DESCRIPTION: Measurement of the time interval beginning with the time results are verified until the critical value is reported by the laboratory for carbamazepine, phenobarbital, and acetaminophen toxicology tests. Reporting done via phone, or secure electronic transmission, such as text messaging, messaging through the Laboratory Information System, the Electronic Health Record, or email with read receipt functionality. When notification is sent by email, performance met is contingent on read receipt received. If a read receipt is not received this should be considered as performance not met.

INSTRUCTIONS: This measure is to be reported for the laboratory tests in the numerator and denominator statements.

DENOMINATOR: All carbamazepine, phenobarbital, and acetaminophen toxicology tests ordered in which time intervals are recorded and a critical value was reported by the laboratory.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Point of care testing.

NUMERATOR: The time interval in minutes as noted in the measure description in which the critical value for carbamazepine, phenobarbital, and acetaminophen was reported by the laboratory via phone, or secure electronic transmission, such as text messaging, messaging through the Laboratory Information System, Electronic Health Records systems, or email with read receipt functionality. When notification is sent by email, performance met is contingent on read receipt received. If a read receipt is not received this should be considered as performance not met.

RATIONALE: Critical results of laboratory tests that fall significantly outside the normal range may indicate a life- threatening situation. The objective of this measure is to provide the responsible licensed caregiver these results within an established time frame so that the patient can be promptly treated, and encourages pathologists to work closely with clinicians to close the loop on follow-up for critical values and other abnormal results.

OUTCOME OR HIGH PRIORITY: High Priority

MEASURE TYPE: Process

NQS DOMAIN: Communication and Care Coordination

MEANINGFUL MEASURE AREA: Preventable Healthcare Harm

MEASURE TITLE: Time Interval: Critical Value Reporting for Troponin.

MEASURE DESCRIPTION: Measurement of the time interval beginning with the time results are verified for troponin until the critical value is reported by the laboratory. Reporting done via phone, or secure electronic transmission, such as text messaging, messaging through the Laboratory Information System, the Electronic Health Record, or email with read receipt functionality. When notification is sent by email, performance met is contingent on read receipt received. If a read receipt is not received this should be considered as performance not met.

INSTRUCTIONS: This measure is to be reported for the laboratory tests in the numerator and denominator statements.

DENOMINATOR: All troponin tests ordered in which time intervals are recorded and a critical value is reported by a laboratory.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Point of care testing.

NUMERATOR: The time interval in minutes in which the critical value for troponin was reported by the laboratory via phone, or secure electronic transmission, such as text messaging, messaging through the Laboratory Information System, Electronic Health Records systems, or email with read receipt functionality. When notification is sent by email, performance met is contingent on read receipt received. If a read receipt is not received this should be considered as performance not met.

RATIONALE: Critical results of laboratory tests that fall significantly outside the normal range may indicate a life- threatening situation. The objective of this measure is to provide the responsible licensed caregiver these results within an established time frame so that the patient can be promptly treated, and encourages pathologists to work closely with clinicians to close the loop on follow-up for critical values and other abnormal results.

OUTCOME OR HIGH PRIORITY: High Priority

MEASURE TYPE: Process

NQS DOMAIN: Communication and Care Coordination

MEANINGFUL MEASURE AREA: Preventable Healthcare Harm

MEASURE TITLE: Rate of Communicating Results of an Amended Report With a Major Discrepancy to the Responsible Provider.

MEASURE DESCRIPTION: Rate of communicating to the responsible provider the results of diagnostic reports that were amended due to a major discrepancy.

INSTRUCTIONS: This measure is to be reported on all amended anatomic pathology reports.

DENOMINATOR: All anatomic pathology reports where a major discrepancy has been noted in the original report and the report is amended with the correct information. A major diagnostic discrepancy is defined as one causing potential major harm to/impact on patient care. Examples of major discrepancies are; missed malignancy, over-diagnosis of malignancy and/or high-grade dysplasia, misclassification of malignancy or margin status that (typically) results in a treatment change. A minor diagnostic discrepancy is defined as a potential minor harm to/impact on patient care. Examples of minor discrepancies are; misclassification of a colon polyp resulting in change in follow-up, basal cell versus squamous cell carcinoma, Gleason grade/extent of prostate cancer not resulting in change in treatment.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Anatomic pathology reports that have not been amended for a major discrepancy.

NUMERATOR: The number of reports where the responsible provider was notified of an amended anatomic pathology report due to a major discrepancy in the original report via secure electronic transmission, such as text messaging, messaging through Laboratory Information Systems, Electronic Health Records systems, or phone within five business days. A major diagnostic discrepancy is defined as one causing potential major harm to/impact on patient care. Examples of major discrepancies are; missed malignancy, over-diagnosis of malignancy and/or high-grade dysplasia, misclassification of malignancy or margin status that (typically) results in a treatment change. A minor diagnostic discrepancy is defined as a potential minor harm to/impact on patient care. Examples of minor discrepancies are; misclassification of a colon polyp resulting in change in follow-up, basal cell versus squamous cell carcinoma, Gleason grade/extent of prostate cancer not resulting in change in treatment.

RATIONALE: Amendments to reports that would significantly affect patient care should be reported promptly to the responsible clinician. Records of notification should include date and person notified, and preferably appear in the amended report along with a record of what was changed in the initial report. Periodic evaluation of amended reports is commonly included as part of a laboratory's quality management program. Records of date of communication of significant/unexpected findings are required for compliance with certification of the laboratory. Laboratory medicine is a highly-structured field, for which the accuracy and safety of diagnostic reports have continuously been evaluated and regulated for the last several decades. To provide diagnostic information to clinicians, pathologists utilize an abundance of diagnostic tools to form a diagnosis, such as electronic medical records, diagnostic imaging, submission of additional histologic levels, specialized immunohistochemical and molecular studies, access to prior related specimen slides, and submission of additional tissue. After a diagnosis is rendered using these tools, re-evaluation of case material by various QA measurements often occurs. These QA strategies are employed by practicing laboratories, not only as a means of decreasing diagnostic error, but also to meet regulatory guidelines for accreditation. Secondary case review has been built into some pathology quality assurance practices (e.g., review of a set percentage of cases, intradepartmental "difficult case" conferences, cytologic-histologic correlation, or review of all malignancies). Secondary case review also occurs in hospital patient-centered conferences (e.g., tumor board); external consultation practices; or at the behest of clinicians, who may initiate communication when the pathology report does not correlate with the clinical findings. An error detected by one of these processes may be referred to as a discrepancy or a difference in interpretation or reporting between two pathologists. Error detection rates based on the different methods of secondary review have been variably studied.

OUTCOME OR HIGH PRIORITY: High Priority

MEASURE TYPE: Process

NQS DOMAIN: Communication and Care Coordination

MEANINGFUL MEASURE AREA: Preventable Healthcare Harm

MEASURE TITLE: Rate of Notification to Clinical Provider of a New Diagnosis of Malignancy.

MEASURE DESCRIPTION: The rate of reporting to a responsible clinical provider from the pathologist when there is a new diagnosis of malignancy (other than squamous or basal cell carcinoma of the skin) from a pathology specimen.

INSTRUCTIONS: This measure is to be reported on all anatomic pathology specimens.

DENOMINATOR: All anatomic pathology specimens accessioned and evaluated in the laboratory with a new diagnosis of malignancy.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Diagnosis of squamous or basal cell carcinoma of the skin.

NUMERATOR: The number of reports where a new diagnosis of malignancy was made and the responsible clinical provider was notified via secure electronic transmission, such as text messaging, messaging through the Laboratory Information System, Electronic Health Record, or phone within five business days.

RATIONALE: : Occasionally, surgical pathology findings include information that is significant and unexpected. Examples of such findings include: unexpected malignancy or change of a frozen section diagnosis after review of permanent sections. Effort should be made to ensure that these findings are communicated to the clinician in a timely fashion, and the date of communication of these findings should be documented in the pathology report. While individual pathology departments may designate certain surgical pathology diagnoses for prompt communication to the clinician, there is currently a lack of standardization for which types of specimens require such communication, and how results are best communicated.

OUTCOME OR HIGH PRIORITY: High Priority

MEASURE TYPE: Process

NQS DOMAIN: Communication and Care Coordination

MEANINGFUL MEASURE AREA: Preventable Healthcare Harm

MEASURE TITLE: Non-small cell lung carcinoma (NSCLC) ancillary biomarker testing status and turnaround time from point of specimen accession date to ancillary testing completion and reporting date should be ≤10 days.

MEASURE DESCRIPTION: Percentage of lung cytopathology or pathology specimen cases with non-small cell lung carcinoma (NSCLC) that address presence or absence of actionable targets through ancillary biomarker testing

AND

meet the maximum 10-day turnaround time (TAT) requirement (Report Date of ancillary biomarker testing – Accession Date = ≤ 10 days).

This measure has two performance rates that contribute to the overall performance score:

1. Percent of cases in which ancillary biomarker testing for actionable targets with a diagnosis of non-small cell carcinoma is addressed.

2. Percent of cases that meet the maximum 10-day turnaround time.

The overall performance score submitted is a weighted average of: (Numerator 1 + Numerator 2)/(Denominator)

DENOMINATOR: All final pathology reports for lung cytopathology or pathology specimen cases with a diagnosis of non-small cell lung carcinoma.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Lung cytopathology or pathology specimens diagnosed as small cell lung carcinoma.

NUMERATOR: APercentage of lung cytopathology or pathology specimen cases with non-small cell lung carcinoma (NSCLC) that address presence or absence of actionable targets through ancillary biomarker testing

AND

The final pathology report is in the laboratory information system/electronic health record with result(s) verified and reported by the laboratory, available to the requesting physician(s) within 10 days from original specimen accession date.

Numerator definitions:

1. Biomarker testing for potential actionable targets on NSCLC can be determined by any method deemed appropriate by the signing pathologist (on final report) and requesting physician, including but not limited to immunohistochemistry, molecular, next-generation sequencing and/or other ancillary testing modalities.

2. Documentation of the presence or absence of ancillary testing and actionable targets can occur anywhere in the final pathology report deemed appropriate by the signing pathologist (e.g. final diagnosis line, microscopic description, comment, etc.) or as an addendum to add testing information without changing significant components of the final report or as an amendment.

3. Turnaround Time (TAT): Timeframe from the day the specimen is accessioned in the pathology laboratory to the day the final report is signed out with ancillary biomarker testing results.

4. Accession Date: The date recorded in the laboratory information system that documents when a specimen was received and accessioned by the laboratory.

5. Final Report Date: The date recorded in the laboratory information system that documents when a result of NSCLC is verified and reported by the laboratory and is available to the requesting physician(s) (signed out).

6. Signed Out with Ancillary Biomarker Testing Results: The pathology report with a final diagnosis released and inclusive of an indication or results of ancillary biomarker testing for actionable NSCLC targets.

RATIONALE: Biomarker testing is considered standard-of-care for all patients diagnosed with non-small cell lung carcinoma (NSCLC). Customization of specific biomarkers and assay-type may be unique by performing-institution, yet laboratory systems should support reporting the NSCLC diagnosis and biomarker results of NSCLC targetable oncogenic drivers in ≤10 days.

MEASURE TYPE: Process

NQS DOMAIN: Effective Clinical Care

MEANINGFUL MEASURE AREA: Appropriate use of Healthcare

MEASURE TITLE: Notification to the provider ordering repeat blood chemistry panels in clinically stable patients within four days.

MEASURE DESCRIPTION: Percentage of providers who ordered a repeat blood chemistry panel within four days on an individual patient, in greater than 10% of their patients tested, who were notified by the laboratory that repeat testing is not likely beneficial in clinically stable patients.

DENOMINATOR: All providers who have ordered a repeat blood chemistry panel within four days on a single patient, where repeat testing exceeds 10% of their patients tested.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Codes denoting clinical instability / hemodynamic instability.

NUMERATOR: The number of providers who have ordered a repeat blood chemistry panel within four days on a single patient, where repeat testing exceeds 10% of their patients tested, and were notified by the laboratory that repeat testing is not beneficial in clinically stable patients.

RATIONALE: Hospitalized patients frequently have considerable volumes of blood drawn (phlebotomy) for diagnostic testing during short periods of time. Phlebotomy is highly associated with changes in hemoglobin and hematocrit levels for patients and can contribute to anemia. This anemia, in turn, may have significant consequences, especially for patients with cardiorespiratory diseases. Additionally, reducing the frequency of daily unnecessary phlebotomy can result in significant cost savings for hospitals.

MEASURE TYPE: Process

NQS DOMAIN: Effective Clinical Care

MEANINGFUL MEASURE AREA: Appropriate use of Healthcare

MEASURE TITLE: Notification to the provider ordering repeat *C. difficile* stool toxin testing within seven days.

MEASURE DESCRIPTION: Percentage of providers who ordered repeat *C. difficile* stool toxin testing within seven days on an individual patient, who were notified by the laboratory that repeat testing is not beneficial, and can lead to increased false positive test results.

DENOMINATOR: All providers who have ordered repeat *C. difficile* stool toxin testing within seven days on a single patient.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: None

NUMERATOR: The number of providers who have ordered repeat *C. difficile* stool toxin testing within seven days on a single patient, and were notified by the laboratory that repeat testing is not beneficial, and can lead to increased false positive results.

RATIONALE: Methods employed in the past with suboptimal sensitivity led to frequent retesting for *Clostridium difficile* infection (CDI), which actually had a high risk that false-positive results. Ideally, in the absence of clear changes to the clinical presentation of suspected CDI (i.e., change in character of diarrhea or new supporting clinical evidence), repeat testing should not be performed. This recommendation is based on studies that have shown that the diagnostic yield of repeat testing within a 7-day period is approximately 2%. Furthermore, use of current highly sensitive testing strategies means that the single tests have very high negative predictive value (typically >99%) for CDI.

MEASURE TYPE: Process

NQS DOMAIN: Effective Clinical Care

MEANINGFUL MEASURE AREA: Appropriate use of Healthcare

MEASURE TITLE: Notification to the provider ordering repeat complete blood counts (CBCs) in clinically stable patients within four days.

MEASURE DESCRIPTION: Percentage of providers who ordered a repeat CBC within four days on an individual patient, in greater than 10% of their patients tested, who were notified by the laboratory that repeat testing is not likely beneficial in clinically stable patients.

DENOMINATOR: All providers who have ordered a repeat CBC within four days on a single patient, where repeat testing exceeds 10% of their patients tested.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: Codes denoting clinical instability or hemodynamic instability.

NUMERATOR: The number of providers who have ordered a repeat CBC within four days on a single patient, where repeat testing exceeds 10% of their patients tested, and were notified by the laboratory that repeat testing is not beneficial in clinically stable patients.

RATIONALE: Hospitalized patients frequently have considerable volumes of blood drawn (phlebotomy) for diagnostic testing during short periods of time. Phlebotomy is highly associated with changes in hemoglobin and hematocrit levels for patients and can contribute to anemia. This anemia, in turn, may have significant consequences, especially for patients with cardiorespiratory diseases. Additionally, reducing the frequency of daily unnecessary phlebotomy can result in significant cost savings for hospitals.

MEASURE TYPE: Process

NQS DOMAIN: Effective Clinical Care

MEANINGFUL MEASURE AREA: Appropriate use of Healthcare

MEASURE TITLE: Notification to the provider ordering repeat Hepatitis C serology testing on a patient with previously positive results.

MEASURE DESCRIPTION: Percentage of providers who ordered repeat Hepatitis C serology testing on a patient with previously positive results, who were notified by the laboratory that repeat testing is not beneficial.

DENOMINATOR: All providers who have ordered repeat Hepatitis C serology testing on a patient with previously positive results.

DENOMINATOR EXCLUSIONS/EXCEPTIONS: None.

NUMERATOR: The number of providers who have ordered repeat Hepatitis C serology testing on a patient with previously positive results, and were notified by the laboratory that repeat testing is not beneficial.

RATIONALE: Hepatitis C virus (HCV) is the most common chronic bloodborne pathogen in the United States and a leading cause of complications from chronic liver disease. The prevalence of the anti-HCV antibody in the United States is approximately 1.6% in noninstitutionalized persons. Hepatitis C–related end-stage liver disease is the most common indication for liver transplants among U.S. adults, accounting for more than 30% of cases. Studies suggest that about one half of the recently observed 3-fold increase in incidence of hepatocellular carcinoma is related to acquisition of HCV infection 2 to 4 decades earlier. USPTF recommends screening at-risk populations with anti–HCV antibody testing followed by confirmatory polymerase chain reaction testing. Once positive, there is no indication for repeating a positive anti-HCV antibody test, as it would remain positive throughout the patient's lifetime. Despite these recommendations, duplicate HCV antibody testing is relatively common. A 2014 report from the New York City Department of Health indicated that from 2006-2010, 70,257 duplicate tests were performed for 58,886 individuals in New York City, costing an estimated $1.4 million.

MEASURE TYPE: Process

NQS DOMAIN: Effective Clinical Care

MEANINGFUL MEASURE AREA: Appropriate use of Healthcare