MALNUTRITION QUALITY IMPROVEMENT INITIATIVE™

# Implementing Quality Improvement and Reporting on the Global Malnutrition Composite Score (GMCS)

*Updated April 2023*

The Malnutrition Quality Improvement Initiative (MQii) is a project of the Academy of Nutrition and Dietetics, Avalere Health, and other stakeholders who provided guidance and expertise through a collaborative partnership. Support provided by Abbott.

# Outline

MALNUTRITION QUALITY IMPROVEMENT INITIATIVE

# Why Malnutrition Matters

The Malnutrition Quality Improvement Initiative (MQii) is a project of the Academy of Nutrition and Dietetics, Avalere Health, and other stakeholders who provided guidance and expertise through a collaborative partnership. Support provided by Abbott.

# Malnutrition Is a Burdensome and Often Under-Identified Condition

## Malnutrition Is A Highly Preventable Condition

**Up to 50%**

**of patients at risk of becoming malnourished are affected by malnutrition.**

**9%**

**of hospitalized patients are diagnosed with malnutrition.**

**Up to 31%**

**of malnourished patients and 38% of well-nourished patients experience nutritional decline during their hospitals stays.**

## Malnutrition Poses a Significant Burden to Patients and Hospitals

**5x**

**maximum likelihood of in-hospital death compared to general patient population.**

**56%**

**higher likelihood of 30-day readmissions, with septicemia as the leading diagnosis upon readmission.**

**34%**

**higher costs for a malnourished patient hospital stay compared to non-malnourished patient stays.**

Sources: Barrett ML, Bailey MK, Owens PL, Brown MH. Non-maternal and Non-neonatal Inpatient Stays in the United States Involving Malnutrition, 2016. August 30, 2018. U.S. Agency for Healthcare Research and Quality. Available here.

Curtis LJ, Bernier P, Jeejeebhoy K, Allard J, Duerksen D, Gramlich L, Laporte M, Keller HH. Costs of hospital malnutrition. Clin Nutr. 2017;36(5):1391-1396.

Academy of Nutrition and Dietetics. Global Malnutrition Composite Score Specification Manual. June 2022. Available here.

# Quality Malnutrition Care Produces Significant Cost Savings for Hospitals

**27%**

**reduction in 30-day readmission rates for a multi-hospital Accountable Care Organization that optimized its malnutrition care.**

**$4.8M**

**in cost savings generated by a 4-hospital system that implemented a nutrition-focused quality improvement program.**

**24%**

**relative reduction in readmission risk for malnourished patients with a nutrition care plan versus those patients without a care plan.**

***For more information on the value of malnutrition care, please visit the Malnutrition Matters page found on the MQii website.**

Sources: Sriram K, Sulo S, VanDerBosch G, et al. A comprehensive nutrition-focused quality improvement program reduces 30-day readmissions and length of stay in hospitalized patients. *JPEN J Parenter Enteral Nutr*. 2017;41(3):384-391.

Sulo S, Feldstein J, Partridge J, et al. Budget impact of a comprehensive nutrition-focused quality improvement program for malnourished hospitalized patients. *Am Health Drug Benefits*. 2017;10(5):262-270.

Valladares AF, Kilgore KM, Partridge J, Sulo S, Kerr KW, McCauley S. How a Malnutrition Quality Improvement Initiative Furthers Malnutrition Measurement and Care: Results From a Hospital Learning Collaborative. *JPEN J Parenter Enteral Nutr*. 2021;45(2):366-371.

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# STEP 1: Implementing Malnutrition Quality Improvement (QI)

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# Quality Malnutrition Care Can Help Hospitals Achieve National Quality Requirements

**Optimal malnutrition care reduces adverse patient outcomes for which hospitals increasingly face penalties from the Centers for Medicare & Medicaid Services.**

**Hospital Readmissions Reduction Program:**
**3% penalty**

**Hospital Inpatient Quality Reporting Program:**
**1/4 reduction to market basket update**

**Hospital-Acquired Conditions Reduction Program:**
**1% penalty**

**Hospital Outpatient Reporting Program:**
**1/4 reduction to market basket update**

**Hospital Value-Based Purchasing Program:**
**2% penalty**

Private payers have established similar efforts to incentivize better care and outcomes.

# Implementing Malnutrition QI

1. Work with hospital quality improvement (QI) department to assess hospital's malnutrition care processes and compare to the standard nutrition care process workflow
2. Identify and prioritize top areas for malnutrition care process and documentation improvement
3. Create and implement a plan with care team to address prioritized areas for malnutrition care process and documentation improvement

Using the QI Plan-Do-Study-Act (PDSA) process can help streamline QI implementation. It may take several PDSA cycles to meet quality improvement goals.

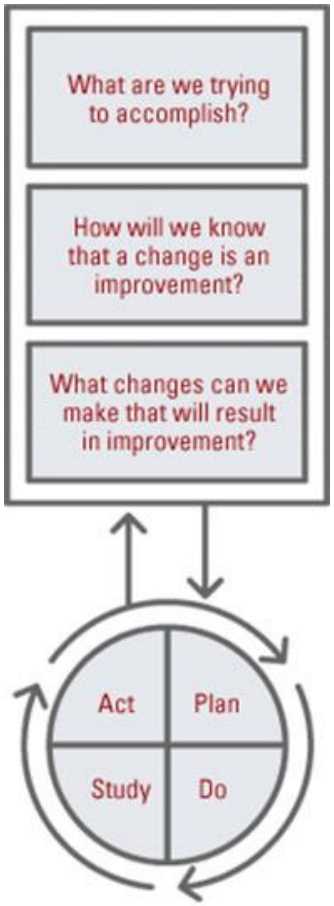


Image source: AHRQ. Health Literacy Universal Precautions Toolkit, 2nd Edition: Plan-Do-Study-Act (PDSA) Directions and Examples. Available here.

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# STEP 2: GMCS Measure Reporting: Why to Report and How to Begin

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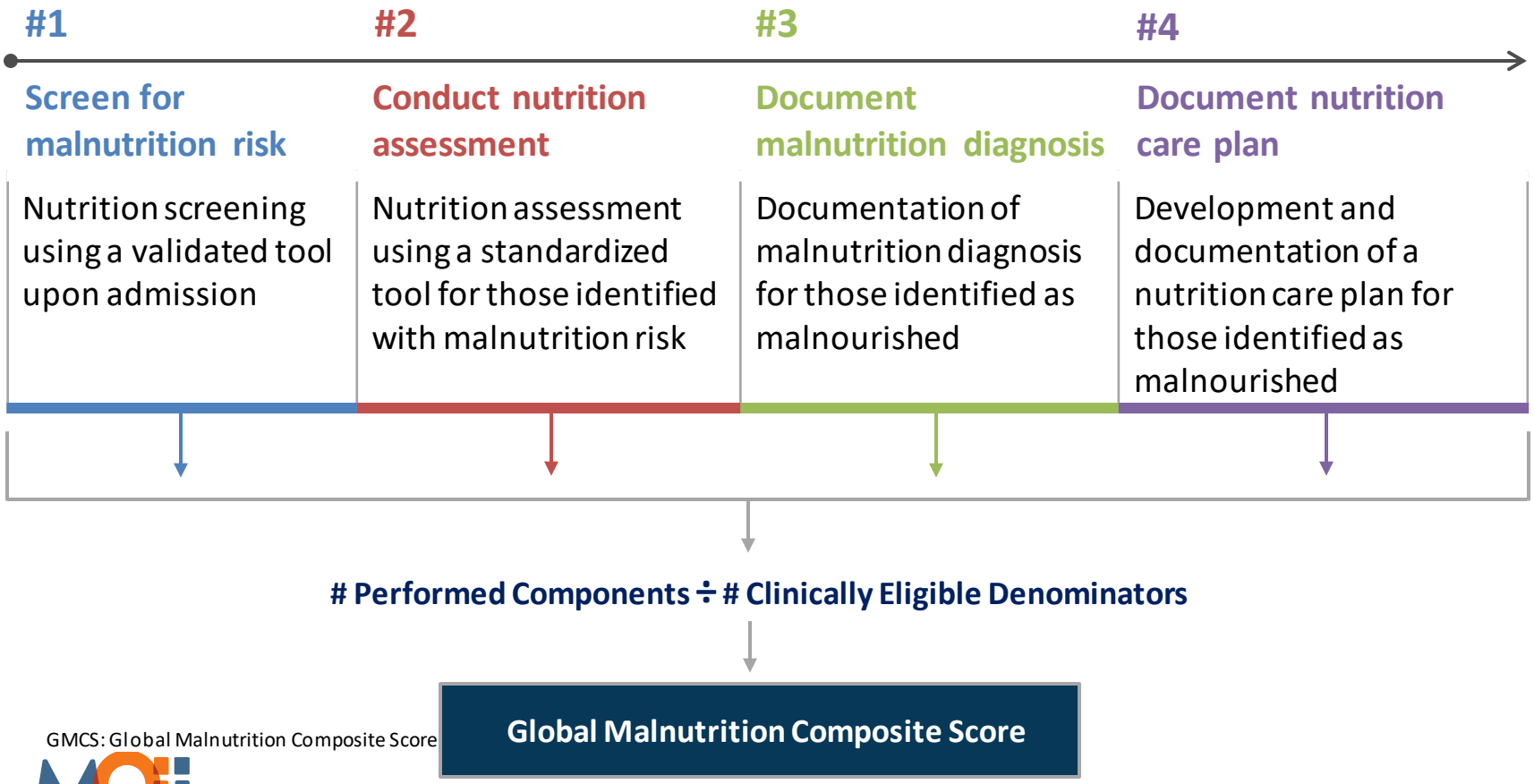
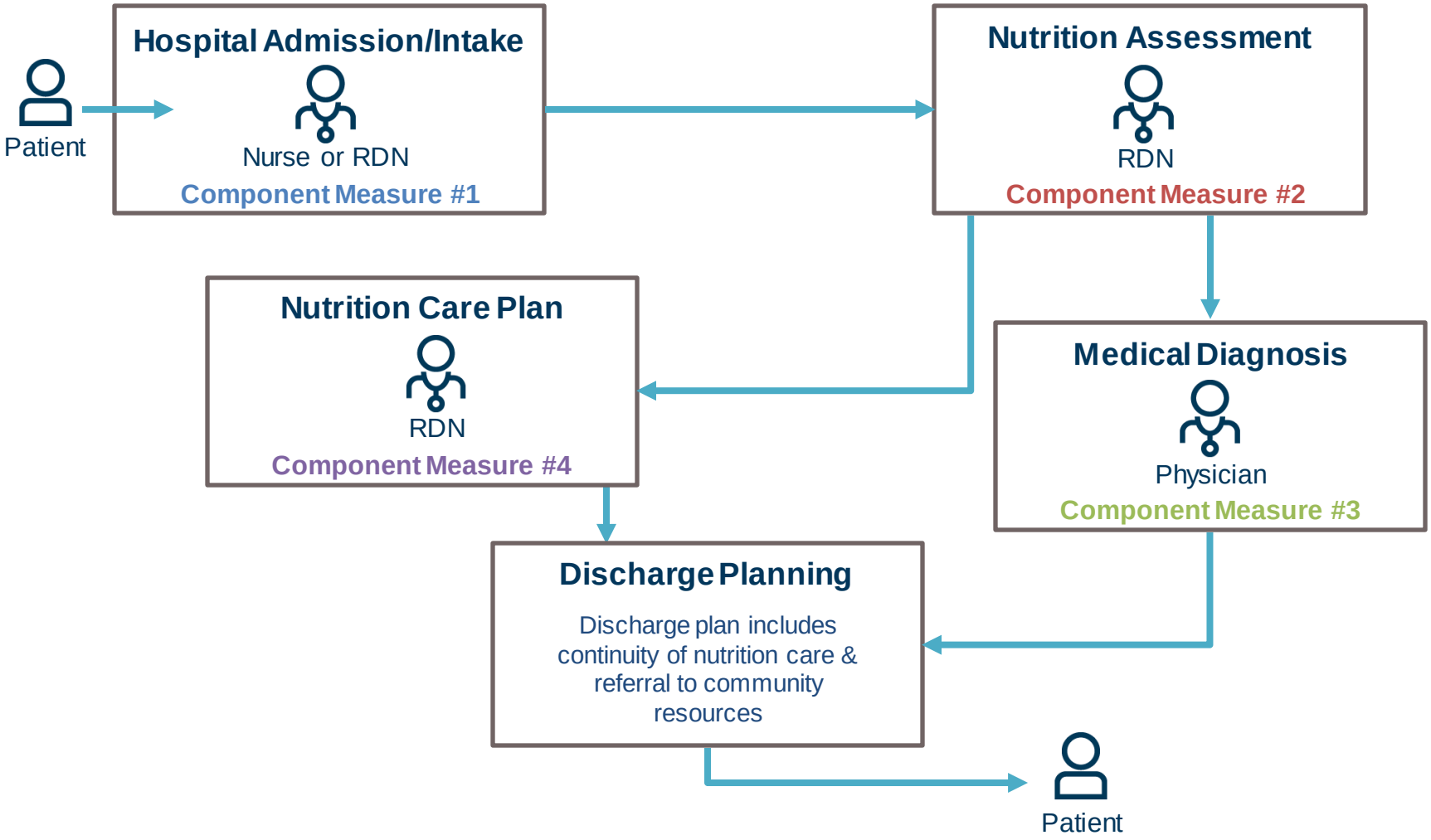
# The GMCS Is the First Malnutrition-Specific Quality Measure Adopted into a CMS Payment Program

- The GMCS represents the first 4 steps of the standard clinical nutrition care process
- The GMCS is in the eCQM category
- Hospitals choose 3 of 9 measures from this category for IQR reporting to CMS




GMCS: Global Malnutrition Composite Score

# The GMCS Components Align With the Appropriate Nutrition Care Process for Hospitalized Patients




GMCS: Global Malnutrition Composite Score

Reasons to Report the GMCS

# The GMCS Measure Aligns with CMS Priorities and Meets Additional Health Equity Requirements

| Health Equity | CMS Quality Measures | NQF Key Measure to Address Rural Health | Meets The Joint Commission's New Requirements |
|---|---|---|---|
| Health equity continues to be a priority for CMS, which classified the GMCS as a health equity/SDOH measure. Multiple stakeholders are pushing hospitals to address health equity. | The GMCS helps improve hospital performance on mandatory measures already in place, such as mortality, readmissions, and total cost of care. | NQF identified the GMCS as a key measure to improve rural health and support rural health equity. | The GMCS helps hospitals meet The Joint Commission's new standards pertaining to health equity and addressing SDOH. |

| Aligns with CMS's Latest Interoperability Standards | Reduces Hospital Readmissions and Improves Patient Outcomes |
|---|---|
| The GMCS was developed in close partnership with CMS, meets interoperability standards and required infrastructure, and is included in the Medicare Promoting Interoperability Program for Eligible Hospitals and CAHs beginning in CY 2024. | The GMCS reflects the best-in-class nutrition care process and has been demonstrated to reduce hospital readmissions, LOS, and cost of care. |

GMCS: Global Malnutrition Composite Score; SDOH: Social Determinants of Health; NQF: National Quality Forum; IQR: Inpatient Quality Reporting; LOS: Length of Stay
Source: National Quality Forum. 2022 Key Rural Measures: An Updated List of Measures to Advance Rural Health Priorities. August 2022. Available here.

# Reporting on the GMCS Can Improve Identification and Treatment of Malnutrition

## PROCESS IMPROVEMENT

- Reporting on the GMCS can reward hospitals/health systems for improving their malnutrition care quality processes.
- Reporting can facilitate further improvements leading to better patient outcomes, reduced readmissions, a thus driving higher value care and greater cost-savings.

## LEARNING COLLABORATIVE SUPPORT

- More than 300 hospitals/health systems are currently participating in the MQii Learning Collaborative.
- As a result, the Learning Collaborative provides a breadth of key learnings, resources, and guidance for implementing the GMCS in hospitals and health systems.
  - There exists a strong foundation of supporters and members with proven history using the component quality measures that make up the GMCS.
  - Members have created and tested EHR dashboards that could be applied more widely.

Quality decision makers at Learning Collaborative member institutions have committed to continuing malnutrition quality improvement and have expressed interest in reporting on the GMCS. They highlighted their ability to track the measure across care delivery sites, their ability to extract data from their EHR, and their level of performance as key determinants for reporting.

GMCS: Global Malnutrition Composite Score; EHR: Electronic Health Record

Reasons to Report the GMCS

# Hospital Executives, Quality Leaders, and Vendors Have Indicated Factors Supporting GMCS Reporting

**Hospital Performance on a Given Measure**

Malnutrition can exacerbate existing medical conditions, leading to delayed recovery, poor wound healing, and increased likelihood of readmission. Reporting on the GMCS could impact performance on several other quality measures in other payment programs related to these outcomes and exacerbation of other conditions (e.g., CMS's STAR rating measure on readmission rates).

**Health Equity Strategy**

Notably, CMS has classified the GMCS as a health equity measure. Addressing malnutrition in hospitals and across the care continuum also aligns with the priorities of the Biden administration, which include addressing health equity and social determinants of health.

**System-Wide Influences**

Integrated health systems in population health contracts, such as ACOs, can use this measure for their own QI to help drive initiatives to address malnutrition across the care continuum and to improve health outcomes and reduce costs.

**Support from EHR Vendors**

EHR vendors are optimistic about hospitals' ability to report on a new measure as their systems are dedicated to aligning with CMS quality reporting requirements.

Additional talking points will become available as we seek feedback from more stakeholders over the coming months.

ACO: Accountable Care Organization; eCQM: Electronic Clinical Quality Measure; EHR: Electronic Health Record; CMS: Centers of Medicare & Medicaid Services; GMCS: Global Malnutrition Composite Score

# Work With Your Quality Department, IT, and EHR Vendor to Facilitate GMCS Measure Reporting

## Clinical Care Teams/Administrators

***To ensure:***

- Identify clinical champion/ influencer, team, and roles to lead implementation
- Care team is properly educated on malnutrition QI and GMCS opportunity
- Care team workflows and resources are standardized
- They have a mechanism to track performance throughout the year

## Quality Team/IT Staff Team

***To ensure:***

- Information about standardized care team workflows is captured in correct format and field
- Data are validated and performance is shared with project team to track progress internally

## EHR Vendor

***To ensure:***

- EHR is updated to support and report on the GMCS (note many EHRs are dedicated to supporting reporting programs to CMS)
- Identify GMCS structured data elements, mapping, frequency, and existing use in other eCQMs

IT: Information Technology; EHR: Electronic Health Record; GMCS: Global Malnutrition Composite Score; QI: Quality Improvement; eCQM: Electronic Clinical Quality Measure

# GMCS Components Build on One Another to Determine a Final Composite Score Performance

GMCS uses three basic calculations to evaluate performance: two for each eligible hospitalization (or episode), and one for aggregate performance in the reporting period (12 months).

1. $$\textbf{\textit{Total Malnutrition Components Score}} = Component\ 1 + Component\ 2 + Component\ 3 + Component\ 4$$

**NOTE**: Each eligible component will receive either a zero or one.

Numerator component scores:
1 = yes (completed)
0 = no (not completed)

2. $$\textbf{\textit{Total Malnutrition Components Score as Percentage}} = \left(\frac{Total\ Malnutrition\ Components\ Score}{Total\ Malnutrition\ Components\ Score\ Eligible\ Denominators}\right) \times 100$$

3. $$\textbf{\textit{Aggregate Total Malnutrition Components Score as Percentage}} = \frac{(\sum Total\ Malnutrition\ Components\ Score\ as\ Percentage)}{\#\ Eligible\ Hospitalizations\ in\ the\ Measure\ Population}$$

# GMCS Eligible Denominators

To calculate the **Total Malnutrition Components Score as Percentage**, hospitals must identify the **Total Malnutrition Components Score Eligible Denominators** for each applicable hospitalization (i.e., totaling either 1, 2, or 4). This sum represents the number of GMCS components (or measure observations) that should be performed during a hospitalization based on the patient's clinical malnutrition needs.

**NOTE:** The **Total Malnutrition Components Score Eligible Denominators** will always be four EXCEPT in ***two*** instances:

- *The **Total Malnutrition Components Score Eligible Denominators** is one for hospitalizations with a performed Malnutrition Risk Screening if the patient is not identified as "at risk" for malnutrition*
- *The **Total Malnutrition Components Score Eligible Denominators** is two for hospitalizations with a performed Nutrition Assessment if the patient is not identified with a "Moderate" or "Severe" Malnourished Status*

# GMCS Episode Performance Example

**Calculating episode performance:**

- A hospitalization for a 68-year-old male with a length of stay of 4 days who was *screened for malnutrition risk* (Component 1) and identified at risk for malnutrition
- An RDN performed a *nutrition assessment* (Component 2), identified the patient as a moderately malnourished, and developed a *nutrition care plan* (Component 4)
- The *moderate malnutrition diagnosis* (Component 3) was documented in the EHR by the physician

# GMCS Episode Performance Example

1. **1** (*Component 1*) + **1** (*Component 2*) + **1** (*Component 3*) + **1** (*Component 4*) = **4** performed component clinical actions

**Interpretation:** Four Components or Measure Observations were performed or documented

2. **4** (*sum of performed component clinical actions*) ÷ **4** (*clinically eligible denominators*) = 1×100 = **100%**

**Interpretation:** 100% or four Components or Measure Observations were performed or documented for the four clinically eligible components

*Note that higher scores indicate better performance.*

# Higher Rates Among Each Component of the GMCS Indicates Better Overall Performance

**After GMCS reporting is operationalized, GMCS performance can be gauged by first assessing rates associated with each of the measure components.**

### #1: Rate of Completed Malnutrition Screening

Score reflects percent of all admitted patients who receive a malnutrition risk screening by an RN or RDN.

### #2: Rate of Completed Nutrition Assessment

Score reflects percent of patients who screen positive for malnutrition risk who then receive a nutrition assessment by an RDN.

### #3: Rate of Malnutrition Diagnosis Documentation

Score reflects percent of patients identified as malnourished during the nutrition assessment who then have a malnutrition diagnosis documented by a physician.

### #4: Rate of Documented Nutrition Care Plan

Score reflects percent of patients identified as malnourished during the nutrition assessment who then have a documented nutrition care plan created by an RDN.

GMCS: Global Malnutrition Composite Score; RN: Registered Nurse; RDN: Registered Dietitian Nutritionist

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# Additional Resources

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Additional Resources

# Additional Resources and Information About the GMCS Are Offered by CMS, MQii, and the Academy

## CMS /

- Global Malnutrition Composite Score measure information and specifications
- Composite quality measures information from AHRQ and CMS

## MQii /

- Malnutrition Quality Improvement Initiative
- Quick Start Guide
- GMCS for IQR webpage

*QR Code to the MQii GMCS Page*

## Academy of Nutrition and Dietetics /

- Global Malnutrition Composite Score webpage
- *Journal of the Academy of Nutrition and Dietetics* Oct. 2022 Supplement
- August Quarterly Spotlight on Malnutrition
- November Quarterly Spotlight on Malnutrition

## Other /

- Older Adults Will Benefit from a New Proposed CMS Malnutrition Quality Measure
- Proposed CMS Global Malnutrition Composite Score Measure Could Improve Malnutrition Care
- ASPEN Webinar on Interdisciplinary Implementation of the GMCS

GMCS: Global Malnutrition Composite Score; CMS: Centers for Medicare & Medicaid Services; AHRQ: Agency for Healthcare Research and Quality; IQR: Inpatient Quality Reporting

# Opportunities to Provide Input on GMCS

- To provide input, submit inquires, and offer formal measure comments on the GMCS or any eCQM, use the Office of the National Coordinator for Health Information Technology (ONC) Project Tracking System (Jira) eCQM Issue Tracker.
- For questions about the GMCS eCQM, please email malnutritionquality@avalere.com or quality@eatright.org.

**As a reminder, do not include any PHI or PII in any GMCS eCQM inquiry.**

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# Appendix: IQR Program Overview

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Appendix: IQR Program Overview

# Overview of the Hospital Inpatient Quality Reporting (IQR) Program

## Overview

- Established in 2003 as a **pay-for-reporting** program that requires hospitals to submit data on hospital quality and safety measures important to Medicare patients
- Results for IQR measures are **publicly reported** on the Care Compare website
- Hospitals subject to payment reductions under IQR are excluded from the Hospital VBP Program, established by the Affordable Care Act

## Timing and Participation

- Performance measures assessing the quality of care are submitted by more than 3,000 participating hospitals
- Data sets are due quarterly or annually, depending on the data set, throughout the calendar year (CY) for measurement

## Financial Incentives

- Measures reported in each CY affect payments 2 years later (e.g., reporting in CY 2022 affects payments in Fiscal Year 2024)
- Eligible hospitals that do not participate in the program, or those participating that do not meet all reporting criteria within the year, receive a one-fourth reduction of the applicable percentage increase in their annual payment update. They are also excluded from the Hospital VBP Program, **further reducing performance-based incentive payments**

## Quality Measures

- Measures included in IQR are generally focused on reducing hospital-related complications and mortality and ensuring appropriate, high-quality care
- Example measures include hospital-acquired infections, readmissions, mortality; HCAHPS; and specific measure bundles related to AMI, HF, PN, and joint replacements

Sources: Centers for Medicare & Medicaid Services (CMS). FY 2023 Inpatient Prospective Payment Systems (IPPS) final rule. Available here. CMS QualityNet. Hospital IQR Program Guide for FY 2024. Available here.

IQR: Inpatient Quality Reporting; VBP: Value-Based Purchasing; AMI: Acute Myocardial Infarction; HF: Heart Failure; PN: Pneumonia; HCAHPS: Hospital Consumer Assessment of Healthcare Providers and Systems

# For 2024 IQR Reporting, Hospitals Must Report on 6 eCQMs

## CMS requires reporting on 3 eCQMs:

- Safe Use of Opioids – Concurrent Prescribing
- Cesarean Birth
- Severe Obstetric Complications

## Hospitals must choose 3 additional eCQMs to report from the following list:

| | |
|---|---|
| • **Global Malnutrition Composite Score** | • Opioid-Related Adverse Events |
| • Severe Hyperglycemia | • Severe Hypoglycemia |
| • Discharged on Antithrombotic Therapy | • Antithrombotic Therapy by the End of Hospital Day 2 |
| • Intensive Care Unit Venous Thromboembolism Prophylaxis | • Venous Thromboembolism Prophylaxis |
| • Anticoagulation Therapy for Atrial Fibrillation/ Flutter | |

Source: CMS QualityNet. IQR Measures. Available here.
IQR: Inpatient Quality Reporting; eCQM: Electronic Clinical Quality Measure