Introduction to the Malnutrition Quality Improvement Initiative (MQii)
Presentation Outline

• Business Case for the Malnutrition Quality Improvement Initiative (MQii)
• Background on the MQii and Learning Collaborative
• The Malnutrition eCQMs & MQii Toolkit
• Opportunities for Engagement in the MQii
• MQii Tools and Resources to Support Your QI Project
Business Case for the MQii
Malnutrition Poses a Significant Burden to Hospitals

Associated with a 5x higher likelihood of in-hospital death\(^1\)

Affects 20-50% of patients, who are at risk of or malnourished upon hospital admission\(^2,3\)

Is typically diagnosed in only 7% of hospitalized patients, leaving many potentially undiagnosed and untreated\(^1\)

Associated with a 54% higher likelihood of 30-day readmissions\(^4\)

Creates greater risk of hospital-acquired infections, falls, pressure ulcers, and slower wound healing\(^5\)

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Malnutrition Contributes to High Healthcare Costs

$157 Billion
Morbidity, mortality, and direct medical costs associated with disease-related malnutrition

$51.3 Billion
Annual costs of disease-associated malnutrition attributable to older adult patients

Addressing Malnutrition Can Improve Patient Outcomes and Lower Costs

RECENT STUDIES DEMONSTRATE THAT PROVIDING OPTIMAL MALNUTRITION CARE IS ASSOCIATED WITH IMPROVED OUTCOMES

Optimizing nutrition care in an Accountable Care Organization (ACO) with multiple hospitals reduced readmission rates by 27%\(^1\)

Supporting early nutritional care can reduce pressure ulcer incidence, length of stay, 30-day readmissions, and costs of care\(^2\)

Implementation of a nutrition-focused quality improvement program resulted in over $4.8M in cost savings across four hospitals\(^3\)

Malnutrition Care Aligns with National Priorities for to Improve Healthcare Value

Optimal malnutrition care reduces adverse patient outcomes for which hospitals increasingly face penalties from the Centers for Medicare & Medicaid Services (CMS):

- **Hospital Readmissions Reduction Program:** 3% penalty
- **Hospital-Acquired Conditions Reduction Program:** 1% penalty
- **Hospital Inpatient Quality Reporting Program:** 1/4 reduction to market basket update
- **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.
Background on the MQii

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

This initiative aims to advance evidence-based, high-quality, patient-driven care for hospitalized older adults who are malnourished or at-risk for malnutrition.
The MQii Has Focused on Disseminating Best Practices for Malnutrition Care

ADVANCEMENT OF MALNUTRITION QUALITY OF CARE HAS BEEN SPEARHEADED BY AN INITIAL GROUP OF PIONEER INSTITUTIONS

- In 2015-2016, pioneering acute care facilities implemented and tested new MQii tools: (1) a standardized malnutrition quality improvement toolkit and (2) a set of four de novo malnutrition electronic clinical quality measures (eCQMs).

- In 2017, the MQii Learning Collaborative 2.0 is generating further evidence on the use of the eCQMs in combination with the Toolkit by assessing the impact and scalability of implementing these complementary tools to advance malnutrition care quality in 50 hospitals nationwide.*

* A description and overview of the 50 hospitals who participated in the Learning Collaborative 2.0 are included in the Appendix.
The MQii Provides a Dual-Pronged Approach to Achieve Malnutrition Standards of Care

The MQii Toolkit provides practical resources to enable hospitals to achieve optimal nutrition standards of care

MQii Toolkit Implementation

Dual-Pronged Approach:
Achieve Malnutrition Standards of Care

MQii eCQM Adoption

Data reported from eCQMs will help hospitals demonstrate their success in meeting the standards of care

**Both tools are available for free and public use at:** [http://www.MQii.Today](http://www.MQii.Today)
The Malnutrition eCQMs Were Developed to Reflect Best Practices

MALNUTRITION ECQMS ALIGN WITH THE MALNUTRITION CARE WORKFLOW

Screening
Completion of a Malnutrition Screening within 24 hours of Admission (patients age 18+) - MUC16-294

Assessment
Completion of a Nutrition Assessment for Patients Identified as At-Risk for Malnutrition within 24 hours of a Malnutrition Screening (patients age 65+) - MUC16-296

Diagnosis
Appropriate Documentation of a (Medical) Malnutrition Diagnosis (patients age 65+) - MUC16-344

Care Plan Development
Nutrition Care Plan for Patients Identified as Malnourished after a Completed Nutrition Assessment (patients age 65+) - MUC16-372

Intervention Implementation*
Implementation of a nutrition care plan including treatment for all patients identified as malnourished or at-risk for malnutrition

Monitoring / Evaluation & Discharge Planning*
Implementation of processes, including discharge planning, that support ongoing monitoring and support the care of patients identified as malnourished or at-risk for malnutrition

Clinician Typically Responsible for Each Step

• Nurse  • Dietitian  • Physician
• Dietitian
• Physician
• Dietitian
• Nurse
• Physician
• Dietitian
• Nurse
• Physician
• Dietitian
• Nurse

= Measure developed to address this step in the malnutrition care workflow

*Measures for monitoring and evaluation, and discharge planning were not technically feasible due to limitations in availability of measure data.
The Toolkit Provides Start-to-Finish Guidance for Your Entire Interdisciplinary Care Team

USE OF THE TOOLKIT WILL HELP YOU IDENTIFY AND ADDRESS OPPORTUNITIES FOR QUALITY IMPROVEMENT

• Includes implementation resources:
  o Soliciting leadership buy-in
  o Identifying a quality improvement project based on your hospital’s existing care practices
  o Understanding best practices for optimal malnutrition care
  o Using tools to support education and training
  o Tracking changes in care with data management information

• May potentially improve patient and economic outcomes of interest, such as readmissions and length of stay

Toolkit Components:

- The Importance of Malnutrition Care
- Assess Your Readiness
- Identify Malnutrition QI Opportunities
- Access the Toolkit
  • Training Materials
  • Clinical Workflow
  • Best Practice Recommendations
  • Data Collection Tools

Appendix: Principles and Models of Quality Improvement
Both Components of the Initiative are Grounded in Multi-Stakeholder Support

Advisory Committee
Toolkit design and implementation informed by representatives from:
• Joint Commission
• Academy of Nutrition and Dietetics
• American Nurses Association
• Patient organizations
• Hospitals
• Abbott Nutrition

Technical Expert Panel
Measure development informed by representatives from:
• Atlanta Medical Center
• Academy of Nutrition & Dietetics
• National Health Council
• EHRA Quality Measurement Workgroup
• North Fulton Hospital
• New York Presbyterian Hospital
• Nutrition Informatics Computrition
• University of Kansas Medical Center
• Cleveland Clinic
• Malnutrition Antagonists

MQii Toolkit Development

MQii eCQM Development

CMS
Approach informed by regular communication with CMS to ensure alignment with CMS quality goals and adoption of best practices for a quality improvement demonstration
MQii Aligns with HHS’ National Quality Strategy “Levers”

THE NATIONAL QUALITY STRATEGY STRIVES TO MAKE CARE SAFER AND MORE AFFORDABLE WHILE ENSURING PATIENT ENGAGEMENT, CARE COORDINATION, AND THE USE OF BEST PRACTICES

- Measurement and Feedback
- Public Reporting
- Certification, Accreditation, and Regulation
- Payment
- Health Information Technology
- Learning and Technical Assistance
- Consumer Incentives and Benefit Designs
- Innovation and Diffusion
- Workforce Development

MQii eCQMs

MQii Toolkit
Opportunities to Engage in the MQii
If Your Hospital Chooses to Pursue a MQii Project, You Will Have the Opportunity to:

1. **Pursue malnutrition-focused quality improvement** using an online multi-disciplinary toolkit and first-of-their-kind malnutrition eCQMs.

2. **Transform quality and performance** of malnutrition care delivery through shared learning of real-world approaches, best practices, and data.

3. **Implement evidence-based, high-quality, patient-driven malnutrition care** that reduces clinical variation, improves patient safety, and reduces costs and other negative patient outcomes.
Appendix: Getting Started with Your Malnutrition Quality Improvement Project
Appendix Outline

- Assembling Your Team
- Getting Started: Identify Your Opportunities and Select a QI Focus
- Using a PDSA Approach to QI
## Assembling Your Team: Recommended Roles and Responsibilities for Your Core Team

<table>
<thead>
<tr>
<th>Member</th>
<th>Role</th>
<th>Suggestions</th>
<th>Est Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Executive Sponsor</strong></td>
<td>Hospital Leader to champion the effort from a leadership perspective, works to maintain executive leadership buy-in</td>
<td>Recommend Executive Sponsor and Project Champion establish regular meetings (i.e., monthly) to receive progress updates</td>
<td>30 mins. per month to review progress and approach</td>
</tr>
<tr>
<td><strong>Project Champion</strong></td>
<td><em>Dietitian</em> who generates support and buy-in for project by all relevant parties. Leads day-to-day efforts for this initiative. Develops processes for this project at site and spreads enthusiasm across hospital about the effort. Attends all educational webinars, participates in discussion boards and leads Toolkit implementation (e.g., leads clinician training). A nurse and/or physician may serve as a Co-champion.</td>
<td>Recommend Project Champion establish a team of champions (see next slide) and lead weekly “huddles” throughout this effort to discuss barriers and next steps. It might be useful to hold meetings twice a week.</td>
<td>10 - 15 hours per month <em>(depends on QI focus and resources)</em></td>
</tr>
<tr>
<td><strong>IT/Informatics Representative</strong></td>
<td>Assist with collecting and analyzing data elements required for eCQMs, length-of-stay, readmissions, and any other necessary data</td>
<td>Recommend maintaining regular communications with the Project Champion to ensure timely transmission of data</td>
<td>10 - 15 hours total to build eCQM report</td>
</tr>
</tbody>
</table>
## Assembling Your Team: Value of Including Champions for Each Role in the Care Team

<table>
<thead>
<tr>
<th>Role</th>
<th>Value-Add</th>
<th>Est Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dietitian Champion</strong></td>
<td>If the Project Champion is not a dietitian, we recommend engaging a dietitian leader who will champion this effort across dietitians and make sure targeted QI changes are adopted. It is also ideal to include a dietitian staff member on the team in addition to the dietitian project champion</td>
<td>4 – 8 hours per month (Depends on QI focus)</td>
</tr>
<tr>
<td><strong>Nurse Champion</strong></td>
<td>Nurses are the first line of defense to identify malnourished patients. They also play a critical role in implementing interventions and discharge planning. It can be useful to have a nurse champion the value of this effort across nursing staff and make sure their nutrition care responsibilities are implemented effectively.</td>
<td>4 – 8 hours per month (Depends on QI focus)</td>
</tr>
<tr>
<td><strong>Physician Champion</strong></td>
<td>Physicians play a critical role in implementing interventions, particularly when establishing a diagnosis and support optimal care coordination amongst members of the care team. We recommend securing support from a physician leader who will champion this effort and make sure targeted QI changes are adopted.</td>
<td>4 – 8 hours per month (Depends on QI focus)</td>
</tr>
</tbody>
</table>
## Assembling Your Team: Suggested Additional Team Member

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Value-Add</th>
<th>Est Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Improvement Team Representative</td>
<td>A representative from your institution’s Quality Improvement Department/Committee should be identified to serve as a liaison responsible for the identification of existing quality improvement tools and resources within your institution to support implementation.</td>
<td>1 hour a month to attend huddles</td>
</tr>
</tbody>
</table>
Getting Started: Identify Your Opportunities and Select a Quality Improvement Focus

- Engage Your Project Team and Secure their Commitment
- Identify and Map Your Workflow and Compare to Recommended Best Practices
- Complete the Assessment and Decision Tool
- Use the Output to Select your QI Focus and Intervention
- Plan Your Implementation and Introduce the Changes
Using a PDSA Approach to QI Allows You to Pursue Improvements with Guidance from eCQM Data

Prepare for Engagement with Care Teams, Plan for Training
- How to Get Started Checklist
- Care Assessment & Decision Tool
- Best Practice Workflow Template
- Root Cause Analysis Template*
- PDSA Cycle Templates*

Train Care Teams on New Workflows or Documentation
- Implementation Roadmap*
- QI Implementation Project Charter*

Assess eCQM Performance to Identify Areas of Opportunity for Improvement
- Sustainability Plan Template*
- Lessons Learned Log*

Collect Performance Data to Calculate eCQMs
- eCQM Specifications Manual
- eCQM Data Extract Template
- eCQM Performance Calculator*
- Lessons Learned Log*

Each tool includes guidance on how and when your team is recommended to use it to support QI decision-making and/or your QI implementation approach

QI: Quality Improvement

*Tools referenced can be found on the MQii website at: http://www.MQii.Today
MQii Tools To Support Participants’ QI Initiatives (1/2)

PROJECT MANAGEMENT TOOLS IN THE PLAN & DO STEPS OF THE PDSA CYCLE FOCUS ON SETTING UP YOUR QI INITIATIVE AND PROJECT TEAM

Each tool includes guidance on how and when it can be used to support you with managing your QI intervention

<table>
<thead>
<tr>
<th>Plan Resources</th>
<th>Do Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How to Get Started Checklist</strong></td>
<td><strong>Implementation Roadmap</strong>*</td>
</tr>
<tr>
<td>Outlines critical steps for beginning a malnutrition QI project</td>
<td>Recommends actions for your implementation period, including expected outcomes and suggested timing</td>
</tr>
<tr>
<td><strong>Root Cause Analysis Template</strong>*</td>
<td><strong>QI Implementation Project Charter</strong>*</td>
</tr>
<tr>
<td>This will facilitate and allow you and your team to drill down to the root cause and find optimal solutions</td>
<td>Planning tool to be completed with your team as you work through the Implementation Roadmap</td>
</tr>
<tr>
<td><strong>Best Practice Workflow Template</strong></td>
<td><strong>Care Assessment &amp; Decision Tool</strong></td>
</tr>
<tr>
<td>Allows you to map your current workflow and compare it to the recommended best practice workflow</td>
<td>Guides your team’s understanding of the current state of malnutrition care</td>
</tr>
<tr>
<td><strong>PDSA Cycle Templates</strong>*</td>
<td><strong>“Plan” Resources</strong></td>
</tr>
<tr>
<td>After you assess your progress the PDSA cycle will help you prepare and take any next steps</td>
<td><strong>“Do” Resources</strong></td>
</tr>
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QI: Quality Improvement

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MQii Tools To Support Participants’ QI Initiatives

PROJECT MANAGEMENT TOOLS IN THE STUDY & ACT STEPS OF THE PDSA CYCLE FOCUS ON IMPLEMENTATION, COLLECTING AND ANALYZING DATA

Each tool includes guidance on how and when it can be used to support you with managing your QI intervention

<table>
<thead>
<tr>
<th>“Study” Resources</th>
<th>“Act” Resources</th>
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</table>
| **eCQM Specifications Manual**<br>Provides you with guidance for how to implement the four malnutrition eCQMs | **Sustainability Plan Template** *
Guides you with development of a plan for short- and long-term strategies for sustaining improvements |
| **eCQM Data Extract Template**<br>Guides your IT team / analyst in development of an EHR extract to collect eCQM data | **Lessons Learned Log** *
Allows you to use those lessons logged during implementation to extract insights and identify potential modifications that may be made to your project |
| **eCQM Performance Calculator** *
Allows you to use your extracted EHR data to calculate your hospital’s eCQM performance | **Lessons Learned Log** *
Provides a template for documenting the lessons learned over the course of your QI implementation |

QI: Quality Improvement

*Tools referenced can be found on the MQii website at: [http://www.MQii.Today](http://www.MQii.Today)
Data Collection Will be Critical to Implementation

Engage Your IT Team and Secure their Commitment

Identify and Map Data Elements & Build eCQM report

Run Report and Evaluate Performance

Use the Report to Measure Progress

Refine the Report as Needed to Align with Your MQii Goals
Appendix: Overview of MQii Learning Collaborative 2.0
MQii Learning Collaborative 2.0: An Overview of Participating Sites

- 50 Learning Collaborative 2.0 sites participated across 14 states in 2017
- Hospitals represented both public and private institutions, academic medical centers, community hospitals and small to large facilities

U.S Distribution of Recruited Sites

Demographics

- **Bed size**: 25 – 1,371
- **Number of Dietitians on Staff**: 3 – 26
- **Geographic Distribution**:
  - Urban: 80%
  - Rural: 20%
- **EHR Platforms**:
  - Epic: 70%
  - Cerner: 28%
  - AllScripts: 2%