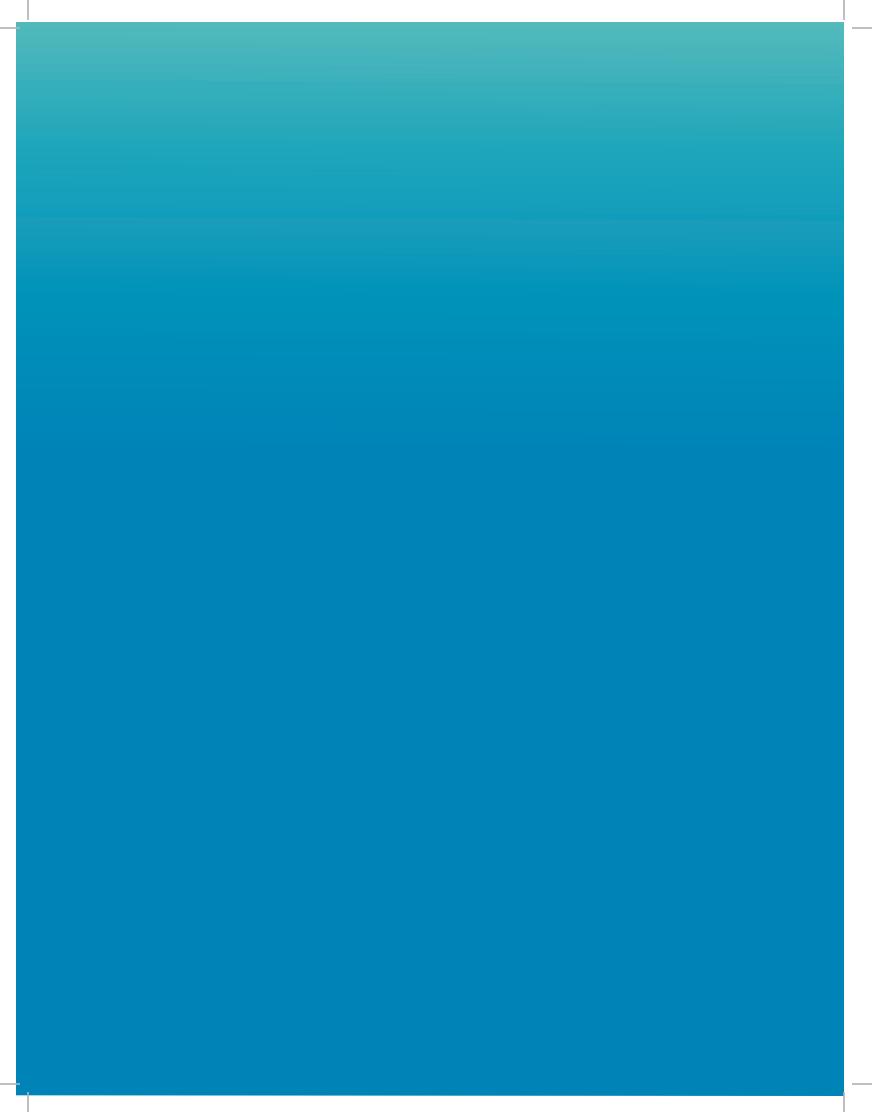
# Dialogue Proceedings / Launching the Malnutrition Quality Improvement Initiative

November 2014







## DIALOGUE PROCEEDINGS / LAUNCHING THE MALNUTRITION QUALITY IMPROVEMENT INITIATIVE

In light of growing efforts over the past decade to improve quality of care in the United States, malnutrition is an area that has largely remained unaddressed by national programs and initiatives, despite its notable negative impact on patient outcomes and costs of care.

In order to gain consensus on the impact of malnutrition in the U.S. and explore approaches for malnutrition quality improvement to achieve better patient outcomes, Avalere Health LLC ("Avalere"), and the Academy of Nutrition and Dietetics ("the Academy") held an initial Dialogue event in November 2013, with participation from professional societies, government agencies, patient advocacy organizations, and industry representatives. Based on the outputs of that Dialogue event, Avalere and the Academy, along with other stakeholders, engaged in additional activities between November 2013 and September 2014 to continue to explore approaches to advance malnutrition care in the U.S. These activities culminated in a second Dialogue event on September 16, 2014, "Launching the Malnutrition Quality Improvement Initiative," during which Avalere and the Academy shared progress to date on malnutrition quality improvement activities with key stakeholders, officially introduced a quality initiative to improve patient outcomes, and obtained expert input on pathways for successful implementation.

This document highlights these activities, including:

- 1. An overview of the initial Dialogue event in November 2013
- 2. Research for best practices in malnutrition care
- 3. Planning the development of a "Malnutrition Quality Improvement Initiative" (MQII)
- 4. A follow-up Dialogue event in September 2014 to launch the MQII and define optimal approaches to enhance malnutrition care

Support for the Dialogue was provided by Abbott.

#### **BACKGROUND**

Malnutrition is a leading cause of morbidity and mortality, especially among the elderly. Malnutrition can be related to poor nutrition, chronic disease, or an acute condition or illness. It is most simply defined as any nutritional imbalance and may be represented by either "undernutrition" or "overnutrition." Malnutrition is often accompanied by the presence of two or more of the following characteristics: insufficient energy intake, weight loss, loss of muscle mass, loss of subcutaneous fat, localized or generalized fluid accumulation, or decreased functional status.<sup>1</sup>

Evidence suggests that 20 percent to 50 percent of patients are at risk for or are malnourished at the time of hospital admission.<sup>2</sup> Furthermore, patients who are malnourished
while in the hospital have a greater risk of complications, readmissions, and length of stay,
which is associated with up to a 300 percent increase in costs.<sup>3</sup> Clinical guidelines recommend screening, assessment and diagnosis, nutritional intervention, education/counseling,
discharge planning, and use of care plans for patients who are malnourished or at high isk
of being malnourished. However, evidence suggests variability in the delivery of this
recommended care.<sup>4-7</sup> Furthermore, research shows that initiatives targeted at improving
quality of care related to malnutrition in the hospital setting (e.g., screening at admission
for at-risk patients, ongoing monitoring at regular intervals) can reduce the rates of malnutrition in the hospital and improve patient outcomes.<sup>8,9</sup> Based on these findings, Avalere
and the Academy undertook efforts to better identify gaps in malnutrition care, define
what constitutes "optimal" malnutrition care, and introduce quality improvement activities
aimed at addressing challenges in caring for malnourished hospitalized patients.

## Malnutrition Dialogue 1.0: "Measuring the Quality of Malnutrition Care in the Hospitalized Elderly Patient" (November 2013)

During an initial Dialogue event held in Washington, DC, on November 11, 2013, a diverse group of stakeholders met to discuss the impact of malnutrition in the U.S. and identify approaches to address the issue. Participants agreed that malnutrition in the hospital setting represents a significant issue with clear implications for patient outcomes and resource use. In addition, there was consensus around key barriers to optimal malnutrition care. Dialogue participants also reviewed and discussed 37 potential approaches to improve, monitor, and measure malnutrition care. Following this discussion, participants identified eight areas as priority topics for near-term quality improvement and measurement. Figure 1 captures key areas of consensus regarding challenges to optimal malnutrition care from this initial Dialogue event, while Figure 2 highlights the eight areas prioritized for near-term action. A detailed summary of the discussion and outputs from that Dialogue event are provided in a separate proceedings document.

i For the purposes of this document, undernutrition is the primary focus.

ii For additional information on the November 2013 Dialogue proceedings, please see "Dialogue Proceedings / Measuring the Quality of Malnutrition Care in the Hospitalized Elderly Patient." Available at: http://avalerehealth.com/expertise/life-sciences/insights/dialogue-proceedings-measuring-the-quality-of-malnutrition-care

#### Figure 1. Areas of Consensus Regarding Key Barriers to Optimal Malnutrition Care

- There is a lack of recognition of the magnitude of the malnutrition problem in the U.S.
- Care for malnutrition is complex, requiring multiple providers, including physicians, dietitians, and nurses to be involved in numerous aspects of malnutrition care across various settings of care.
- Various information systems are used in nutrition care, adding to the complexity of addressing the issue.
- The hospital culture does not regard nutrition as medical care, and does not facilitate a team-based approach to address malnutrition.

Figure 2. Areas Prioritized for Malnutrition Quality Improvement and Measurement

- Execution of a Nutrition
   Care Plan
- Use of a Validated Nutrition Screening Tool
- Use of a Validated Nutrition Assessment Tool
- Muscle Wasting as an Undesirable Outcome

- Patient Satisfaction as an Outcome
- Malnutrition as a "Never Event"
- Workforce: Provision of Team-Based Care
- Use of an Electronic Health Record (EHR) Template

Based on the outputs of the initial Dialogue, Avalere and the Academy determined that to advance quality of care for malnutrition a number of immediate next steps were necessary. First, they decided to conduct a review of "best practices" for malnutrition care to better understand optimal approaches to care for patients with malnutrition, and inform broad malnutrition quality improvement efforts. To improve patient outcomes by mitigating the impact of malnutrition, Avalere and the Academy recognized the need to establish a malnutrition-focused quality improvement initiative. Finally, the organizations sought additional stakeholder input through a second Dialogue to prioritize among malnutrition quality improvement approaches and guide the design of the quality improvement initiative.

#### **Summary of Nutrition Best Practices Research**

In order to better understand optimal nutrition care practices, Avalere conducted targeted interviews with U.S. hospitals identified as leaders in delivering optimal nutritional care. The specific objectives of this research were to:

- Fill a knowledge gap in the public domain by formally documenting: "What does good malnutrition care look like?" with best practice examples from a sample of U.S. hospitals;
- Provide a source of evidence for new quality measure generation by ensuring that measures target the most effective practices and inform the development of necessary data infrastructure; and
- Serve as a tool to help share best practices across stakeholders and facilitate integration of such practices into new healthcare models, starting with a quality improvement initiative.

Avalere and the Academy collaborated to identify 10 hospitals to interview utilizing a survey that addressed a number of requirements and a supplementary literature review. Questions in the survey sought to assess respondents' alignment with the following criteria:

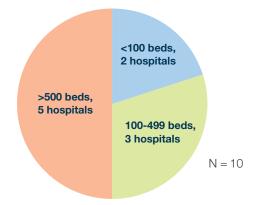
- 1. Current position of the respondent in an acute care hospital;
- 2. Use of a validated nutrition screening tool;
- 3. Presence of a multidisciplinary nutrition care delivery process that is integrated into the broader patient care plan; and
- 4. Nutrition care facilitated by an electronic health record (EHR) system that is capable of computerized provider order entry and clinical decision support.

Registered dietitians from 105 hospitals participated in the survey. The supplementary literature review identified additional potential hospitals using the same criteria outlined above. Avalere and the Academy selected potential interviewee hospitals by targeting those that either responded in the affirmative to all survey questions or met the same criteria in the literature review findings. Figures 3 and Figure 4 illustrate the demographic characteristics of the 10 selected institutions included in this research.

Figure 3. Geographic Distribution of Institutions



Figure 4. Bed Size of Institutions



Location of institutions interviewed

Avalere conducted a series of group interviews via teleconference with 37 healthcare professionals including nurses, registered dietitians, pharmacists, and physicians. The interviews aimed to document multidisciplinary approaches to nutrition care for malnourished and at-risk hospitalized patients. Best practices were identified across 6 domains for the 10 hospitals interviewed. These domains are listed in Table 1, along with examples of best practices identified in each domain.

**Table 1. Best Practice Domains and Examples** 

Best Practice Domain:	Example of Best Practice:
Development of the Nutrition Care Delivery Process	Harnessing the energy and dedication of an internal "champion" to promote quality improvement efforts in nutrition
Structure of the Nutrition Care Delivery Process	Completion of malnutrition screening within 24 hours of admission; Completion of nutrition assessment for patients who are malnourished or found to be at risk for malnutrition within 24 to 48 hours; Monitoring of the patient while on the nutritional intervention, often by a multidisciplinary team, and adjusting the nutrition care plan as needed; Discharge planning that is tailored to each patient's needs, incorporates feedback from patients and caregivers and the entire multidisciplinary care team when appropriate, and facilitates continuity of care
Roles and Composition of the Care Team	Delivery of malnutrition care by a multidisciplinary team including nurses, dietitians, physicians, pharmacists, discharge planners, speech language pathologists, social workers, food service providers, and kitchen staff
Integration of Nutrition Care into Broader Patient Care Delivery Process	Establishment of a care plan for at-risk or malnourished patients and embedding nutrition components into the broader patient care plan; Inclusion of dietitians in patient care rounds
Ensuring Compliance with the Nutrition Care Delivery Process	Development of training modules and case studies to provide additional training to dietitians
Critical Role of the Electronic Health Record (EHR)	Integration of EHR system into all care processes from patient admission through patient discharge to facilitate communication across information systems such as pharmacy or food service systems

A full list of best practices identified in each of these categories is provided in Appendix I.

iii While Avalere solicited information on a seventh best practice domain, "Outcomes of the Nutrition Care Delivery Process," no meaningful findings were identified in this domain.

#### Overview of the Malnutrition Quality Improvement Initiative (MQII)

As a result of the outputs of the first Dialogue event and the subsequent best practices research, Avalere, the Academy, and other stakeholders have embarked on the development of a "Malnutrition Quality Improvement Initiative" to advance the quality of care for malnutrition. The framework below (Figure 5) provides an overview of the goals and approach for this Initiative.

Figure 5. Proposed Framework for Malnutrition Quality Improvement Initiative

#### WHAT IS OUR GOAL?

Reduce the burden of malnutrition in the hospital setting by improving the quality of nutrition care, defined by improved clinical outcomes and reduced cost of care

#### WHAT ARE KEY LEVERS TO ACHIEVE OUR GOAL?

Adapt QI tools\*

Define quality measures

Support enhanced evidence generation

Promote awareness of best practices

#### **HOW DO WE ACHIEVE OUR GOAL?**

By demonstrating:

Impact of nutrition and care delivery processes on malnourished and at-risk patient outcomes

Feasibility of implementing a specific set of best practices

Feasibility of utilizing HIT to support adoption of the best practices\*

Ability to extract data for quality measure design, testing, and reporting

#### WHAT ARE OUR DESIRED RESULTS?

Support uptake and measurement of identified best practices

Increased uptake of best practices to close gaps in malnutrition care

Definition and use of high-priority malnutrition quality measures in accountability programs

An Advisory Committee of experts<sup>iv</sup> has been convened to provide guidance for the development of the MQII. Throughout the course of the MQII, these experts will inform the design and implementation of the MQII, raise awareness for the Initiative, review MQII materials (e.g., draft Initiative protocol), help recruit key partners, and support the achievement of established milestones for the Initiative.

<sup>\*</sup>QI: Quality improvement; HIT: Health information technology

iv The Advisory Committee is composed of experts in the design and implementation of QI initiatives, measure development, healthcare delivery, nutrition care, and nutrition care research.

In addition, to support alignment with other nutrition quality improvement (QI) efforts and avoid duplication in launching the MQII, Avalere conducted an environmental scan of other malnutrition-focused QI efforts in the U.S. The environmental scan found no current U.S.-based quality improvement initiatives designed to address malnutrition in the hospital setting as their primary focus, although some initiatives were identified that address malnutrition or other nutrition issues as components of a broader initiative. The lack of existing malnutrition-focused initiatives highlighted a prime opportunity for the MQII to improve the quality of malnutrition care.

Avalere and the Academy convened a Dialogue in September 2014 to garner expert input on how to appropriately structure, design, and implement the MQII.

## MALNUTRITION DIALOGUE 2.0 EVENT SUMMARY: "LAUNCHING THE MALNUTRITION QUALITY IMPROVEMENT INITIATIVE" (SEPTEMBER 2014)

#### Overview

Avalere and the Academy held a second Dialogue event on September 16, 2014, in Washington, DC. This Dialogue aimed to achieve the following objectives:

- Share progress to date on efforts to assess and improve the current state of malnutrition care;
- Introduce the MQII; and
- Generate expert input on pathways for successful implementation of the MQII.

Participants in this event included experts with experience from professional societies, government agencies, patient advocacy organizations, health systems, and industry organizations. A full list of Dialogue participants is provided in Appendix II.

#### **Dialogue Discussion Summary**

Overview of the Impact of Malnutrition and Initial Activities to Address the Issue

At the beginning of the Dialogue, Alison Steiber, Chief Science Officer at the Academy of Nutrition and Dietetics, provided a review of the significance of malnutrition in the U.S. Dr. Steiber shared evidence on the incidence and risk factors of malnutrition, as well as the impact of malnutrition on patient outcomes. She also discussed the body of evidence suggesting wide variability in care for malnutrition, and introduced the "Nutrition Care Process," which is intended to encourage adoption of good clinical processes. Following this presentation, Dayo Jagun, Director at

Avalere Health, provided an overview of key takeaways from the first Dialogue event in 2013, as well as the activities that have occurred over the past year as a result of feedback received at that event.

#### Malnutrition Quality Improvement Initiative Overview

Kristi Mitchell, Senior Vice President at Avalere Health, next provided an overview of the framework and vision for the MQII (see Figure 5 on page 8). Participants were asked to share feedback on the "problem" the Initiative should target relative to malnutrition. While participants did not reach consensus on a single problem statement, a number of key themes—which built upon those identified during the first Dialogue event—were highlighted. These include the following:

- Poor coordination of care among providers and settings of care
- Inadequate identification of malnourished patients or patients at risk for malnutrition
- Lack of ownership of patient malnutrition care needs in the hospital setting
- Lack of standardization of definitions
- Limited nutrition information generally found in EHRs
- Lack of understanding or appreciation of the established link between appropriate nutritional interventions and cost savings

Dialogue participants then provided some initial feedback on the MQII approach. Recommendations included the following:

- 1. Consider narrowing the focus to manageable, measurable components to clearly demonstrate the link between the introduced best practice and desired objectives (e.g., improved outcomes, reduced variability of care).
- 2. Ensure that the framework/approach of the MQII is patient-centered in order to reflect patient care needs and achieve improvements in outcomes related to malnutrition care that are most important to patients.
- 3. Highlight the importance of the impact of nutritional interventions on reduced costs of care or its indicators (such as readmission or length of stay) to help create a value proposition for payers and other stakeholders.
- 4. Maintain alignment with the National Quality Strategy (NQS) by identifying approaches that further the aims and priorities of the NQS in order to enhance buy-in and support for the Initiative by key stakeholders.

#### Sharing Quality Improvement Lessons Learned

To further inform the development of the MQII, five Dialogue participants were asked to briefly present a description, impact, and lessons learned from the implementation of national and/or local quality improvement efforts or initiatives. During these presentations, participants shared several takeaways and lessons learned that are of potential relevance to the MQII, captured in Figure 6.

Figure 6: Takeaways and Lessons Learned to Inform the MQII

#### Role of the Physician/ Nurse Champion

Securing a champion for the MQII at each site is critical to the success of the Initiative in order to ensure active participation of the site, buy-in from necessary healthcare professionals, and integration of health care professionals throughout the institution.

#### **Tracking Impact**

Identification of quality indicators or measures to monitor impact is essential. While clinical outcomes are important, in order to truly gain traction, the Initiative must have an impact on cost of care.

#### **Provider QI Tools**

Development/
identification of toolkits
are an important
piece of QI initiatives
in order to support
provider improvement.
Providers respond
more positively to
QI tools than they
do to requirements
(e.g., quality
measure reporting
requirements).

#### **Data Collection**

To minimize burden and ensure data quality, standardized data collection, management, and reporting for the MQII is essential. Given limited resources, documentation and data collection must be integrated into the clinical workflow whenever possible.

#### Data Quality

It will be important to collect the highest quality data possible in a real-world setting, while recognizing that the data will not meet the "gold standard" (i.e., be of the quality associated with randomized controlled trials). The MQII should focus on collecting data in a manner that is feasible and best supports the Initiative's objectives.

#### Stakeholder Engagement

Involvement of stakeholders from an early stage is essential, including patients, consumers, and purchaser groups.

#### **Incentives**

Obtaining broad buy-in for the MQII requires alignment with provider incentives (e.g., linking to provider payments).

#### **Learning Networks**

Establishing a network of clinicians and other providers to discuss best practices, address provider questions, and exchange ideas can provide valuable support when implementing a QI initiative. In addition, providing opportunities for mentorship can be of particular importance to support low-performing providers.

v The five Dialogue presentation topics and their presenters are as follows: Development of a National Quality Improvement Initiative: Karim Godamunne, MD, MBA, SFHM, North Fulton Hospital and Society of Hospital Medicine Representative; Local Implementation of a Quality Improvement Initiative: Michael Englesbe, MD, University of Michigan Health Systems; Establishing Provider and Patient Tools: Sharon McCauley, MS, MBA, RDN, LDN, FADA, FAND, Academy of Nutrition and Dietetics; eMeasure Development: Maureen Dailey, PhD, RN, CWOCN, American Nurses Association; Establishing Data Standards for Quality Measurement and Reporting: Kevin Larsen, MD, Office of the National Coordinator for Health Information Technology.

Interactive Session to Brainstorm MQII Design and Implementation

Following these presentations, participants were assigned to three breakout groups to brainstorm on what a "good" QI initiative might look like. Participants were asked to provide input on the design of the MQII, implementation of the MQII, and metrics of success. Following the breakout session, one representative from each group presented an overview of the group's recommendations. Figure 7 summarizes the high-level recommendations from each group.

**Figure 7. Breakout Session Recommendations** 

## BLUE GROUP RECOMMENDATIONS

- **Setting:** Accountable care organization (ACO)
- Population: Age 65+ hospitalized patients
- Design: Introduce a nutrition care plan, communicate it upon discharge, and track its impact on patient nutritional status and readmission rates over the course of 6 months to 1 year using a patient survey and administrative data

## RED GROUP RECOMMENDATIONS

- Setting: Academic medical center (integrated delivery system)
- **Population:** Elderly surgical patients
- Design: Use a nutrition care plan intervention (including screening, assessment, treatment/intervention, and monitoring) over a 3–6 month timeframe using a clustered design

## GREEN GROUP RECOMMENDATIONS

- Setting: Hospital
- Population: Age 65+ hospitalized patients with chronic conditions
- Design: Screen all patients and implement a "checklist" intervention using the Nutrition Care Process (nutrition assessment, diagnosis, intervention, monitoring/evaluation); Utilize a prepost, non-control design and monitor 30-day admissions, 30/90 day mortality, complications, and costs

#### Recommendations for MQII Design and Implementation

While certain aspects of the recommendations varied across the three groups, some common themes emerged, including the following:

- **Population:** Focus on patients over 65 years of age given the significant impact malnutrition has on this population and their healthcare outcomes, as well as the higher risk and prevalence of malnutrition for this patient population.
- Setting: Implement the MQII in an integrated delivery system or similar closed system to optimize feasibility and measuring of impact. For instance, use of such a system would introduce efficiencies, enable more clear tracking of the impact of the Initiative on outcomes of interest, and facilitate use of sites that are comparably structured and which employ integrated electronic medical record and administrative systems.
- **Design:** Focus on assessment of multiple aspects of nutrition care, including screening, assessment, intervention, and monitoring. Consider lessons learned from the development of bundles (e.g., the sepsis bundle) and checklists (e.g., the surgical safety checklist) in selecting an approach for the MQII. For example, the sepsis bundle has demonstrated success in improving care, but implementation of this type of approach may introduce challenges, including establishing accountability for team members. By contrast, the checklist approach has been successful in many examples, but is generally only appropriate for more simple care processes that occur in a single moment in time (such as a pre-operative "time out" to ensure all necessary presurgical steps have been completed).
- Outcomes of Interest: Focus on important outcomes of interest such as mortality, cost, length of stay, quality of life, patient engagement and/or satisfaction, variability in nutrition care, readmissions, and complications.

Participants emphasized that several challenges will need to be overcome to support successful implementation of the MQII. For example, buy-in from surgeons and other physicians will be essential to the success of the MQII. In addition, as demonstrated by the "lessons learned" shared by Dialogue participants who had implemented QI initiatives, having a "champion" at each site is critical. However, gaining buy-in and identifying a champion can be difficult in practice, given the many new quality of care, payment, and delivery demands facing clinicians and the need to define clearly the value proposition of new QI efforts for hospital professionals. Furthermore, involving patients and families in nutrition care is of high importance but can be challenging in practice. As such, hospitals will need to be responsive to patient preferences and desires, and cultures within these institutions (e.g., patient-provider interaction, time and resources allocated to patient education) will need to center on optimally supporting patient and caregiver engagement.

## NEXT STEPS FOR THE MALNUTRITION QUALITY IMPROVEMENT INITIATIVE (MQII)

The input provided by the September 2014 Dialogue participants will be used to inform and guide the design of the MQII, which will be further refined by the Advisory Committee members. The pilot phase of the MQII is anticipated to launch in early 2015, following identification of a pilot site, creation of a pilot protocol, and review and approval by an institutional review board. The goal is to complete the pilot project by the end of 2015, utilizing a scalable design that eventually can be expanded to other sites.

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## APPENDIX 1: NUTRITION CARE IN THE HOSPITAL SETTING: BEST PRACTICE EXAMPLES

#### **Development of the Nutrition Care Delivery Process**

- Harnessing the energy and dedication of an internal "champion" to promote quality improvement efforts in nutrition
- Integration of malnutrition care improvement efforts during times of broader organizational changes (e.g., Electronic Health Record (EHR) system update, broader hospital quality improvement efforts)
- Use of external resources or mandates such as specialty society guideline recommendations or Joint Commission accreditation requirements as impetus for malnutrition-focused quality improvement efforts

#### **Structure of the Nutrition Care Delivery Process**

- Completion of malnutrition screening within 24 hours of admission
- Utilization of malnutrition screening tools that are appropriate for each hospital's population and practice culture. These tools include validated tools such as the Malnutrition Screening Tool (MST), modified versions of validated tools, and tools unique to the hospital's patient population
- Use of risk-based triggers for nutrition assessment (though institutions' definition of "risk" varies), with more timely introduction of nutrition intervention based on specific triggers (e.g., higher risk level assigned to patient)
- Completion of nutrition assessment using a standardized template for patients who are malnourished or found to be at risk for malnutrition within 24 to 48 hours
- Introduction of dietitian ordering privileges to facilitate more timely care and intervention
- Monitoring of the patient while on the nutritional intervention, often by a multidisciplinary team including at a minimum a nurse and a dietitian, and adjusting the nutrition care plan as needed
- Re-screening of patients, including those who had an initial negative screen (no nutrition risk) within a specific timeframe typically defined by length of stay
- Discharge planning that is tailored to each patient's needs, incorporates feedback from patients and caregivers and the entire multidisciplinary care team when appropriate, and facilitates continuity of care

#### **Roles and Composition of the Care Team**

- Delivery of malnutrition care by a multidisciplinary team including nurses, dietitians, physicians, pharmacists, discharge planners, speech language pathologists, social workers, food service providers, and kitchen staff
- Adaptation of the care team composition to patient needs depending on patient's pre-existing or emergent diagnoses during the stay, level of acuity, and type of treatment required
- Close collaboration across care team members to prevent conflicts across interventions used (e.g., timing of medical therapies and nutrition interventions)
- Patient and family inclusion in the care team and their engagement in identifying patient preferences, completing the nutrition assessment, education around care plans, and reviewing post-discharge care needs

#### **Integration of Nutrition Care into Broader Patient Care Delivery Process**

- Establishment of a care plan for at-risk or malnourished patients and embedding nutrition components into the broader patient care plan
- Communication of nutrition care plans to all care team members both within and outside of nutrition care teams through multiple channels (usually EHR documentation, verbal or written communications)
- Inclusion of registered dietitians in daily patient rounds to ensure that appropriate nutrition care is provided, ad hoc assessments can take place, and care team education can occur if necessary
- Use of EHR systems to fully integrate nutrition care planning processes, interventions, and patient notes into overall care plans

#### **Ensuring Compliance with the Nutrition Care Delivery Process**

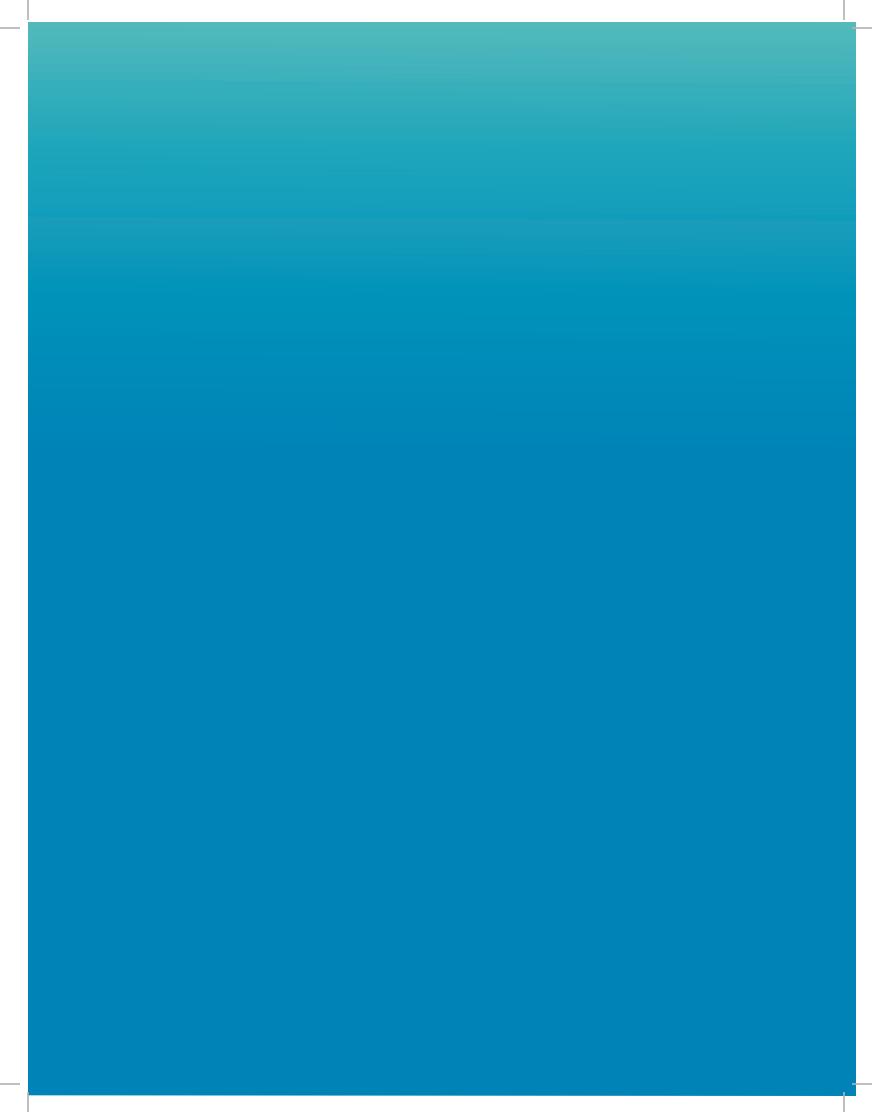
- Execution of regular, randomized electronic chart audits, with any discrepancies between malnutrition care provided and expected standards addressed by the individual dietitian
- Development of training modules and case studies to provide additional training to dietitians
- Documentation of daily care logs by all dietitians in a standardized and systematic way

#### **Critical Role of the EHR**

- Integration of EHR system into all care processes from patient admission through patient discharge to facilitate communication across information systems such as pharmacy or food service systems
- Source for all malnutrition care documentation provided through standardized EHR templates
- Facilitation of documentation using standardized terminology such as Nutrition Care Process Terminology (NCPT)
- Generation of automated requests to dietitians for nutrition assessments based on the results of nutrition screening entered by a nurse, or consult requests from patient care team members
- Ability to access or visualize nutrition care plans and notes alongside patient medical notes documented by other healthcare professionals

#### **APPENDIX 2: SEPTEMBER 2014 DIALOGUE PARTICIPANTS**

Name	Title, Organization
Dayo Jagun, MBBS, MPH (Dialogue Facilitator)	Director, Avalere Health LLC
Kristi Mitchell, MPH (Dialogue Facilitator)	Senior Vice President, Avalere Health LLC
Alison Steiber, PhD, RDN (Dialogue Facilitator)	Chief Science Officer, Academy of Nutrition and Dietetics
Naseer Ahmed, MD	Director, Clinical Development, Abbott Nutrition
Connie Bell, MPH, RN	Education Manager, American Kidney Fund
Bob Blancato, MPA	Executive Director, National Association of Nutrition and Aging Services Program
Steve Brotman, MD, JD	Senior Vice President, Payment and Health Care Delivery Policy, AdvaMed
Maureen Dailey, PhD, RN, CWOCN	Senior Policy Fellow, Health Policy, American Nurses Association
Michael Englesbe, MD	Associate Professor of Surgery, University of Michigan Health Systems
Karim Godamunne, MD, MBA, SFHM	Chief Medical Officer, North Fulton Hospital; Representative to the Alliance to Advance Patient Nutrition, Society of Hospital Medicine
Kessey Kieselhorst, MPA, RD, LDN, CPHQ	Director, Regulatory Performance Improvement, Geisinger Health System
Emma Kopleff, MPH	Senior Policy Advisor, National Partnership for Women & Families
Kevin Larsen, MD	Medical Director, Meaningful Use Office, Office of the National Coordinator for Health Information Technology
Ainsley Malone, MS, RD, LD, CNSC, FAND	Nutrition Support Dietitian, American Society for Parenteral and Enteral Nutrition
Sharon McCauley, MS, MBA, RDN, LDN, FADA, FAND	Director, Quality Management, Academy of Nutrition and Dietetics
Ginny Meadows, RN, FHIMSS	Vice President, Regulatory Strategy, McKesson Corporation; Chair, Electronic Health Record Association Quality Measurement Workgroup
Ann Watt, MBA, RHIA	Associate Director, Department of Quality Measurement, The Joint Commission



## About Avalere Health

Avalere Health is a strategic advisory company whose core purpose is to create innovative solutions to complex healthcare problems. Based in Washington, DC, the firm delivers actionable insights, business intelligence tools, and custom analytics for leaders in healthcare business and policy. Avalere's experts span 180 staff drawn from Fortune 500 healthcare companies, the federal government (e.g., CMS, OMB, CBO, and Congress), top consultancies, and nonprofits. For more information, please visit us at www.avalere.com

# About the Academy of Nutrition and Dietetics

The Academy of Nutrition and Dietetics (formerly the American Dietetic Association) is the world's largest organization of food and nutrition professionals with over 75,000 members. The Academy is committed to improving the nation's health and advancing the profession of dietetics through research, education, and advocacy. For more information, please visit www.eatright.org