Society of Hospital Medicine

Expert Panel on Inpatient Malnutrition
Philadelphia, PA
September 8, 2016

Attendees

Albert Barrocas
Karim Godamunne
Jenna Goldstein
Peggi Guenter
Lillian Harvey Banchik
Elena Kret-Sudjuian
Carol Manchester
Melissa Parkhurst
Sara Platt
Kathy West

Executive Summary

In an effort to examine the current state of inpatient malnutrition and identify opportunities for improvement, the Society of Hospital Medicine (SHM) convened a panel of clinician experts on September 8, 2016 in Philadelphia, Pennsylvania for a one-day meeting. The goal of this meeting was to identify key challenges and develop a series of recommendations for diagnosing and treating malnutrition in the hospital. SHM initiated this meeting as a result of an educational grant awarded by Abbott Nutrition. The core objective of the grant was to develop a series of recommendations to engage hospitalists as champions in addressing inpatient malnutrition. The strategies are to promote education and reliable practice in order to properly diagnose and treat malnutrition in the hospital. The principles articulated in "Critical Role of Nutrition in the Improving Quality of Care: An Interdisciplinary Call to Action to Address Adult Hospital Malnutrition" served as a foundation for the meeting discussion. These principles are designed to support early nutrition early diagnosis and treatment and are as follows: 1) Create an institutional culture where all stakeholders value nutrition, 2) Redefine clinicians' roles to include nutrition care, 3) Recognize and diagnose all malnourished patients and those at risk, 4) Rapidly implement comprehensive nutrition interventions and continued monitoring, 5) Communicate nutrition care plan and 6) Develop a comprehensive discharge nutrition care and education plan.[1] This summary reviews the conclusions of the panelists based on these principles and the potential next steps for implementing strategies to achieve the principles' goals.

Introduction

Malnutrition was defined as any nutrition insufficiency that affects hospitalized patients and is generally described as undernutrition. The importance of malnutrition in hospitalized patients is again documented in a recent AHRQ Statistical Brief #210, *Characteristics of Hospital Stays Involving Malnutrition* in which patients with a malnutrition diagnosis had longer hospital stays, more inpatient hospital deaths, more often did not have a routine discharge to home, and higher costs. Malnutrition was most often associated with older adults and those with lower income.[2] Hospitalists are in a unique position to champion the screening, diagnosis, prevention, and treatment of malnutrition, thus improving outcomes and decreasing costs.

The group identified two barriers to addressing malnutrition in hospitals. Clinicians have multiple priorities and fail to identify signs and symptoms of malnutrition in patients on admission. Additionally, some malnutrition is not always considered a care priority and many clinicians do not have the adequate knowledge of criteria and screening methods.

Principles that Guide Strategy for Addressing Hospital Malnutrition

Principle 1: Create an institutional culture where all stakeholders value nutrition

An institutional strategy for addressing malnutrition should be supported by executive medical and clinical directors. A chief medical officer or vice president of medical affairs can be a strong advocate for prioritizing this strategy of addressing malnutrition and clinical directors provide operational direction and support through departments such as nursing, nutrition services, and pharmacy.

Develop cases to demonstrate increased value of addressing malnutrition. Hospitalists need to show how appropriate diagnosis and treatment can result in a reduction in length of stay, readmissions, and recurrence of adverse outcomes and share the value proposition with hospital administrators. Internal data can assist with building a business case to obtain the

resources needed for plan implementation and continued data collection can sustain initiatives. Baseline data may demonstrate the severity of malnutrition in the hospital and implementation data may provide proof of improved outcomes following interventions.

Begin education on the importance of patient nutritional health and the need for QI early in the careers of hospitalists. The emphasis can be on the critical intersection between nutrition and disease. A connection should be drawn between inpatient malnutrition and cost of care, length of stay and readmissions. Methods of diagnosis, treatment and options for improvement tools should be presented. Team building and collaboration, especially interprofessional/transdisciplinary, should be stressed for sharing strategies and improvement techniques with colleagues. Shared teams' responsibility encourages a culture of engagement and buy-in. This includes creating incentives for lowering malnutrition rates, addressing the gaps in care plans during hand-offs, and developing mechanisms for handling turnover rates of hospitalists.

Principle 2: Redefine clinicians' roles to include nutrition care.

Redefine clinicians' roles by mapping their current roles and what are the ideal roles and expectations for the nutrition care team. Each hospital should identify a hospitalist nutrition champion. The ideal champion will be able to build respect, manage and gain resources, and promote team collaboration. These tasks should be in addition to hospitalist duties and outlined as part of the job description. Hospitalists who take on nutrition champion roles should be compensated appropriately for their responsibilities. Champions should lead a malnutrition quality project to prove effectiveness and efficiency of the role and value of the intervention.

There is a need to incentivize hospitalists to become nutrition champions and provide protected time to pursue QI projects related to diagnosis and treatment of malnourished patients. These QI efforts can involve two types of teams: the core team comprised of nurses, dietitians,

pharmacists, and hospitalists; and the extended team involving social workers, chaplains, documentation specialists, and transitions of care specialists. Each team member is able to contribute to the overall care plan. Championing nutrition-related patient care improvement initiatives would first entice hospitalists by reminding them of their initial desire to help patients and return to basics, such as with nutrition. Second, there seems to be a general desire among medical professionals to obtain specialization and taking on the role of nutrition champion can help to propel a career forward and gain influence within an institution. Finally, financial incentive to become a nutrition champion can be greatly influential but challenging. Funding can be sourced within the institution or health system, or may have to come from an outside source interested in improving inpatient health. Funds could come from documented cost savings by improving nutrition status, decreasing length of stay and complications, and reducing readmissions.

Principle 3: Recognize and diagnose all malnourished patients and those at risk.

The nutrition care process for hospitalized patients includes nutrition screening, assessment, diagnosis, intervention, evaluation, and discharge planning.

Screening: Upon admission, nurses most often perform nutrition screening as part of the nursing admission assessment. Screening requirements and criteria for diagnosis and metrics should be an institutional standard to assure quality evaluation. A positive nutrition screen should result in an automatic trigger for a referral for a Registered Dietitian (RD) to see the patient as soon as possible. Re-screenings should be conducted throughout a patient's stay, ranging from daily to three to five days depending on the disease and nutrition status. Rescreening from admission through discharge is critical since one-third of inpatients will become malnourished during hospitalization.

Assessment: To diagnose a patient as malnourished, at least two of the following sic criteria need to be met as per The American Society for Parenteral and Enteral Nutrition/Academy of Nutrition and Dietetics malnutrition characteristics and markers where weight loss, energy intake, body fat, muscle mass, fluid accumulation, and grip strength are assessed. See the full toolkit for the details on this assessment tool. Disease-related malnutrition can be present upon admission or be acquired during a hospital stay or encounter. Disease and nutritional status are co-dependent in acute or chronic illness and injury. Specific diseases and malnutrition types require individualized evaluation and treatment as the 19-year-old well-nourished patient with multiple trauma injuries in the ICU will differ from a 69-year-old with chronic kidney disease, but both are at risk for malnutrition related complications.

Principle 4: Rapidly implement comprehensive nutrition interventions and continued monitoring

Rapidly order nutrition interventions. The hospitalist, if he/she is in agreement, should implement the dietitian's recommendations as soon as possible, but no later than 48 hours after admission.

Monitor intervention efficacy and nutrition status. Continued monitoring and reassessment of an intervention requires consistent support and resources. Stakeholders encouragement of the interprofessional/transdisciplinary team and development of protocols promotes ownership and facilitates smooth implementation and intervention sustainability. Reassessment is part of the evolution of improving and maintaining the life of an intervention and supports continued monitoring of not just the individual patient, but also the improvement process in the institution. This allows the interdisciplinary team and stakeholders to tap into what measures are proving effective and where changes may be needed.

Principle 5: Communicating the nutrition care plan

Hold weekly interprofessional/transdisciplinary rounds to review nutrition treatment plans for individual patients. If nutrition assessment is incorporated into the EMR, an expectation for daily review can be implemented as a requirement for physicians and other team members. Nutrition care recommendations and information should be incorporated into the process of hand-offs for simplified tracking and updating.

Provide patients, families and caretakers a thorough and contextually appropriate explanation of malnutrition and how to address its effects on the body and health outcomes. Instructions given by a nutrition team member for nutrition care must be given at a level and language understandable to the patient and caregivers. Plans should be realistic and easy to follow. A patient should not be expected to follow nutrition plan instructions that are beyond their limit of resources, such as finances.

Principle 6: Develop a comprehensive discharge nutrition care and education plan

Develop a discharge nutrition care plans that is consistent and effectively communicated to all stakeholders. A discharge plan, after-visit summary, and nutrition section as part of the discharge papers can facilitate the process. These plans should ideally be created days before a patient is due to be discharged to allow time to make adjustments and provide the patient and/or family with education.

Individualize discharge instructions and education plans to match the patient's life outside of the hospital. If the patient is going to a nursing home, their directions should be different than a patient who is going home and may not have a caretaker. A care plan should realistically meet the confines of the patient's funding capacity. Plan for a follow-up appointment if so indicated. The follow-up appointment should be made prior to discharge and documented in the EHR.

Opportunities for Identifying Improvement Efforts for Nutrition Care

Create a gap analysis

- Establish a baseline of current nutrition care
- Determine why malnutrition is occurring
- Identify:
    - Processes, resources and measures already in place
    - Contributors to barriers and counter measures
    - Resources needed and wanted
    - Facilitators and barriers
    - Tools for communication and education
- Determine the level of interest by the hospital administration
- Establish benchmarks to measure project progress and success
    - Purpose: keeping teams on track to prevent falling behind plans
    - Examples: building care teams and conducting assessments
- What are the next steps for using that information?
- What is the timeline for completing those steps?

Design a quality improvement initiative to reduce malnutrition

- Research what initiatives already exist internally and in similar institutional settings
- Identify the facilitators of success, potential barriers and strategies
- Specialize initiative to the hospital
- Identify goals and methods for effective and efficient initiatives
- Build a road map for intervention
- Propose questions that the intervention will answer about ideal nutrition care
- Determine tools, protocols and other resources
- Utilize quantitative and qualitative evidence in planning
    - Examples: institutional comparisons, patient testimony, peer review research

- Create data collection methodology and usage
    - How many patients should be involved in data collection and initial intervention?
    - What are the metrics for patient behavior change and outcome?
    - What are the evaluation metrics pre- and post-intervention implementation?
        - Outside perspective can be particularly useful in developing evaluation measures
- Establish strategies and metrics to evaluate quality

Recommendations

- Identify specific hospital interventions.
- Implement interprofessional/transdisciplinary team rounds to individual patient care plans and increase Accountability, Communication and Teamwork(ACT)
- Assign responsibility across departments rather than to an individual or a single team
- Integrate nutrition care plans into a hospital's EMR.
- Facilitate access to in EMR for progress notes and patient information
- Champion encouragement of team members to create and review notes
- Include behavior and systems change measures

Collaboration Between Organizations

- Prevent duplication of work, lack of standardization and contradictory information
    - Repetitive and inconsistent information may cause an intervention to appear too complicated OR
    - Physicians may try to combine too many intervention components and become overwhelmed
- Convene special interest groups involving physicians to develop initiatives and practice tools
    - Ensure realistic design

    - Mentored implementation, malnutrition experts coaching hospitals through their interventions, is the ideal intervention but is costly
    - Work with institutions and nutrition experts to develop processes, protocols, and documentation templates to implementation initiatives.
- ASPEN offers centralized resource for materials
    - Utilize to build case for implementing interventions
    - Include qualitative and quantitative evidence
- There is no centralized repository of resources with all organizations' research and materials
    - Repository would require maintenance to monitor expired web links and provide updates
    - Resources should be readily accessible via membership or public access
    - Materials should encourage education and empower medical professionals
    - Resources should assist in the design of creating sustainable initiatives in the face of turnover and burnout

Conclusion

The hospitalist, with the support of hospital administration can become a nutrition champion, leading nutrition care transdisciplinary teams for their patients in order to reduce the complications and cost associated with disease related malnutrition. This nutrition care process can lend itself to a quality improvement initiative which can best demonstrate value of these efforts. Malnutrition should be screened for, assessed, and diagnosed early in the hospital stay and accompanied by transitional care plans across the continuum of care to optimize care for the malnourished patient.

References

1. Tappenden K, Quatrara B, Parkhurst M, Malone A, Fanijang G, Ziegler T. Critical Role of Nutrition in Improving Quality of Care: An Interdisciplinary Call to Action to Address Adult Hospital Malnutrition. *JPEN J Parenter Enteral Nutr*. 2013;37(4):482-97.

2. Weiss AJ, Fingar KR, Barrett ML, Elixhauser A, Steiner CA, Guenter P, Brown MH. Characteristics of Hospital Stays Involving Malnutrition, 2013. HCUP Statistical Brief #210. September 2016. Agency for Healthcare Research and Quality, Rockville, MD. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb210-Malnutrition-Hospital-Stays-2013.pdf.

3. Braunschweig C, Gomez S, Sheean PM. Impact of declines in nutritional status on outcomes in adult patients hospitalized for more than 7 days. *J Am Diet Assoc*. 2000;100(11):1316–1322; quiz 1323–1324.

4. White, J, Guenter P, Jensen, G et al. Academy of Nutrition and Dietetics and American Society for Parenteral and Enteral Nutrition Characteristics Recommended for the Identification and Documentation of Adult Malnutrition (Undernutrition). *JPEN J Parenter Enteral Nutr.* 2012;36:275-283.

5. Jensen, G, Mirtallo, J, Compher, C. Adult Starvation and Disease-Related Malnutrition: A Proposal for Etiology-Based Diagnosis in the Clinical Practice Setting from the International Consensus Guideline Committee. *JPEN J Parenter Enteral Nutr.* 2010;34:156-159.