HEALTH LICENSING OFFICE
Kate Brown, Governor

Oregon Health Authority

700 Summer St NE, Suite 320
Salem, OR 97301-1287
Phone: (503)378-8667
Fax: (503)585-9114
http://www.oregon.gov/OHA/HLO

WHO: **Health Licensing Office**
Board of Licensed Dietitians

WHEN: **9:30 a.m. Oct. 26, 2016**

WHERE: **Health Licensing Office**
Rhoades Conference Room
700 Summer St. NE, Suite 320
Salem, Oregon

What is the purpose of the meeting?
The purpose of the meeting is to conduct board business. Please use appropriate language, manners and protocols when conducting board business. A working lunch may be served for board members and designated staff in attendance. A copy of the agenda is printed with this notice. Please visit http://www.oregon.gov/OHA/HLO for current meeting information.

May the public attend the meeting?
Members of the public and interested parties are invited to attend all board/council meetings. All audience members are asked to sign in on the attendance roster before the meeting. Public and interested parties' feedback will be heard during that part of the meeting.

May the public attend a teleconference meeting?
Members of the public and interested parties may attend a teleconference board meeting **in person** at the Health Licensing Office at 700 Summer St. NE, Suite 320, Salem, OR. All audience members are asked to sign in on the attendance roster before the meeting. Public and interested parties' feedback will be heard during that part of the meeting.

What if the board/council enters into executive session?
Prior to entering into executive session the board/council chairperson will announce the nature of and the authority for holding executive session, at which time all audience members are asked to leave the room with the exception of news media and designated staff. Executive session would be held according to ORS 192.660.

No final actions or final decisions will be made in executive session. The board/council will return to open session before taking any final action or making any final decisions.

Who do I contact if I have questions or need special accommodations?
The meeting location is accessible to persons with disabilities. A request for accommodations for persons with disabilities should be made at least 48 hours before the meeting. For questions or requests contact a board specialist at (503) 373-2049.

All board members are asked to please give at least 24-hour notice if they are unable to attend the meeting so arrangements may be made.

Items for Board Action

Approval of Agenda

Health Licensing Office

Board of Licensed Dietitians

◆◆◆

9:30 a.m. Oct. 26, 2016
700 Summer St. NE, Suite 320
Salem, Oregon

1. **Call to order**

2. **Items for board action**
   - Approval of agenda
   - Approval of minutes for Feb. 17, 2016
   - Approval of 2017 meeting dates
   - Approval of 2017 chair and vice chair

3. **Reports**
   - Director's report
     Recruiting efforts/progress
   - Licensing and fiscal
   - Regulatory

4. **Public/interested parties' feedback**

5. **Executive session -** Pursuant to ORS 192.660(2)(f) and 192.660(2)(L) for the purpose of considering information or records exempt from public inspection. (Investigation cases 16-8092, 16-8095 and 16-8116)

6. **Items for board action II**
   - Vote on cases

7. **Policy**
   - Continuing education audit discussion

8. **Other board business**

Agenda is subject to change.
For the most up to date information visit www.oregon.gov/OHA/HLO

Approval of Minutes

Health Licensing Office
Board of Licensed Dietitians

◆ ◆ ◆

Feb. 17, 2016
700 Summer St. NE, Suite 320
Salem, Oregon

MINUTES

MEMBERS PRESENT
Diane Stadler, vice chair
Bert Connell
Harold Burden
Jill Calamar – via teleconference
Paula Koeller – via teleconference
Penny Harrison – via teleconference

MEMBER ABSENT
Maureen McCarthy, chair

STAFF PRESENT
Sylvie Donaldson, interim director and fiscal services and licensing manager
Anne Thompson, policy analyst
Sarah Kelber, communications coordinator
Maria Gutierrez, board specialist
April Strobel – licensing qualification specialist

Call to order
Diane Stadler called the meeting of the Board of Licensed Dietitians to order at 9:33 a.m., at the Health Licensing Office (HLO), in Salem. Roll was called.

Items for board action

- **Approval of the agenda**

Bert Connell made a motion, with a second by Jill Calamar, to approve the agenda. Motion passed unanimously.

- **Approval of the minutes**

Paula Koeller made a motion, with a second by Bert Connell, to approve the Nov. 4, 2015, minutes. Motion passed unanimously.

Reports

- **Director report**

Sylvie Donaldson, interim director and fiscal services and licensing manager, updated the Board about the transition to the Public Health Division of the Oregon Health Authority (OHA). She explained that as that division regulates many of the places where our licensees work, the fit with HLO was a good one.

Donaldson said that boards have a new protocol for voting, with each member being asked to voice an

"aye" or "nay." When HLO transitions to electronic minutes, the process will make clear how members vote on issues.

She then told the Board that HLO has gotten approval to move to a new location in Salem off of Cherry Street, but isn't sure when the move will occur. The new location will offer a bigger waiting room, more testing space, free parking and a bigger board room. She said that as the Legislature adds more boards and programs, HLO needs more room to accommodate its customers. Donaldson said that with the addition of another board and a program, that HLO has 14.

Donaldson said that the Board's licensees are being audited to for continuing education compliance. Staff selects 10 percent of the licensees at random – 76 for dietitians – and checks that they are meeting requirements. Of the 76, we have received 37 responses; 21 have been processed and three have been referred to the enforcement division. She said the Board will get a final tally when the audit is completed.

She also said that the workforce survey that dietitians complete upon renew has decreased in price from $2.50 to $2. The money is collected by HLO but forwarded to OHA, who conducts the survey.

Communications Coordinator Sarah Kelber told the Board about the new website and its features. She explained that the staff is testing the new site now to make sure everything works and the go-live date is March 9. She said that she is taking photos of Board members for use on the new site. Kelber also said that HLO got approval for a Facebook page and that there are two – one for cosmetology and one for HLO in general. The pages will be used to communicate to licensees about closures due to weather and holidays, proposed administrative rules and meetings.

Stadler asked Donaldson about the new board and program; Donaldson said they were Board of Certified Advanced Estheticians and the Music Therapy Program.

Donaldson updated the Board on members who would be ending their second terms at the end of 2016. While Burden, Calamar and McCarthy may serve until replaced, they cannot seek a third term. She said that replacement-recruiting process can take different lengths of time and will begin later in the year; the Board can revisit that at the Oct. 26 meeting.

- **Licensing and fiscal statistical reports**

Donaldson presented a statistical overview of licensing, license trends and age and gender diversity in licensees. She said there were 77 new licenses issued in the current biennium as well as 426 renewals. More than 65 percent of licenses were renewed online. Licenses have increased 30 percent in five years and the vast majority of the holders are female.

(Calamar dropped out of the conference call at 10 a.m., rejoining at 10:03 a.m.)

The Board's finances are solid, but Donaldson said the assessment for Public Health shared services has not been subtracted, so the total will change. She said that balances are kept larger for smaller boards,

because one lawsuit could drain the finances quickly, and fewer licensees means less revenue coming in to bolster the bottom line.

♦ **Regulatory report**

Donaldson reported on enforcement, saying that the Board has had only three complaints in four years – one of the best rates at HLO – and that helps keep the Board's finances solidly in the black. Stadler asked where the complaints came from; Donaldson said they all were from her. She said if a qualifications staff members notices something is amiss, she opens the complaint; all three of the complaints were licensing issues around mandatory reporting.

♦ **Policy report**

Policy Analyst Anne Thompson told the Board that the Oregon Health Authority's Common Credentialing Advisory Group expects to have a vendor by the middle of 2016, with an implementation date falling in the middle of 2017. Connell asked how the project was funded. Thompson and Donaldson explained how the fiscal-impact process works with legislation, but assured the Board that the money would not come from HLO.

Thompson told the Board that there was no public comment on the proposed administrative rule changes, which were spurred by Senate Bill 230 (2015). The bill changed the name of the recipient of the health care workforce survey and also required licensees to complete the survey when they renew their license. While the rules were open, the Health Licensing Office's name was updated from the Oregon Health Licensing Agency.

Items for board action II

♦ **Vote to adopt permanent administrative rules**

Bert Connell made a motion, with a second by Harold Burden, to adopt permanent administrative rules. Motion passed unanimously.

Public/interested parties' feedback

None.

Other board business

The Board wondered if three meetings would be necessary in 2016. Donaldson said that McCarthy wanted dietitians' access to the library at Oregon Health & Science University to be discussed at the next meeting. Stadler said she would research that and access to Oregon State as well and let Thompson know what she finds. If it's information about resources that staff can communicate to licensees, Donaldson said a memo can go out and online and the Board can be updated at a later meeting.

The meeting adjourned at 10:49 a.m.

Minutes prepared by Anne Thompson, Policy Analyst

[Note: An audio recording is available by public records request. Please contact the agency for additional information.]

2017 Meetings

HEALTH LICENSING OFFICE
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Oregon Health Authority

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2017 meeting dates

BACKGROUND AND DISCUSSION

Board of Licensed Dietitians must decide on 2017 meeting dates.

ISSUE

The Board must approve 2017 meeting times and dates. The Health Licensing Office proposes:

- 9:30 a.m. April 26
- 9:30 a.m. November 1

BOARD ACTION

The Council approves 2017 meeting times and dates:

2017 Chair and Vice Chair

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Chair and vice chair – 2017

BACKGROUND AND DISCUSSION

Maureen McCarthy has served as chair, and Diane Stadler has served as vice chair, for the Board of Licensed Dietitians during 2016.

ISSUE

The Board must nominate and elect a chair and vice chair for 2017.

Role of the chair in meetings

- Officially call the meeting to order.
- Keep order and impose any necessary restrictions for the efficient and orderly conduct of the meeting.
- Direct the "flow" of the meeting and to ensure the meeting is conducted in a professional manner. Some key points regarding meeting protocol include:
  - Board members wishing to speak must wait to be addressed by the chair.
  - Once addressed by the chair, the board member must state their last name for the record before speaking.
  - The chair guides members through the motion-making process.
  - If public comment is being accepted by the Board, audience members must wait to be addressed by the chair and state their full name and affiliation to the Board.
- Officially enter/exit executive session.
- Officially adjourn the meeting.

Role of the chair outside of meetings

- Collaborate with the director regarding the Board budget. The director may contact the chair to discuss the Board budget regarding revenue, expenditures and possible fee changes.
- Assist in generating meeting agendas. The board specialist or analyst may contact the chair to discuss the agenda for an upcoming meeting. The chair may be asked to comment on topics to be discussed and the format or order in which the topics should be presented at the meeting.

Role of the vice chair

The vice chair must assume the responsibilities of the chair if there is an absence or if the chair is no longer a member of the Board.

BOARD ACTION

The Board nominates and elects:

Chair:
Vice chair:

Director’s Report

Board of Licensed Dietitians
HEALTH LICENSING OFFICE
Kate Brown, Governor

Oregon Health Authority

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Memorandum

To: Sylvie Donaldson, HLO Interim Director; Ann Thompson, HLO Policy Analyst

From: Larry Peck, HLO CE Qualifications Analyst

Date: 4/13/2016

Subject: Status of CE attestation audit for renewal period: 9/15/14 to 10/31/2015.

A continuing education audit on currently active licensed dietitians was conducted and completed on 4/13/2016. The audit included 10% of the license base, for a total of 76 licensees randomly sorted and selected through a computer generated process.

On 2/1/2016, all 76 licensees were sent an audit notification letter requesting that they provide verification of having complied with the 15 hours of continuing education obtained within the CE attestation period for renewal of their current license. The deadline date to comply with the audit was 3/1/2016.

Of the 76 licensees audited, 73 submitted the required number of hours in approved continuing education to meet the audit requirements for renewal. Three licensees failed to meet the requirements of the audit. A report of the three licensees that failed to comply with the audit was forwarded to the HLO Regulatory Operations Division.

A copy of this report will be provided at the next meeting of the Board of Licensed Dietitians.

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http://www.oregon.gov/OHLA/Pages/index.aspx

March 1, 2016

To: All licensed dietitians
From: The Board of Licensed Dietitians
Re: Library resources

The Board of Licensed Dietitians would like to let authorization holders know about resources that are available to them.

Here is the link to the OHSU Library website; it describes resources for non-OHSU Oregon Licensed Health Professionals and instructions to access these resources.

http://www.ohsu.edu/xd/education/library/orhp.cfm

Sincerely,
Anne Thompson
Policy Analyst

Licensing and Fiscal Statistical Reports

Health Licensing Office

Board of Licensed Dietitians

Licensing Division Statistics as of October 12, 2016

2015 - 2017 Biennium

Quarter	Licenses Issued	Renewals Processed	*% of Renewals Processed Online*
1st	33	173	*69.4%*
2nd	30	193	*76.7%*
3rd	38	175	*65.1%*
4th	35	140	*71.4%*
5th	40	182	*76.4%*
6th	14	27	*70.4%*
7th	-	-	
8th	-	-	
Total:	190	890	*71.9%*

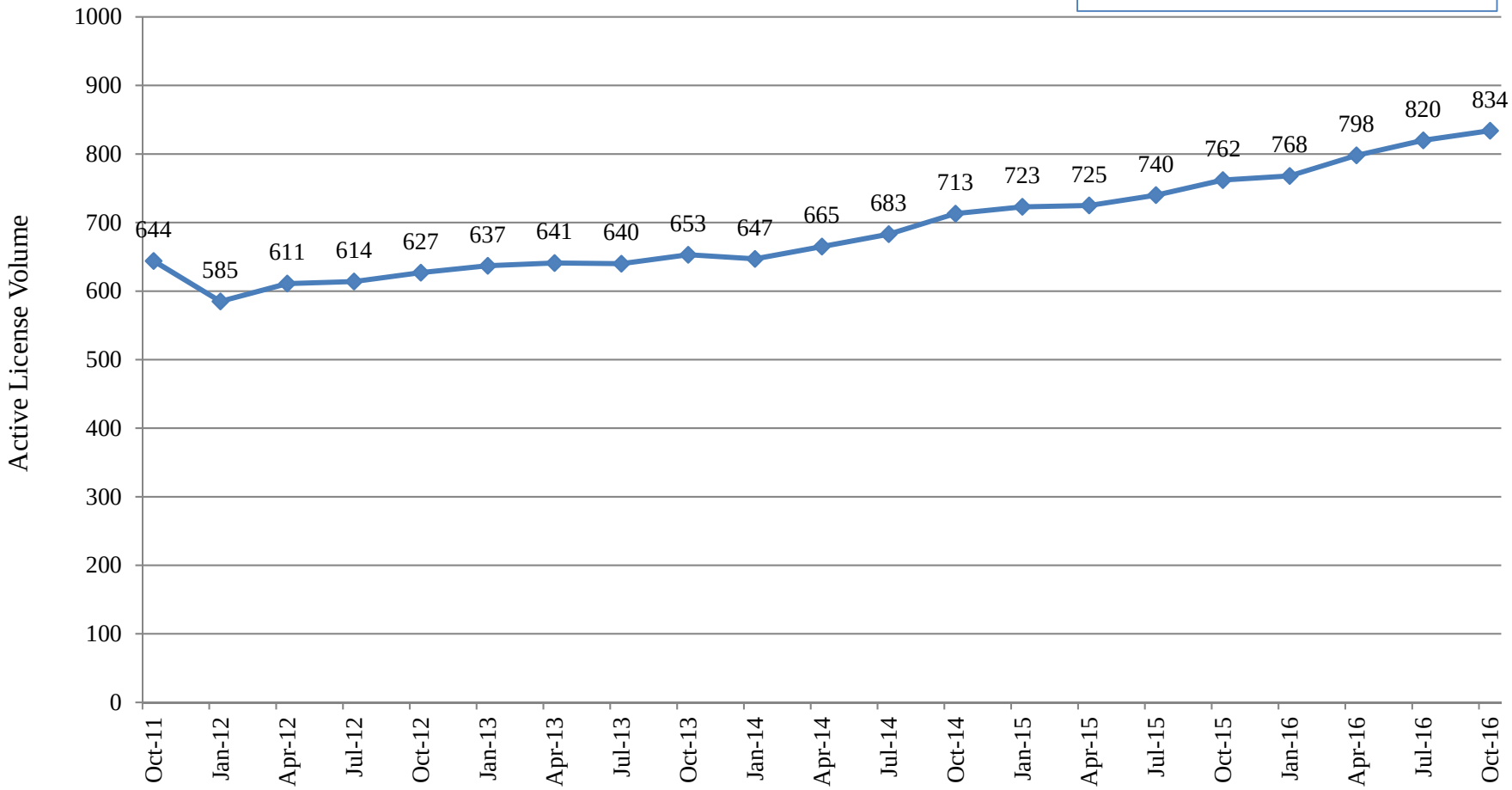
Health Licensing Office

Board of Licensed Dietitians

5 Year Active License Trend

October 2011 - October 2016

+9.45% change in growth over 1 year
+29.50% change in growth over 5 years



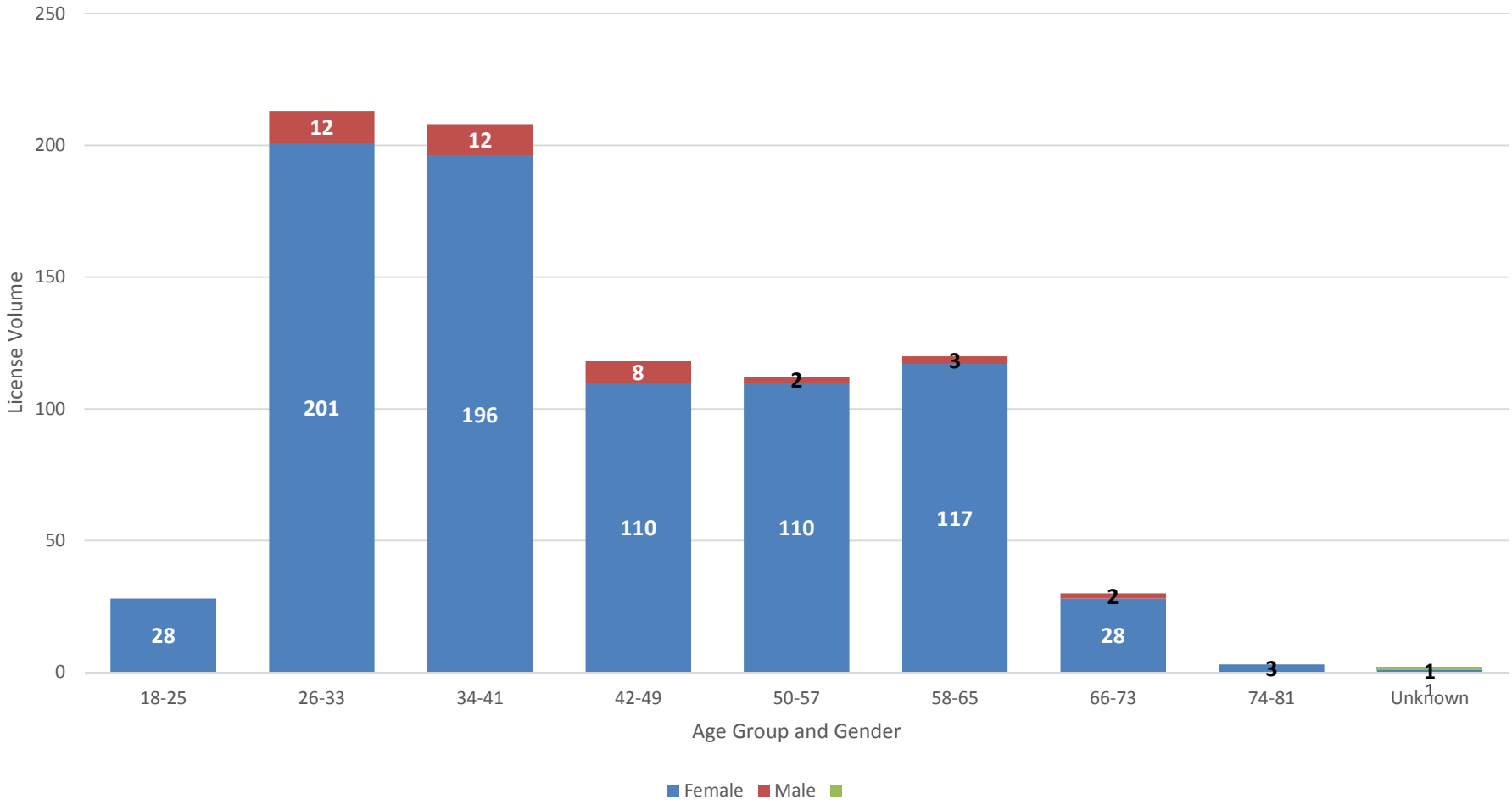
Health Licensing Office

Board of Licensed Dietitians

Active Licensed Dietitains

Statistics grouped by Age Group and Gender as of October 12, 2016

2015 - 2017 Biennium



HEALTH LICENSING OFFICE
Fund 3840 - LICENSED DIETITIANS
STATEMENT OF CASH FLOW
FOR THE PERIOD 07/01/15 - 10/12/16

CURRENT

15-17' Beginning Cash Balance	$	178,289.00
Revenues	$	70,549.50
Expenditures	$	56,383.70
Less: Accrued Expenditures	$	-
Less: Total Expenditures	$	(56,383.70)
Subtotal: Resources Available	$	192,454.80
Change in (Current Assets)/Liabilities	$	-
Ending Cash Balance (Actual)	**$**	**192,454.80**

Indirect Charges are calculated using the following rates:
* Based on average Licensee Volume

Shared Assessment %	1.00%
Examination %	0.00%
Small Board Qualification %	11.44%
Inspection %	0.00%

HEALTH LICENSING OFFICE
Fund 3840 - LICENSED DIETITIANS
STATEMENT OF CASH FLOW
FOR THE PERIOD 07/01/15 - 06/30/17

PROJECTED

15-17' Beginning Cash Balance	$	178,289.00
Revenues	$	123,398.00
Expenditures	$	104,092.98
Less: Accrued Expenditures	$	-
Less: Total Expenditures	$	(104,092.98)
Subtotal: Resources Available	$	197,594.02
Change in (Current Assets)/Liabilities	$	-
Ending Cash Balance (Projection)	**$**	**197,594.02**

Indirect Charges are calculated using the following rates:
* Based on average Licensee Volume

Shared Assessment %	1.00%
Examination %	0.00%
Small Board Qualification %	11.44%
Inspection %	0.00%

Regulatory Report

Health Licensing Office

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Board of Licensed Dietitians

October 26, 2016

2015 – 2017 Biennium

Between July 1, 2015 and September 30, 2016, 6 complaints were received by the Office. Total open 5. Total closed 1.

ANONYMOUS	CLIENTS	OTHER
0	0	6

Other: Licensees
General Public
Internal

Public/Interested Parties' Feedback

Executive session

Pursuant to ORS 192.660(2)(f) and 192.660(2)(L) for the purpose of considering information or records exempt from public inspection.

Items for Board Action

Policy Report

Other Board Business

Oregon Health Authority

Health Licensing Office
Board of Licensed Dietitians
October 26, 2016

****PLEASE PRINT****

Name (First, Last)	Representing	Request to Comment (yes/no)
Terese Scollard	Oregon Academy of Nutrition + Dietetics Public Policy Committee - liaison to LD Board	yes please

STATE OF OREGON

PROCLAMATION

OFFICE OF THE GOVERNOR

WHEREAS: The Oregon Academy of Nutrition and Dietetics invites Oregonians to observe Malnutrition Awareness Week and support actions to prevent, identify, educate, treat, and report disease-related malnutrition; and

WHEREAS: Disease-related malnutrition often goes undetected but is prevalent among vulnerable populations at any body weight, including low-income and communities of color, as well as those with chronic illness; and

WHEREAS: Disease-related malnutrition impacts patient health outcomes, leading to higher infection rates, poor wound healing, longer lengths of stay, and higher frequency of readmission, and is associated with increased health costs; and

WHEREAS: Action in all settings of care creates opportunities for self-management education and outpatient interventions to reduce or prevent hospital admissions and readmissions, reduce post-discharge services, and enables people to remain more independent at home; and

WHEREAS: The Oregon Academy of Nutrition and Dietetics joins the American Society of Parenteral and Enteral Nutrition in recognizing Malnutrition Awareness Week and to raise awareness around the important steps that can be taken to prevent and treat disease-related malnutrition.

NOW, THEREFORE: I, Kate Brown, Governor of the State of Oregon, hereby proclaim **September 26-30, 2016** to be

MALNUTRITION AWARENESS WEEK

in Oregon and encourage all Oregonians to join in this observance.

IN WITNESS WHEREOF, I hereunto set my hand and cause the Great Seal of the State of Oregon to be affixed. Done at the Capitol in the City of Salem in the State of Oregon on this day, September 20, 2016.

Kate Brown, Governor

Jeanne P. Atkins, Secretary of State

Malnutrition Alert! Oregon: Adult Disease-Related Malnutrition
Oregon Academy of Nutrition and Dietetics: Public Policy Committee
4/8/14 T. Scollard/S. Connor/J. Pavlinac (Representatives of the OAND)

Purpose: To minimize the negative health and economic impact of disease-related malnutrition for the adult population in Oregon, and to create accountability and value for Oregonians.

Background:

- Adult disease-related malnutrition (DRM, under nutrition) is an under-reported critical public health condition that is often unaddressed prior to acute hospitalization. DRM is a cause and consequence of disease and occurs when disease and/or disability interact to prevent adequate food intake or create increased nutritional requirements, resulting in inability for a person to sustain their bodily needs.
- New, internationally agreed upon clinical characteristics and criteria[1], and validated screening tools create the opportunity to identify patients with DRM, and those at risk of DRM.
- The diagnosis of DRM will create conformity in practice and incentivize health care providers to address timely treatment.
- Identification of at-risk adults in all settings of care creates opportunity to apply effective, inexpensive outpatient interventions and thus reduce or prevent hospital admissions and readmissions due to malnutrition, reduce post-discharge utilization of physicians, readmissions, long term care and other health care services.

Adult DRM is significantly under-reported. It occurs in patients of any body mass index (BMI), due to metabolic alterations inherent in inflammatory disease. U.S.[3], European[4], British[5,6,,9] and Canadian[7] studies consistently show DRM prevalence of about 1 in 3 to 4 adult acute care admissions, with more patients leaving institutions who are at risk or of diminished nutritional status. Medical and nutritional diagnosis of DRM when present enables economic analysis, clinical analysis, decision support, and population surveillance to determine health policy and establish best practices. Consumer engagement to prevent DRM creates partnership among patients, care givers and medical professionals to support simpler, more efficacious clinic and home-based early interventions that will reduce suffering, morbidity and better manage utilization and health costs.

Key Objectives:

- Create and support actions to identify, treat, track and report adult disease-related malnutrition in Oregon.
- Create opportunities to address disease-related malnutrition in order to reduce the negative future economic impact of expensive rescue treatments that now occur in hospitals.
- Support alerts to, and identification of malnourished patients in all settings of care, using validated screening tools and processes, to reduce or prevent nutritional failure to reduce the incidence and severity and subsequent clinical consequences, patient outcomes and suffering.
- Create an environment for consumer awareness and evidence-based self-management.

<u>Step #1:</u> Diagnose Disease-Related Malnutrition when present.

- Recognize and implement the *Consensus Statement of the Academy of Nutrition and Dietetics and the American Society of Parenteral & Enteral Nutrition: Characteristics Recommended for the Identification and Documentation of Adult Malnutrition (Under nutrition)*[1] in Oregon.
- Document the type and severity of disease-related malnutrition when present in adults in all settings of care.
- Health systems establish organized groups of qualified professionals to address and manage their populations and outcomes

<u>Step #2:</u> Report prevalence of adult Disease-Related Malnutrition for systems, economic and clinical outcomes analyses.

- Report the volume of patient cases, age category and percentages, length of stay, case acuity, and other pertinent data for adult patients with disease-related malnutrition.
- Include disease-related malnutrition when present in multiple cause of death reporting when it is determined clinically to be a contributor of death.

<u>Step #3</u>: Education and resources for consumers for evidence-based self-management and medical nutrition therapy to reduce and prevent incidence of disease-related malnutrition

- Health care organizations create consumer-friendly tools and educational resources for patient/care-giver self management
- Direct consumers to these and licensed, qualified professional services to support a patient/health care provider partnership for health maintenance and prevention of adult disease-related malnutrition to:
    - Retain independence, quality of life, and support successful patient home management
    - Reduce rescue activities in acute care settings for avoidable nutritional declines
    - Reduce admissions, readmissions and shorten length of stay in acute care or assisted care
    - Reduce patient acuity and morbidity such as infections, falls, pressure ulcers
    - Reduce avoidable utilization of health care services and resources

***References**:*

1. *Consensus Statement of the Academy of Nutrition and Dietetics and the American Society of Parenteral & Enteral: Characteristics Recommended for the Identification and Documentation of Adult Malnutrition (Undernutrition)* J Acad Nutr Diet. 2012;112:730-738. http://malnutrition.andjrnl.org/Content/articles/1-Consensus_Statement.pdf Accessed 9/23/2013
2. Institute of Healthcare Improvement Triple Aim Initiative. http://www.ihi.org/offerings/Initiatives/TripleAim/Pages/default.aspx Accessed 12/8/2012.
3. Malnutrition Resource Center, http://malnutrition.andjrnl.org/ Accessed 12/8/2012.
4. Fight Malnutrition:Dutch Malnutrition Steering Group. http://www.fightmalnutrition.eu/ Accessed 12/8/2012.
5. http://www.nice.org.uk/nicemedia/pdf/cg032fullguideline.pdf Accessed 12/8/2012.
    a. http://www.nice.org.uk/nicemedia/pdf/cg032fullguideline.pdf Accessed 12/8/2012.
    b. http://www.nice.org.uk/nicemedia/live/10978/29981/29981.pdf Accessed 12/8/2012.
    c. http://www.nice.org.uk/CG032 Accessed 12/8/2012.
6. British Association of Parenteral and Enteral Nutrition (BAPEN) http://www.bapen.org.uk/
    a. BAPEN Commissioning Tool kit http://www.bapen.org.uk/professionals/publications-and-resources/commissioning-toolkit Accessed 12/8/2012.
7. Canadian Malnutrition Task Force. http://nutritioncareincanada.ca/ Accessed 12/8/2012
8. http://www.malnutrition.com accessed 9/23/2013
9. Malnutrition Pathway http://www.malnutritionpathway.co.uk/ accessed 10/14/2013

Respectfully Submitted:

Terese Scollard MBA RDN LD, FAND, Sonja Connor MS RD LD, Jessie Pavlinac MS RD LD, on behalf of Oregon Academy of Nutrition and Dietetics Public Policy Committee 3/18/2014, updated 4/8/2014

Malnutrition Measures Specification Manual

Version 1.0 – October 2016

Table of Contents

Background

Burden of Malnutrition in Hospitalized Adults

Malnutrition is a leading cause of morbidity and mortality, especially among older adults. Evidence suggests that 20% to 50% of all patients are at risk for or are malnourished at the time of hospital admission[1] and up to 31% of these malnourished patients and 38% of well-nourished patients experience nutritional decline during their hospital stay.[2] In addition, as many as 65% of older adult patients age 65 and older admitted to the hospital may be malnourished.[3]

Malnutrition is the inadequate intake of nutrients, particularly protein over time, and may contribute to, chronic illness, and acute disease or illness and infection. People can be underweight or overweight and malnourished when they lack sufficient nutrients needed to promote healing, rehabilitation, and reduce the risk of medical complications. Malnutrition and weight loss can also contribute to sarcopenia, the age associated loss of skeletal muscle mass and function, which can impact recovery, mobility and independence.

Hospitalized patients are vulnerable to nutritional decline for many reasons, including dietary restrictions because of tests, treatments, and medical conditions, as well as, poor appetite and gastrointestinal problems. One study noted that one-fifth of hospitalized patients aged 65+ had an average nutrient intake of less than 50% of their calculated maintenance energy requirements. 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% increase in costs.[4] Nutritional status is also considered an important factor in the recently identified "post-hospital syndrome," which can result from the stress of hospitalization.[5]

Gaps in Malnutrition Care Quality

Despite the evidence that demonstrates the benefits of nutrition for healing and recovery and a clinical consensus model for implementing optimal nutrition care, significant variation and gaps remain with respect to nutrition screening, assessment, intervention, monitoring, and overall care for malnourished and at-risk hospitalized older adults.

Research demonstrates that there is significant room to improve identification, diagnosis, and treatment of malnutrition in hospitalized. Nutrition screening is the first step in optimal malnutrition care, and triggers a nutrition assessment for patients found to be at risk. The nutrition assessment is the basis upon which diagnosis, care plans, and treatments are made for malnourished patients.[6]

Current estimates of the prevalence of adult malnutrition range from 15%−60% depending on the patient population and criteria used to identify its occurrence.[7] However, a review of nationally-representative data on cost and utilization indicated that, in 2010, only 3.2% of patients had a diagnosis of malnutrition, this suggests that malnutrition may be severely under-recognized and underdiagnosed in the hospital setting.[8] This may be due to clinical practice gaps in numerous aspects of nutrition care.

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[1] Barker LA, Gout BS, and Crowe TC. Hospital malnutrition: Prevalence, identification, and impact on patients and the healthcare system. International Journal of Environmental Research and Public Health. 2011;8:514-527.
[2] Braunschweig C et al. *J Am Diet Assoc* 2000; 100 (11): 1316-1322
[3] Aging Network Staff. Malnutrition and Older American. *National Resource Center on Nutrition, Physical Activity & Aging*. Available at: http://nutrition.fiu.edu/aging_network/malfact2.asp. Accessed October 25, 2016.
[4] Isabel TD and Correia M. The impact of malnutrition on morbidity, mortality, length of hospital stay and costs evaluated through a multivariate model analysis. Clinical Nutrition. 2003;22(3):235–239.
[5] Krumholz, *N Eng J Med* Jan 10, 2013; 368;2.
[6] Nutrition care process and model part I: the 2008 update. J Am Diet Assoc. 2008;108(7):1113-7
[7] Mueller C, Compher C & Druyan ME and the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Board of Directors. A.S.P.E.N. Clinical Guidelines: Nutrition Screening, Assessment, and Intervention in Adults. J Parenter Enteral Nutr. 2011;35: 16-24.
[8] Corkins MR, Guenter P, Dimaria-ghalili RA, et al. Malnutrition diagnoses in hospitalized patients: United States, 2010. JPEN J Parenter Enteral Nutr. 2014;38(2):186-95.

For instance, a national survey of hospital-based professionals in the United States found that only 36.7% reported completing nutrition screening at admission, 50.8% reported doing so within 24 hours, and 69% reported documenting the findings in the medical record.[9] Consequently, this gap in identification of malnutrition risk affects the ability of dietitians to complete nutrition assessments for the at-risk patient population since many remain unidentified. In addition, no national benchmarking of malnutrition in acute care hospitals exists in the United States. In order for this type of benchmarking to be instituted, malnutrition screening and assessment must be standardized to track and monitor malnutrition rates and identify the appropriate rate of diagnosis that follow.[9]

Appropriate identification and assessment of patients at risk for malnutrition, and communication of these results to the physician, are critical to ensure patients receive a malnutrition diagnosis and the necessary follow-on malnutrition care they require. For instance, researchers in the Netherlands assessed 395 patients to determine if they were provided appropriate malnutrition care after being identified as at-risk for malnutrition via nutrition screening. With regard to appropriate nutritional intervention for malnourished patients, when a dietitian was consulted during a malnourished patient's case, 80.6% of patients were provided additional feeding and/or vitamin supplements compared to 13.2% and 27.9% respectively by medical doctors.[10] In conclusion, addressing these performance gaps can facilitate optimal malnutrition care and address the adverse malnutrition-associated outcomes discussed above.

How Malnutrition Intervention Can Help Improve Health Outcomes and Lower Costs

Addressing malnutrition directly aligns with the Triple Aim and National Quality Strategy priorities related to patient safety, care coordination, patient- and family-centered care, population health, and affordability. Clinical consensus recommendations underscore that early identification and systematic nutrition care coupled with interdisciplinary team-based care are critical in remediating malnutrition in both the hospital and in the post-acute care setting.[11] Patient and family engagement in their nutrition care plan during hospitalization and upon discharge is important to facilitate recovery. Studies have demonstrated that implementation of a comprehensive nutrition pathway from inpatient admission to post-discharge improved identification of high-risk patients and decreased time to nutrition consult, length of hospital stay, and 30-day readmission rate.[12, 13]

The Academy of Nutrition and Dietetics

The Academy of Nutrition and Dietetics (Academy) is committed to advancing the profession through a variety of quality strategy initiatives in every practice area for nutrition and dietetics practitioners. This includes member engagement, development, and utilization of quality improvement tools, resources, and education materials. Most notably, the Academy's development and stewardship of de novo electronic clinical quality measures (eCQMs) will ultimately improve patient outcomes, reduce cost burden, and advance the role of registered dietitian nutritionists. The set of four eCQMs focus on malnutrition care in patients' ages 65+ years in the hospital setting. For more information about the Academy, please visit http://www.eatrightpro.org/resources/about-us

[9] Patel V, Romano M, Corkins MR, et al. Nutrition Screening and Assessment in Hospitalized Patients: A Survey of Current Practice in the United States. Nutr Clin Pract. 2014;29(4):483-490.
[10] Bavelaar JW, Otter CD, Van bodegraven AA, Thijs A, Van bokhorst-de van der schueren MA. Diagnosis and treatment of (disease-related) in-hospital malnutrition: the performance of medical and nursing staff. Clin Nutr. 2008;27(3):431-8.
[11] Tappenden et al. Critical Role of Nutrition in Improving Quality of Care: An Interdisciplinary Call to Action to Address Adult Hospital Malnutrition, J Acad Nutr Diet. 2013; 113:1219-1237.
[12] Brugler L, et al. The five-year evolution of a malnutrition treatment program in a community hospital. Jt Comm J Qual Improv, 1999 Apr; 25(4):191-206.
[13] Somanchi M et al. The Facilitated Early Enteral and Dietary Management Effectiveness Trial in Hospitalized Patients with Malnutrition; JPEN J Parenter Enteral Nutr. 2011;35:209-216.

Overview of Malnutrition Measures Set

Malnutrition Quality Improvement Initiative (MQii)

This set of electronic clinical quality measures (eMeasures) is focused on older adults (ages 65 and older) who face a significantly higher impact from malnutrition. The eMeasures are just one component of a broader multi-stakeholder initiative knows as the Malnutrition Quality Improvement Initiative (MQii) with a mission to advance evidence-based, high-quality and patient-driven care for hospitalized older adults (age 65 and older) who are malnourished or at-risk for malnutrition. The objectives of the initiative are to:

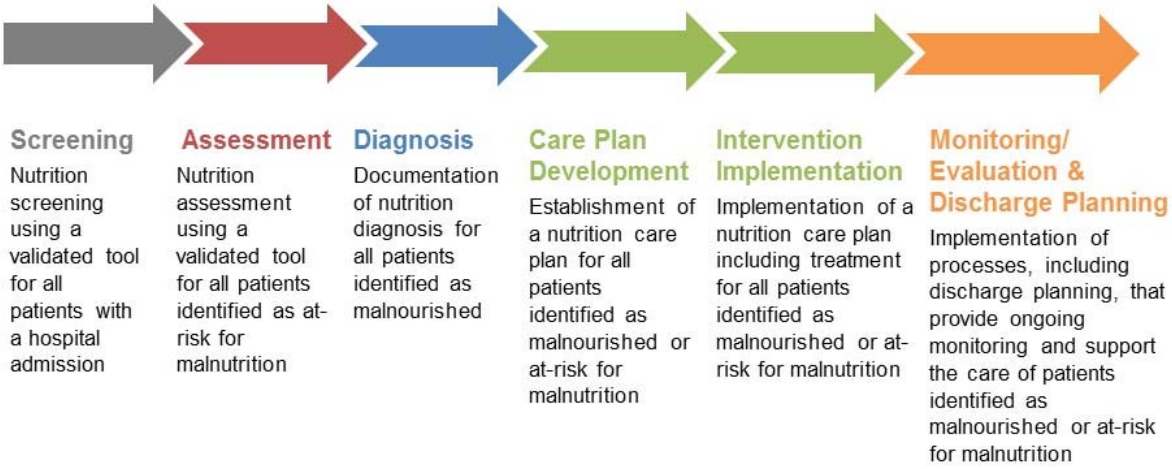
- Improve malnutrition care with an interdisciplinary care team roadmap (toolkit) focused on decreasing time to identification and treatment of malnourished and at-risk hospitalized older adults
- Develop malnutrition quality measures "that matter" – to help improve outcomes that are important to patients and clinicians
- Advance tools that can be integrated into electronic health record (EHR) systems to improve care quality while minimizing administrative burden

The MQii includes two parallel tracks that serve to advance malnutrition care for the older adult population in the inpatient hospital setting:

- A pilot demonstration and learning collaborative of hospitals focused on reducing clinical practice variability in malnutrition care through the implementation of a standardized toolkit, and
- Electronic clinical quality measure (eMeasures) development and implementation to advance the measurement of malnutrition care in hospitals.

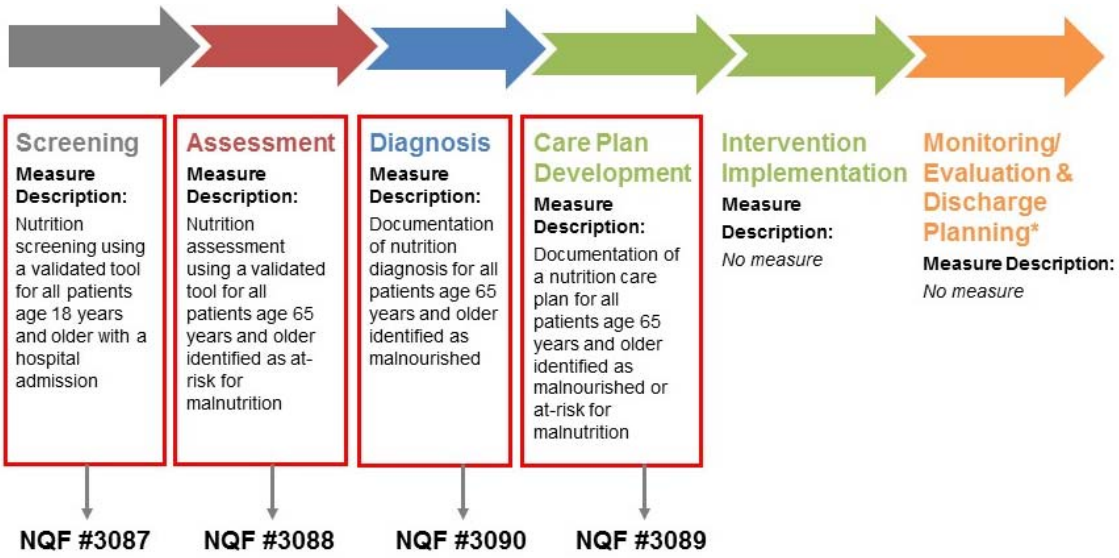
The Malnutrition Care Workflow

Figure 1. Malnutrition Care Workflow



The eMeasures are intended to assess provider performance on following the recommended malnutrition workflow which is supported by a combination of stakeholder consensus and clinical guidance established by systematic review of the evidence. The malnutrition workflow is rooted in patient-driven nutrition efforts that incorporate patient preferences and risk factors (See Figure 1). The four malnutrition eMeasures included in this specification manual represent four measure constructs that demonstrated feasibility for development and use in real world clinical settings. They currently assess the first four stages of the malnutrition care workflow, spanning from screening to the development of a nutrition care plan and documentation of a diagnosis for patients who are identified as malnourished after the completion of a nutrition assessment. Figure 2 outlines the steps of the malnutrition care workflow and alignment of the malnutrition eMeasures along the workflow:

Figure 2. Malnutrition eMeasures Align with the Malnutrition Care Workflow±



* Measures for monitoring and evaluation, and discharge planning were not technically feasible due to limitations in availability of measure data.
± National Quality Forum (NQF) numbers are measure identifiers assigned to each of the four malnutrition eMeasures outlined in Table 1 below

Overview of Malnutrition eMeasures

Table 1 below outlines a high-level description of each of the four malnutrition measures including assigned NQF identifier (NQF #), measure title, description, and the applicable data sources the measure are specified for:

Table 1. Malnutrition eMeasure Description and Applicable Data Source

NQF #	Measure Title	Description	Data Source
3087	Completion of a Malnutrition Screening within 24 hours of Admission	Completion of a malnutrition screening to determine if a patient is at-risk for malnutrition, within 24 hours of admission to the hospital	Fully-specified for electronic health record
3088	Completion of a Nutrition Assessment for Patients Identified as At-Risk for Malnutrition within 24 hours of a Malnutrition Screening	Patients age 65 years and older identified as at-risk for malnutrition based on a malnutrition screening who have a nutrition assessment documented in the medical record within 24 hours of the most recent malnutrition screening	Fully-specified for electronic health record
3089	Nutrition Care Plan for Patients Identified as Malnourished after a Completed Nutrition Assessment	A documented nutrition care plan for those patients who are found to be malnourished based on a completed nutrition assessment with findings of malnutrition	Hybrid specifications using both electronic health record and chart abstraction
3090	Appropriate Documentation of a Malnutrition Diagnosis	Appropriate documentation of a malnutrition diagnosis for those patients who are found to be malnourished based on a nutrition assessment	Hybrid specifications using both electronic health record and chart abstraction

Additional Measure Specification Resources

The specifications for the malnutrition eMeasures are either fully specified for use in electronic health records (EHRs) as in the case of measures #3087 and #3088, or partially specified for use in EHRs and partially specified for chart abstraction in the case of measures #3089 and #3090. As part of the resources generated for implementation of these eMeasures, there are documents that measures users may take advantage of to implement these measures into their EHR. The resources are outlined below:

- *XML-Based Specifications:* an XML document in Health Quality Measure Format (HQMF) which is a standards-based representation of quality measures as electronic documents.
- *Human-Readable Specifications:* generated from the XML-based specifications is a human-readable HTML document that allows the XML to be viewed in a web browser.
- *Value Set Codes Inventory:* an excel spreadsheet that contains all value sets included in the measure, with additional information containing the value set developer, their identifiers (OIDs), descriptive names, revision date, code system, code system version used, and all of the concepts in each value set as codes with descriptors.

These additional measure resources are available on the Academy website: http://www.eatrightpro.org/eMeasures

Disclaimer and Copyright Information

These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications. The measures and specifications are provided without warranty and are in the public domain.

Completion of a Malnutrition Screening within 24 hours of Admission

Description: Completion of a malnutrition screening to determine if a patient is at-risk for malnutrition, within 24 hours of admission to the hospital

Rationale: Patients who are malnourished while in the hospital have been associated with important adverse patient safety outcomes such as increased risk of complications, readmissions, and length of stay. Patients who experience these increased risks are also associated with a significant increase in costs. Malnutrition is also associated with many adverse outcomes including depression of the immune system, impaired wound healing, muscle wasting, and increased mortality. Referral rates for dietetic assessment and treatment of malnourished patients have proven to be suboptimal, thereby increasing the likelihood of patients developing such aforementioned complications (Gomes, 2016, Cereda et al., 2015, Corkins, 2014, Barker et al., 2011, Lim et al., 2012, Amaral et al., 2007, Kruizenga et al., 2005).

Screening for the risk of malnutrition in care settings is important to enable early and effective interventions for patients who are malnourished or at-risk of malnutrition. These screenings are the first step in providing optimal, evidence-based malnutrition care for patients. Although a review of nationally-representative data on cost and utilization indicated that in 2010, 3.2% of patients had a diagnosis of malnutrition (Corkins, 2014), this may be a severely underreported figure identified in other research studies which have estimated that 4-19 million cases are left undiagnosed and untreated. For example, Patel et al. (2014) conducted a national survey of hospital-based professionals in the United States focused on nutrition screening and assessment practices and associated gaps in knowledge of nutrition care. Out of 1,777 unique respondents, only 36.7% reported completing nutrition screening at admission, and 50.8% reported doing so within 24 hours. Only 69% reported documenting the findings in the medical record. Finally, it is important that malnutrition screening tools are validated to ensure that screening is as accurate and reliable as possible (NICE, 2012).

Type of Measure: Process

National Quality Forum (NQF) Identification Number: 3087

Improvement Noted As: An increase in rate

Initial Population: All patients age 18 years and older at time of admission who are admitted to an inpatient hospital

Denominator: All patients age 18 years and older at time of admission who are admitted to an inpatient hospital

Included Populations: Patients admitted to acute inpatient care.

Excluded Populations: None

Data Elements:

- *Inpatient Admission Time*
- *Birthdate*
- *Inpatient Discharge Time*

Numerator: Patients in the denominator who have a completed malnutrition screening documented in the medical record within 24 hours of admission to the hospital. For the purposes of this measure, it is recommended that a malnutrition screening be performed using a validated screening tool, which may include but is not limited to, one of the following validated tools:

Malnutrition Screening Tool (MST) (Wu, 2012), Nutrition Risk Classification (NRC) (Kovacevich, 1997), Nutritional Risk Index (NRI) (Honda, 2016), Nutritional Risk Screening 2002 (NRS-2002) (Bauer, 2005), Short Nutrition Assessment Questionnaire (SNAQ) (Pilgrim, 2016).

Bauer JM, Vogl T, Wicklein S, Trögner J, Mühlberg W, Sieber CC. Comparison of the Mini Nutritional Assessment, Subjective Global Assessment, and Nutritional Risk Screening (NRS 2002) for nutritional screening and assessment in geriatric hospital patients. Z Gerontol Geriatr. 2005;38(5):322-7.

Kovacevich DS, Boney AR, Braunschweig CL, Perez A, Stevens M. Nutrition risk classification: a reproducible and valid tool for nurses. Nutr Clin Pract. 1997;12(1):20-5.

Honda Y, Nagai T, Iwakami N, et al. Usefulness of Geriatric Nutritional Risk Index for Assessing Nutritional Status and Its Prognostic Impact in Patients Aged =65 Years With Acute Heart Failure. Am J Cardiol. 2016;

Pilgrim AL, Baylis D, Jameson KA, et al. Measuring Appetite with the Simplified Nutritional Appetite Questionnaire Identifies Hospitalised Older People at Risk of Worse Health Outcomes. J Nutr Health Aging. 2016;20(1):3-7.

Wu ML, Courtney MD, Shortridge-baggett LM, Finlayson K, Isenring EA. Validity of the malnutrition screening tool for older adults at high risk of hospital readmission. J Gerontol Nurs. 2012;38(6):38-45.

Included Populations: Patients with a completed malnutrition screening, as defined by value set OID: 2.16.840.1.113762.1.4.1095.40.

Excluded Populations: Patients with a length of stay less than 24 hours

Data Elements:

- *Completed Malnutrition Screening*
- *Completed Malnutrition Screening Time Stamp*

Risk Adjustment: No

Data Collection Approach: This measure is specified for use with electronic health records. It has XML-based specifications which are mapped onto the hospital's EHR data warehouse to extract the necessary data elements for the measure specifications. Data elements should be labeled with nationally-standardized coding terminology included in the value sets built into the measure specifications.

Data Accuracy: Variation may exist at the level of documentation of appropriate data for the required data elements. Since the data elements represent the completion of discrete care processes, the accuracy of the data is dependent on the initial documentation by hospital staff.

Measure Analysis Suggestions: None

Sampling: None

Data Reported As: Aggregated rate generated from count data reported as a proportion (numerator/denominator)

Selected References:

Amaral TF, Matos LC, Tavares MM, Subtil A, Martins R, Nazaré M, et al. The economic impact of disease-related malnutrition at hospital admission. Clin Nutr. 2007 Dec;26(6):778–84.

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British Association for Parenteral and Enteral Nutrition. Malnutrition Matters, A Toolkit for Clinical Commissioning Groups and Providers in England. Published 2012. Retrieved from: http://www.bapen.org.uk/pdfs/bapen_pubs/bapen-toolkit-for-commissioners-and-providers.pdf.

Cereda E, Klersy C, Pedrolli C, et al. The Geriatric Nutritional Risk Index predicts hospital length of stay and in-hospital weight loss in elderly patients. Clin Nutr. 2015;34(1):74-8.

Corkins MR, Guenter P, DiMaria-Ghalili RA & Resnick HE. Malnutrition diagnoses in hospitalized patients: United States, 2010. JPEN J Parenter Enteral Nutr. 2014;38(2):186-95.

Gomes F, Emery PW, Weekes CE. Risk of Malnutrition Is an Independent Predictor of Mortality, Length of Hospital Stay, and Hospitalization Costs in Stroke Patients. J Stroke Cerebrovasc Dis. 2016;25(4):799-806.

Guerra RS, Sousa AS, Fonseca I, et al. Comparative analysis of undernutrition screening and diagnostic tools as predictors of hospitalisation costs. J Hum Nutr Diet. 2016;29(2):165-73.

J. Kondrup, S. P. Allison, M. Elia, B. Vellas, and M. Plauth, “ESPEN guidelines for nutrition screening 2002,” Clinical Nutrition, vol. 22, no. 4, pp. 415–421, 2003.

Khalatbari-soltani S, Marques-vidal P. Impact of nutritional risk screening in hospitalized patients on management, outcome and costs: A retrospective study. Clin Nutr. 2016; pii: S0261-5614(16)00069-8.

Kruizenga HM, Van Tulder MW, Seidell JC, Thijs A, Ader HJ, Van Bokhorst-de van der Schueren MAE. Effectiveness and cost-effectiveness of early screening and treatment of malnourished patients. Am J Clin Nutr. 2005 Nov;82(5):1082–9.

Lew CC, Yandell R, Fraser RJ, Chua AP, Chong MF, Miller M. Association Between Malnutrition and Clinical Outcomes in the Intensive Care Unit: A Systematic Review. JPEN J Parenter Enteral Nutr. 2016;

Lim SL, Ong KC, Chan YH, Loke WC, Ferguson M, Daniels L. Malnutrition and its impact on cost of hospitalization, length of stay, readmission and 3-year mortality. Clin Nutr. 2012;31(3):345-50.

Mueller C, Compher C & Druyan ME and the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Board of Directors. A.S.P.E.N. Clinical Guidelines: Nutrition Screening, Assessment, and Intervention in Adults. J Parenter Enteral Nutr. 2011;35: 16-24.

National Institute for Health and Care Excellence. NICE Quality Standard [Q24] Nutrition Support in Adults. Retrieved from: https://www.nice.org.uk/guidance/qs24/chapter/quality-statement-1-screening-for-the-risk-of-malnutrition; Published November 2012.

Patel V, Romano M, Corkins MR, et al. Nutrition Screening and Assessment in Hospitalized Patients: A Survey of Current Practice in the United States. Nutr Clin Pract. 2014;29(4):483-490.

Volkert D, Saeglitz C, Gueldenzoph H, Sieber CC, Stehle P. Undiagnosed malnutrition and nutrition-related problems in geriatric patients. J Nutr Health Aging. 2010;14(5):387-92.

White, J. V., Guenter, P., Jensen, G., Malone, A., & Schofield, M. (2012). Consensus statement of the academy of nutrition and dietetics/American Society for Parenteral and Enteral Nutrition: Characteristics recommended for the identification and documentation of adult malnutrition (undernutrition). Journal of the Academy of Nutrition and Dietetics, 112(5), 730-738.

Completion of a Nutrition Assessment for Patients Identified as At-Risk for Malnutrition within 24 hours of a Malnutrition Screening

Description: Patients age 65 years and older identified as at-risk for malnutrition based on a malnutrition screening who have a nutrition assessment documented in the medical record within 24 hours of the most recent malnutrition screening

Rationale: Patients who are malnourished while in the hospital have been associated with important adverse patient safety outcomes such as increased risk of complications, readmissions, and length of stay. Malnutrition is also associated with many adverse outcomes including depression of the immune system, impaired wound healing, muscle wasting, and increased mortality. Referral rates for dietetic assessment and treatment of malnourished patients have proven to be suboptimal, thereby increasing the likelihood of developing such aforementioned complications (Corkins, 2014), (Barker et al., 2011), (Amaral, et al., 2007), (Kruizenga et al. 2005). Although a review of nationally-representative data on cost and utilization indicated that in 2010, 3.2% of patients had a diagnosis of malnutrition (Corkins, 2014), this may be a severely underreported figure identified in other research studies which have estimated that 4-19 million cases are left undiagnosed and untreated. For example, Patel et al. (2014) conducted a national survey of hospital-based professionals in the United States focused on nutrition screening and assessment practices and associated gaps in knowledge of nutrition care. Out of 1,777 unique respondents, only 23.1% reported using a validated assessment tool to help identify clinical characteristics for a malnutrition diagnosis. Nutrition assessments conducted for at-risk patients identified by malnutrition screening using a validated screening tool was associated with key patient outcomes including less weight loss, reduced length of stay, improved muscle function, better nutritional intake, and fewer readmissions (Mueller, 2011).

The use of validated nutrition assessments are important tools for the identification of physical findings that help clinicians determine the appropriate nutrition interventions and care plans that properly address impaired nutrition status. The identification of these malnutrition findings are independently associated with adverse patient outcomes. In a study of 409 patients with a median age of 68, researchers were able to demonstrate that declining nutritional status as assessed by the subjective global assessment (SGA), a validated assessment tool, was significantly associated with prolonged length of stay (Allard, 2016). Additionally, a study of 733 from more than a dozen hospitals identified that the completion of a validated assessment for patients who were hospitalized was able to detect predictors of outcomes for malnutrition such as length of stay and readmission within 30 days after discharge (Jeejeebhoy, 2015).

Type of Measure: Process

National Quality Forum (NQF) Identification Number: 3088

Improvement Noted As: An increase in rate

Initial Population: Patients age 65 years and older at time of admission who are admitted to an inpatient hospital

Denominator: Patients age 65 years and older who were identified as at-risk for malnutrition upon completing a malnutrition screening.

> **Included Populations:** Patients with a malnutrition screening result of “at risk”, as defined by value set OID: 2.16.840.1.113762.1.4.1095.38.
>
> **Excluded Populations:** Patients with a length of stay of <24 hours
>
> **Data Elements:**
>
> - *Inpatient Admission Time*
> - *Birthdate*

- *Completed Malnutrition Screening*
- *Completed Malnutrition Screening Time Stamp*
- *Malnutrition Screening Result*
- *Inpatient Discharge Time*

Numerator: Patients in the denominator who have a nutrition assessment documented in the medical record within 24 hours of the most recent malnutrition screening. Recommended nutrition assessment tools include:

Subjective Global Assessment (Detsky, 1987), Patient Generated Subjective Global Assessment (Bauer, 2002), Nutrition-Focused Physical Exam (White, 2012)

Detsky AS, Mclaughlin JR, Baker JP, et al. What is subjective global assessment of nutritional status?. JPEN J Parenter Enteral Nutr. 1987;11(1):8-13.

Bauer J, Capra S, Ferguson M. Use of the scored Patient-Generated Subjective Global Assessment (PG-SGA) as a nutrition assessment tool in patients with cancer. Eur J Clin Nutr. 2002;56(8):779-85.

White JV, Guenter P, Jensen G, et al. Consensus statement: 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(3):275-83.

Included Populations: Patients with a completed nutrition assessment, as defined by value set OID: 2.16.840.1.113762.1.4.1095.29.

Excluded Populations: None

Data Elements:

- *Completed Nutrition Assessment*
- *Completed Nutrition Assessment Time Stamp*

Risk Adjustment: No

Data Collection Approach: This measure is specified for use with electronic health records. It has XML-based specifications which are mapped onto the hospital's EHR data warehouse to extract the necessary data elements for the measure specifications. Data elements should be labeled with nationally-standardized coding terminology included in the value sets built into the measure specifications.

Data Accuracy: Variation may exist at the level of documentation of appropriate data for the required data elements. Since the data elements represent the completion of discrete care processes, the accuracy of the data is dependent on the initial documentation by hospital staff.

Measure Analysis Suggestions: None

Sampling: None

Data Reported As: Aggregated rate generated from count data reported as a proportion (numerator/denominator)

Selected References:

Academy of Nutrition & Dietetics. CI: Nutrition Assessment of Critically Ill Adults 2012. Academy of Nutrition & Dietetics Evidence Analysis Library. Published 2012. Retrieved from: http://www.andeal.org/topic.cfm?menu=4800.

Allard JP, Keller H, Jeejeebhoy KN, et al. Decline in nutritional status is associated with prolonged length of stay in hospitalized patients admitted for 7 days or more: A prospective cohort study. Clin Nutr. 2016;35(1):144-52.

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Barker et al., Hospital Malnutrition: Prevalence, Identification and Impact on Patients and the Healthcare System. J Environ Res Public Health. Feb 2011; 8(2): 514–527. Published online Feb 16, 2011.

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Jeejeebhoy KN, Keller H, Gramlich L, et al. Nutritional assessment: comparison of clinical assessment and objective variables for the prediction of length of hospital stay and readmission. Am J Clin Nutr. 2015;101(5):956-65.

Kruizenga HM, Van Tulder MW, Seidell JC, Thijs A, Ader HJ, Van Bokhorst-de van der Schueren MAE. Effectiveness and cost- effectiveness of early screening and treatment of malnourished patients. Am J Clin Nutr. 2005 Nov;82(5):1082–9.

Lew CC, Yandell R, Fraser RJ, Chua AP, Chong MF, Miller M. Association Between Malnutrition and Clinical Outcomes in the Intensive Care Unit: A Systematic Review. JPEN J Parenter Enteral Nutr. 2016;

Lim SL, Ong KC, Chan YH, Loke WC, Ferguson M, Daniels L. Malnutrition and its impact on cost of hospitalization, length of stay, readmission and 3-year mortality. Clin Nutr. 2012;31(3):345-50.

Mueller C, Compher C & Druyan ME and the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Board of Directors. A.S.P.E.N. Clinical Guidelines: Nutrition Screening, Assessment, and Intervention in Adults. J Parenter Enteral Nutr. 2011;35: 16-24.

Patel V, Romano M, Corkins MR, et al. Nutrition Screening and Assessment in Hospitalized Patients: A Survey of Current Practice in the United States. Nutr Clin Pract. 2014;29(4):483-490.

Volkert D, Saeglitz C, Gueldenzoph H, Sieber CC, Stehle P. Undiagnosed malnutrition and nutrition-related problems in geriatric patients. J Nutr Health Aging. 2010;14(5):387-92.

Nutrition Care Plan for Patients Identified as Malnourished after a Completed Nutrition Assessment

Description: A documented nutrition care plan for those patients who are found to be malnourished based on a completed nutrition assessment with findings of malnutrition

Rationale Patients who are malnourished while in the hospital have been associated with an increased occurrence of certain adverse patient outcomes such as increased risk of complications, readmissions, and prolonged length of stay. Malnutrition is also associated with other adverse occurrences including depression of the immune system, impaired wound healing, muscle wasting, and increased mortality. Referral rates for nutrition assessment and treatment of malnourished patients have proven to be suboptimal, thereby increasing the likelihood of developing such aforementioned complications (Corkins, 2014, Barker et al., 2011, Amaral, et al., 2007, Kruizenga et al., 2005). Nutritional status and progress are often not adequately documented in the medical record. It can be difficult to tell when (or if) patients are consuming food and supplements. In addition, nutritional procedures and EHR-driven care recommendations are often lacking in the hospital. Similarly, nutritional care plans and patient issues are poorly communicated to post-acute facilities and PCPs (Corkins, 2014). The current evidence supports the early and rapid identification of malnutrition in order to allow for timely treatment of malnutrition in the hospital. Part of the recommended process for implementing nutrition care is appropriate recognition, diagnosis, and documentation of the nutrition status of a patient in order to address their condition with an appropriate plan of care and communicate patient needs to other care providers. Identifying and addressing malnutrition early in the episode of care is associated with reduced lengths of stay, 30-day readmission rates, hospital-acquired conditions, and overall healthcare costs (Lew, 2016, Meehan, 2016, Fry, 2010).

A randomized controlled trial of 652 hospitalized, malnourished older adults aged 65 years and older evaluated the use of a high-protein oral nutritional supplements for its impact on patient outcomes. The study reported a significant reduction of 90-day mortality ($p = 0.018$) (Deutz, 2016). Additionally, a nutrition support intervention in patients identified by screening and assessment as at risk for malnutrition or malnourished may improve clinical outcomes (Mueller, 2011). Several research studies associated early nutritional care after risk identification with improved outcomes such as reduced length of stay, reduced risk of readmissions, and lower cost of care (Deutz, 2016, Lew, 2016, Meehan, 2016, Milne, 2009, Kruizenga, 2005).

Type of Measure: Process

National Quality Forum (NQF) Identification Number: 3089

Improvement Noted As: An increase in rate

Initial Population: Patients age 65 years and older admitted to inpatient care who have a completed nutrition assessment documented in their medical record

Denominator: Patients age 65 years and older admitted to inpatient care who have a completed nutrition assessment documented in their medical record with findings of malnutrition.

> **Included Populations:** Patients age 65 years and older admitted to inpatient care who have document malnutrition findings from a completed nutrition assessment.
>
> **Excluded Populations:** Patients with a length of stay of less than 24 hours
>
> **Data Elements:**
>
> - *Inpatient Admission Time*
> - *Inpatient Discharge Time*
> - *Birthdate*

- *Completed Nutrition Assessment*
- *Nutrition Assessment Findings*

Numerator: Patients with a nutrition care plan documented in the patient´s medical record.

Care plan components include, but are not limited to: Completed assessment results; data and time stamp; treatment goals; prioritization based on treatment severity; prescribed treatment/intervention; identification of members of the Care Team, timeline for patient follow-up.

Included Populations: Patients with malnutrition who have a document nutrition care plan.

Excluded Populations: None

Data Elements:

- *Documented Nutrition Care Plan*

Risk Adjustment: No

Data Collection Approach: This measure is a hybrid measure as it is specified for use with both auto-extracted as well as with chart abstracted data collection. For the auto-extracted data elements (all critical data elements above except for Documented Nutrition Care Plan and Nutrition Assessment Findings), electronic health records with XML-based specifications that are mapped onto the hospital's EHR data warehouse extract the necessary data elements to fulfill those components of the measure specifications. Data elements should be labeled with nationally-standardized coding terminology included in the value sets built into the measure specifications. The chart abstracted components require manual review of records to identify the Documented Nutrition Care Plan and Nutrition Assessment Findings data elements for incorporation into the measure specifications.

Data Accuracy: Variation may exist in the documentation of the required data elements. Data accuracy is dependent on the accuracy and consistency of the documentation of the malnutrition care plan and interventions.

Measure Analysis Suggestions: None

Sampling: None

Data Reported As: Aggregated rate generated from count data reported as a proportion (numerator/denominator)

Selected References:

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Lew CC, Yandell R, Fraser RJ, Chua AP, Chong MF, Miller M. Association Between Malnutrition and Clinical Outcomes in the Intensive Care Unit: A Systematic Review. JPEN J Parenter Enteral Nutr. 2016.

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Appropriate Documentation of a Malnutrition Diagnosis

Description: Appropriate documentation of a malnutrition diagnosis for those patients who are found to be malnourished based on a nutrition assessment

Rationale: Data analyzed from the Healthcare Cost and Utilization Project (HCUP), a nationally-representative data set describing U.S. hospital discharges, indicated that approximately 3.2% of hospital discharges included malnutrition as a diagnosis in 2010 (Corkins, 2014). However, as this same research article reported, past studies have used validated screening tools to indicate a substantially higher prevalence of malnutrition that has gone undiagnosed in the hospital ranging from 33% (Robinson, 2003) to 78% (Lew, 2016, Somanchi, 2011). Patients who are malnourished while in the hospital have been associated with important negative outcomes such as increased risk of complications, readmissions, and length of stay. Malnutrition is also associated with many adverse outcomes including depression of the immune system, impaired wound healing, muscle wasting, and increased mortality. Referral rates for dietetic assessment and treatment of malnourished patients have proven to be suboptimal, thereby increasing the likelihood of developing such aforementioned complications (Corkins, 2014, Barker et al., 2011, Amaral, et al., 2007, Kruizenga et al., 2005).

Nutritional status and progress are often not adequately documented in the medical record. It can be difficult to tell when (or if) patients are consuming food and supplements. In addition, nutritional procedures and EHR-triggered care are often lacking in the hospital (Corkins, 2014). The current evidence supports the early and rapid identification of malnutrition status in order to allow for timely treatment of malnutrition in the hospital. Part of the recommended process for implementing nutrition care is appropriate recognition of the nutrition status, diagnosis, and documentation of that status and diagnosis to address their condition with an appropriate plan of care and communicate patient needs to other care providers. Identifying and addressing malnutrition early in the episode of care is associated with reduced lengths of stay, 30-day readmission rates, hospital-acquired conditions, and overall healthcare costs (Lew, 2016, Meehan, 2016, Fry, 2010).

A randomized controlled trial of 652 hospitalized, malnourished older adults aged 65 years and older evaluated the use of a high-protein oral nutritional supplements for its impact on patient outcomes. The study reported a significant reduction of 90-day mortality ($p = 0.018$) (Deutz, 2016). Additionally, a nutrition support intervention in patients identified by screening and assessment as at risk for malnutrition or malnourished may improve clinical outcomes (Mueller, 2011). Several research studies associated early nutritional care after risk identification with improved outcomes such as reduced length of stay, reduced risk of readmissions, and lower cost of care (Deutz, 2016, Lew, 2016, Meehan, 2016, Milne, 2009, Kruizenga, 2005).

Type of Measure: Process

National Quality Forum (NQF) Identification Number: 3090

Improvement Noted As: An increase in rate

Initial Population: Patients age 65 years and older admitted to inpatient care who have a completed nutrition assessment with findings of malnutrition documented in their medical record

Denominator: Patients age 65 years and older admitted to inpatient care who have a completed nutrition assessment documented in their medical record with a finding of malnutrition

> **Included Populations:** Patients age 65 years and older admitted to inpatient care who have document malnutrition findings from a completed nutrition assessment.
>
> **Excluded Populations:** Patients with a length of stay of less than 24 hours; Patients who left against medical advice (AMA); Patients discharged to hospice care;

Data Elements:

- *Inpatient Admission Time*
- *Inpatient Discharge Time*
- *Discharge Status: Left Against Medical Advice (AMA)*
- *Discharge Status: Discharged to Hospice*
- *Birthdate*
- *Completed Nutrition Assessment*
- *Nutrition Assessment Findings*

Numerator: Patients with a documented diagnosis of malnutrition.

Included Populations: None

Excluded Populations: None

Data Elements:

- *Malnutrition Diagnosis*

Risk Adjustment: No

Data Collection Approach: This measure is a hybrid measure as it is specified for use with both auto-extracted as well as with chart abstracted data collection. For the auto-extracted data elements (all required data elements above except for Nutrition Assessment Findings), electronic health records with XML-based specifications mapped onto the hospital's EHR data warehouse extract the necessary data elements for those components of the measure specifications. Data elements should be labeled with nationally-standardized coding terminology included in the value sets built into the measure specifications. The chart abstracted components require manual review of records to fulfill the Nutrition Assessment Findings data elements for incorporation into the measure specifications.

Data Accuracy: Variation may exist in the documentation of the required data elements. Data accuracy is dependent on the accuracy and consistency of the documentation of the malnutrition diagnosis by clinicians.

Measure Analysis Suggestions: None

Sampling: None

Data Reported As: Aggregated rate generated from count data reported as a proportion (numerator/denominator)

Selected References:

Academy of Nutrition & Dietetics. CI: Nutrition Assessment of Critically Ill Adults 2012. Academy of Nutrition & Dietetics Evidence Analysis Library. Published 2012. Retrieved from: http://www.andeal.org/topic.cfm?menu=4800.

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British Association for Parenteral and Enteral Nutrition. Malnutrition Matters, A Toolkit for Clinical Commissioning Groups and providers in England. Published 2012. Retrieved from: http://www.bapen.org.uk/pdfs/bapen_pubs/bapen-toolkit-for-commissioners-and-providers.pdf.

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Deutz NE, Matheson EM, Matarese LE, et al. Readmission and mortality in malnourished, older, hospitalized adults treated with a specialized oral nutritional supplement: A randomized clinical trial. Clin Nutr. 2016;35(1):18-26.

Fry DE, Pine M, Jones BL, Meimban RJ. Patient characteristics and the occurrence of never events. Arch Surg. 2010;145(2):148-51.

Kruizenga HM, Van Tulder MW, Seidell JC, Thijs A, Ader HJ, Van Bokhorst-de van der Schueren MAE. Effectiveness and cost- effectiveness of early screening and treatment of malnourished patients. Am J Clin Nutr. 2005 Nov;82(5):1082–9.

Lew CC, Yandell R, Fraser RJ, Chua AP, Chong MF, Miller M. Association Between Malnutrition and Clinical Outcomes in the Intensive Care Unit: A Systematic Review. JPEN J Parenter Enteral Nutr. 2016;

Mueller C, Compher C & Druyan ME and the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Board of Directors. A.S.P.E.N. Clinical Guidelines: Nutrition Screening, Assessment, and Intervention in Adults. J Parenter Enteral Nutr. 2011;35: 16-24.

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Somanchi et al., The Facilitated Early Enteral and Dietary Management Effectiveness Trial in Hospitalized Patients with Malnutrition. JPEN J Parenteral Enteral Nutr 2011 35:209.

White JV, et al. Consensus statement: 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(3):275–283.

Malnutrition Data Element Dictionary

Malnutrition Measure Set Table

Measure ID #	Measure Short Name
#1	Malnutrition Screening within 24 Hours of Admission
#2	Nutrition Assessment Completed for Patients At-Risk of Malnutrition
#3	Nutrition Care Plan Documented for Patients with Findings of Malnutrition
#4	Appropriate Documentation of Malnutrition Diagnosis

Alphabetical Data Dictionary

Index

Data Element Name: *Admission Date*

Value Set Name: Hospital Measures-Encounter Inpatient

Value Set OID: 2.16.840.1.113883.3.666.5.625

Collected For: All Records

Definition: The month, day, and year of admission to acute inpatient care.

Suggested Data Collection Question: N/A, EHR-generated data element

Format:

Length: 10 – MM-DD-YYYY (includes dashes)

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

Suggested Data Sources:
See Inpatient Admission Time Stamp for details

Data Element Name: *Admission Time*

Value Set Name: Hospital Measures-Encounter Inpatient

Value Set OID: 2.16.840.1.113883.3.666.5.625

Collected For: All Records

Definition: The documented time (military time) of the patient's admission to inpatient acute care.

Suggested Data Collection Question: N/A, EHR-generated data element

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

Midnight - 00:00	Noon - 12:00
5:31 am - 05:31	5:31 pm - 17:31
11:59 am - 11:59	11:59 pm - 23:59

Suggested Data Sources:
See Inpatient Admission Time Stamp for details

Data Element Name: *Birthdate*

Collected For: All Records

Definition: The month, day, and year the patient was born.

Note: Patient's age (in years) is calculated by *Admission Date* minus *Birthdate*. The algorithm to calculate age must use the month and day portion of admission date and birthdate to yield the most accurate age.

Format:

Length: 10 – MM-DD-YYYY (includes dashes)

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (1880-Current Year)

Suggested Data Sources:

- Emergency Department record
- Face sheet
- Registration form
- UB-04

Data Element Name: *Completed Malnutrition Screening*

Value Set Name: Malnutrition Risk Screening

Value Set OID: 2.16.840.1.113762.1.4.1095.40

Collected For: #1, #2

Definition: Documentation that the patient completed a screening for malnutrition.

Note: It is recommended that a malnutrition screening be performed using a validated screening tool which may include but is not limited to one of the following validated tools:

Malnutrition Screening Tool (MST) (Wu, 2012), Nutrition Risk Classification (NRC) (Kovacevich, 1997), Nutritional Risk Index (NRI) (Honda, 2016), Nutritional Risk Screening 2002 (NRS-2002) (Bauer, 2005), Short Nutrition Assessment Questionnaire (SNAQ) (Pilgrim, 2016).

Bauer JM, Vogl T, Wicklein S, Trögner J, Mühlberg W, Sieber CC. Comparison of the Mini Nutritional Assessment, Subjective Global Assessment, and Nutritional Risk Screening (NRS 2002) for nutritional screening and assessment in geriatric hospital patients. Z Gerontol Geriatr. 2005;38(5):322-7.

Kovacevich DS, Boney AR, Braunschweig CL, Perez A, Stevens M. Nutrition risk classification: a reproducible and valid tool for nurses. Nutr Clin Pract. 1997;12(1):20-5.

Honda Y, Nagai T, Iwakami N, et al. Usefulness of Geriatric Nutritional Risk Index for Assessing Nutritional Status and Its Prognostic Impact in Patients Aged =65 Years With Acute Heart Failure. Am J Cardiol. 2016;

Pilgrim AL, Baylis D, Jameson KA, et al. Measuring Appetite with the Simplified Nutritional Appetite Questionnaire Identifies Hospitalised Older People at Risk of Worse Health Outcomes. J Nutr Health Aging. 2016;20(1):3-7.

Wu ML, Courtney MD, Shortridge-baggett LM, Finlayson K, Isenring EA. Validity of the malnutrition screening tool for older adults at high risk of hospital readmission. J Gerontol Nurs. 2012;38(6):38-45.

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes)	Patient was screened for malnutrition risk.
N (No)	Patient was not screened for malnutrition risk.

Suggested Data Sources:

- History and physical
- Intake form
- Admission form
- Nursing screen

Data Element Name: *Completed Nutrition Assessment*

Value Set Name: Malnutrition Assessment

Value Set OID: 2.16.840.1.113762.1.4.1095.29

Collected For: #2, #3

Definition: Documentation that the patient received a nutrition assessment.

Note: It is recommended that a nutrition assessment be completed using an evidence-based approach that includes one of the following nutrition assessment tools:

Subjective Global Assessment (Detsky, 1987), Patient Generated Subjective Global Assessment (Bauer, 2002), Nutrition-Focused Physical Exam (White, 2012)

Detsky AS, Mclaughlin JR, Baker JP, et al. What is subjective global assessment of nutritional status?. JPEN J Parenter Enteral Nutr. 1987;11(1):8-13.

Bauer J, Capra S, Ferguson M. Use of the scored Patient-Generated Subjective Global Assessment (PG-SGA) as a nutrition assessment tool in patients with cancer. Eur J Clin Nutr. 2002;56(8):779-85.

White JV, Guenter P, Jensen G, et al. Consensus statement: 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(3):275-83.

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes)	Patient was assessed for malnutrition and other nutrition physical findings by a registered dietitian.
N (No)	Patient was not assessed for malnutrition and other nutrition physical findings by a registered dietitian.

Suggested Data Sources:

- Dietitian assessment form
- Nutrition care form
- Discharge summary
- Progress notes

Data Element Name: *Discharge Status*

Value Set Names:

a. Discharged to Health Care Facility for Hospice Care
b. Discharged to Home for Hospice Care
c. Left Against Medical Advice

Value Set OIDs:

a. 2.16.840.1.113883.3.117.1.7.1.207
b. 2.16.840.1.113883.3.117.1.7.1.209
c. 2.16.840.1.113883.3.117.1.7.1.308

Collected For: #4

Definition: The final place or setting to which the patient was discharged on the day of discharge.

Note: If patients have a discharge status matching any of the following values, the record meets this criteria:

a. Discharged to Health Care Facility for Hospice Care
b. Discharged to Home for Hospice Care
c. Left Against Medical Advice

Format:

Length: 1
Type: Binomial
Occurs: 1

Allowable Values:

1 (Yes)	Discharge status of Hospice (Health Care Facility or Home), or Left Against Medical Advice (AMA)
0 (No)	Patients with any other discharge status: Home, Acute Care Facility, Other Health Care Facility, Expired, Not Documented or Unable to Determine (UTD)

Suggested Data Sources:

- Discharge instruction sheet
- Discharge planning notes
- Discharge summary
- Nursing discharge notes
- Physician orders
- Progress notes
- Social service notes
- Transfer record

Data Element Name: *Hispanic Ethnicity*

Value Set Name: Ethnicity

Value Set OID: 2.16.840.1.114222.4.11.837

Collected For: All Records

Definition: Documentation that the patient is of Hispanic ethnicity or Latino.

Note: None

Format:

Length: 1

Type: Character

Occurs: 1

Allowable Values:

Y (Yes)	Patient is of Hispanic ethnicity or Latino.
N (No)	Patient is not of Hispanic ethnicity or Latino or unable to determine from medical record documentation.

Suggested Data Sources:

- Emergency Department record
- Face sheet
- History and physical
- Nursing admission assessment
- Progress notes

Data Element Name: *Inpatient Admission Time Stamp*

Value Set Name: Hospital Measures-Encounter Inpatient

Value Set OID: 2.16.840.1.113883.3.666.5.625

Collected For: All Records

Definition: The documented time (military time) and calendar date of the patient's admission to inpatient acute care.

Suggested Data Collection Question: N/A, EHR-generated data element

Format:

Length: 15 – MM-DD-YYYY HH:MM (with or without colon) or UTD

Type: Date and Time

Occurs: 1

Allowable Values:

For Time Component:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

Midnight - 00:00	Noon - 12:00
5:31 am - 05:31	5:31 pm - 17:31
11:59 am - 11:59	11:59 pm - 23:59

For Calendar Date Component:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (1880-Current Year)

Suggested Data Sources:

- Emergency Department record
- Nursing admission assessment/admitting note
- Observation record
- Procedure notes
- Vital signs graphic record

Data Element Name: *Malnutrition Diagnosis*

Value Set Name: Malnutrition Diagnosis

Value Set OID: 2.16.840.1.113762.1.4.1095.55

Collected For: #4

Definition: Subset of malnutrition diagnosis codes from the overall nutrition diagnosis value set including:

Suggested Data Collection Question: What malnutrition diagnosis was entered for this case?

Format:

Length: 50 Characters

Type: Character (upper or lower case)

Occurs: 1

Allowable Values:

Any entries labeled with the following codes:

SNOMEDCT (2013-09)	238107002, 272588001, 190602008, 190603003, 360549009, 190605005, 190606006, 65404009, 70241007, 238107002, 665128014, 407752010, 2920802017
LOINC (2.46)	54816-4, 75305-3
ICD9CM (2013)	260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9, 799.4
ICD10CM (2014)	E40, E41, E42, E43, E44, E45, E46, E64

Notes for Abstraction:

None

Suggested Data Sources:

- Discharge summary
- Face sheet
- Nutrition form

Data Element Name: *Malnutrition Screening Time Stamp*

Value Set Name: Malnutrition Risk Screening

Value Set OID: 2.16.840.1.113762.1.4.1095.40

Collected For: #1, #2

Definition: The documented time (military time) and calendar date of the documented malnutrition screening.

Suggested Data Collection Question: N/A, EHR-generated data element

Format:

Length: 15 – MM-DD-YYYY HH:MM (with or without colon) or UTD

Type: Date and Time

Occurs: 1

Allowable Values:

For Time Component:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

Midnight - 00:00	Noon - 12:00
5:31 am - 05:31	5:31 pm - 17:31
11:59 am - 11:59	11:59 pm - 23:59

For Calendar Date Component:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (1880-Current Year)

Suggested Data Sources:

- History and physical
- Intake form
- Admission form
- Nursing screen

Data Element Name: *Malnutrition Screening Findings*

Value Set Name: Malnutrition Risk Screening

Value Set OID: 2.16.840.1.113762.1.4.1095.40

Collected For: #1, #2

Definition: Identification of malnutrition risk from the completion of a malnutrition screening is documented.

Note: Due to the various existing validated screening tools in use, the collection of this data element is dependent on the definition of "at risk" for each individual screening tool. Some tools characterize "nutrition risk" based upon the outcome of a specific quantitative scale.

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes)	Finding of malnutrition risk document in record.
N (No)	No finding of malnutrition risk was documented.

Notes for Abstraction:

Suggested Data Sources:

- History and physical
- Intake form
- Admission form
- Nursing screen

Data Element Name: *Nutrition Assessment Time Stamp*

Value Set Name: Malnutrition Assessment

Value Set OID: 2.16.840.1.113762.1.4.1095.29

Collected For: #2, #3

Definition: The documented time (military time) and calendar date of the documented nutrition assessment.

Suggested Data Collection Question: N/A, EHR-generated data element

Format:

Length: 15 – MM-DD-YYYY HH:MM (with or without colon) or UTD

Type: Date and Time

Occurs: 1

Allowable Values:

For Time Component:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

Midnight - 00:00	Noon - 12:00
5:31 am - 05:31	5:31 pm - 17:31
11:59 am - 11:59	11:59 pm - 23:59

For Calendar Date Component:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (1880-Current Year)

Notes for Abstraction:

None

Suggested Data Sources:

- Dietitian assessment form
- Nutrition care form
- Discharge summary
- Progress notes

Data Element Name: *Nutrition Assessment Result*

Value Set Name: N/A, Chart abstracted data element

Value Set OID: N/A

Collected For: #3, #4

Definition: Documentation of nutrition assessment results.

Note: The findings of the nutrition assessment are defined as the type and characterization of malnutrition identified by the dietitian.

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes)	Malnutrition findings were identified as a result of the nutrition assessment
N (No)	Malnutrition findings were not identified as part of a nutrition assessment

Notes for Abstraction:

Academy of Nutrition and Dietetics (Academy)/American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) clinical characteristics that the clinician can obtain and document to support a diagnosis of malnutrition are published in the 2012 Consensus Statement recommending characteristics for the identification and documentation of adult malnutrition.

White JV, Guenter P, Jensen G, et al. Consensus statement: 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(3):275-83.

Suggested Data Sources:

- Dietitian assessment form
- Nutrition care form
- Discharge summary
- Progress notes

Data Element Name: *Nutrition Care Plan*

Value Set Name: N/A, Chart abstracted data element

Value Set OID: N/A

Collected For: #3

Definition: Documentation of a nutrition care plan

Note: Care plan components include, but are not limited to: Completed assessment results; data and time stamp; treatment goals; prioritization based on treatment severity; prescribed treatment/intervention; identification of members of the Care Team, timeline for patient follow-up.

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes)	Nutrition care plan was documented as part of the patient's medical record
N (No)	Nutrition care plan was not documented as part of the patient's medical record

Notes for Abstraction:

Suggested Data Sources:

- Discharge summary
- Progress notes
- Assessment notes
- Treatment plans
- Treatment consultations
- Dietary progress notes
- Home health instructions

Data Element Name: *Race*

Value Set Name: Race

Value Set OID: 2.16.840.1.114222.4.11.836

Collected For: All Records

Definition: Documentation of the patient's race.

Note: None

Format:

Length: 1

Type: Character

Occurs: 1

Allowable Values:

Select one:

1. **White:** Patient's race is White or the patient has origins in Europe, the Middle East, or North Africa.
2. **Black or African American:** Patient's race is Black or African American.
3. **American Indian or Alaska Native:** Patient's race is American Indian/Alaska Native.
4. **Asian:** Patient's race is Asian.
5. **Native Hawaiian or Pacific Islander:** Patient's race is Native Hawaiian/Pacific Islander.
6. **Other Race:** No race above is applicable.
7. **UTD:** Unable to determine the patient's race or not stated (e.g., not documented, conflicting documentation or patient unwilling to provide).

Suggested Data Sources:

- Emergency Department record
- Face sheet
- History and physical
- Nursing admission assessment
- Progress notes

Data Element Name: *Sex*

Value Set Name: ONC Administrative Sex

Value Set OID: 2.16.840.1.113762.1.4.1

Collected For: All Records

Definition: The patient's documented sex on arrival at the hospital.

Format:

Length: 1

Type: Character

Occurs: 1

Allowable Values:

M = Male
F = Female
U = Unknown

Suggested Data Sources:

- Consultation notes
- Emergency Department record
- Face sheet
- History and physical
- Nursing admission notes
- Progress notes
- UB-04