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ATLANTA



Malnutrition: Pairing With Your Dietitians to Diagnose, Document, and Capture the Super Diagnosis

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9TH ANNUAL CONFERENCE

Vaughn Matacale, MD, *Director, Clin Doc Adv Pgm*
Njeri Njuguna, MS, RDN, LDN, *Mgr Clinical Nutrition*
Ashley Strickland, RDN, LDN, CNSC, *Clinical Nutrition Supervisor*
Vidant Health
Greenville, NC

Learning Objectives


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- At the completion of this educational activity, the learner will be able to:
 - Discuss the impact of malnutrition on patient outcome metrics and reimbursement
 - Implement a competency based development program for dietitians dealing with malnutrition

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Introduction

HPro



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Vidant Health HCPPro

- 8 hospitals (3 CAHs)
- 1500 beds
- Affiliated medical school
- Over 30 IP coders and 15 CDSs
- 43 dietitians
- 11,950 employees
- Over 1,000 providers
- 63,500 admissions
- 35,000 surgeries
- 5 physician advisors

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ICD-10 Diagnoses HCPPro

E40–46 Malnutrition

- E40 – Kwashiorkor
- E41 – Nutritional marasmus
- E42 – Marasmic kwashiorkor
- E43 – Unspecified severe protein-calorie malnutrition
- E44 – Protein-calorie malnutrition of moderate and mild degree
- E45 – Retarded development following protein-calorie malnutrition
- E46 – Unspecified protein-calorie malnutrition

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Why a Super Diagnosis? HCPPro

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The Impact of Diagnosing, Documenting, and Capturing Malnutrition HCPPro

- Improved patient outcomes
- Profiling
 - Better portrayal of care
- Risk adjustment
 - Mortality, readmission rates, complication rates
- Utilization
 - Length of stay, resource utilization
- Financial
 - PQRS/VBPM, CCs/HCCs, MERs, MIPS
 - DRG

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Outcomes: Malnutrition in the Hospital HCPPro

- 1 in 3 patients enters a hospital malnourished
- Malnourished patients:
 - 2x more likely to develop a pressure ulcer in a hospital
 - Hospitalized an average of 2 days longer than those screened and treated early
 - Comprise 45% of patients that fall in a hospital
 - Have 3x the risk for surgical site infection
- Benefits of nutrition intervention:
 - 25% reduction in pressure ulcer incidence
 - 28% decrease in avoidable readmissions
 - 14% fewer overall complications
 - ~2 day reduction in average length of stay

Recommended further reading:
 • Tappenden KA, Quinterio B, Parkhurst ML, Malone AM, Ranjbar G, Ziegler TR. 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):482-497.
 • The Facts on Malnutrition. Available from: <http://malnutrition.com/getinspired/factsheet>. Accessed January 13, 2016.

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Profiling: Improved Portrayal of Care HCPPro

Individual physician

Hip Replacement
 Total hip replacement (ICD-9-CM code 81.50)
 Replace diseased hip joint with an artificial hip joint. The most common reason for a hip replacement is osteoarthritis, which is a breakdown of the cartilage in the joint. [View information about](#)

Adjusted complication rate

PERFORMED PROCEDURE	COMPLICATIONS	RAW COMPLICATION RATE
53 Times	0	0%

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Risk Adjustment/Utilization: UHC Models +HCPPro

- There are 214 expected mortality models
- There are 344 expected LOS models
- There are 338 expected cost models

Malnutrition is found in:

- 38% of expected mortality models
- 83% of expected LOS models
- 79% of expected cost models

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Finance +HCPPro

Payment model	DRG (CC/MCC)	ACO/MA (CC/HCC)	MIPS (physician)	VBP (outcomes/efficiency)
Malnutrition Impact	Yes	Yes	Yes	Yes

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Case and Query Example +HCPPro

This patient with chronic alcoholism has presented with N/V felt to be due to alcoholic hepatitis. She had decreased appetite, weakness and weight loss of over 20lbs in 2 months. Dietitian consult states "this patient meets criteria for severe protein calorie malnutrition in the context of chronic illness based on wt status (12% loss x 2months) and energy intake [limited intake 2/2 behavioral issues (alcoholism)]." Glucerna added to diet. Please clarify if you feel this patient has:

1. SEVERE PROTEIN CALORIE MALNUTRITION
2. NON-SEVERE PROTEIN CALORIE MALNUTRITION
3. UNSPECIFIED PROTEIN CALORIE MALNUTRITION
4. OTHER (please specify)
5. CLINICALLY UNABLE TO DETERMINE

MD response: Non-severe malnutrition

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Impact

Documentation	Diagnosis	ALOS	Relative weight/ CMI (DRG)	Severity of illness (APR)	Risk of mortality (APR)	Inpatient payment	Added HCC weight
No capture	-----	2.9	0.623	Moderate	Mild	\$4,510	0
Unspecified	Malnutrition not specified	4.1	0.917	Moderate	Moderate	\$6,515	0.713
Specific	Severe P-C malnutrition	6.2	1.67	Severe	Moderate	\$11,650	0.713

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Dietitian Initiative

Initial assessment and partnering with CDI



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2012 Malnutrition Consensus

Journal of Parenteral and Enteral Nutrition
<http://pen.sagepub.com/>

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)
 Jane V. White, Peggy Guenter, Gordon Jensen, Ainsley Malone, Marsha Schofield, Academy Malnutrition Work Group, A.S.P.E.N. Malnutrition Task Force and the A.S.P.E.N. Board of Directors
JPEN J Parenter Enteral Nutr 2012; 36: 275
 DOI: 10.1177/0148627112440265

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Characteristics Supporting a Malnutrition Diagnosis HCPPro

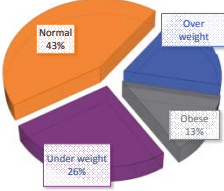
- Inadequate energy intake
- Weight loss
- Loss of muscle mass
- Loss of subcutaneous fat
- Fluid accumulation
- Diminished functional status as measured by hand grip strength

2 or more required for diagnosis

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Data Collection: May 2014 HCPPro

- VMC May 2014 malnutrition
 - 3 RDNs: n = 39 patients
 - Patient population: surgery, general med, nephrology, ICU
 - Malnourished patients:
 - 26% underweight
 - 43% normal BMI
 - 31% overweight/obese
- Malnutrition at any BMI



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Data Collection: November 2014 HCPPro

- VMC November 2014 malnutrition
 - 3 dietitians and clinical documentation specialist
 - Admitted: August–November 2014
 - 83 patients identified with malnutrition
 - Population: Surgery, general medicine, nephrology, ICU
 - Age: 20 to 97 years
 - 43% male, 57% female

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Data Collection: November 2014 HCPPro

- **Patients identified with malnutrition:**
 - 83 patients identified with malnutrition
 - 71 (86%) were coded with a malnutrition code by HIMS
- **Malnutrition added to problem list by provider on day of dietitian evaluation:**
 - 72 No (53 No, 19 No with explanation)
 - 11 Yes (4 Yes, 7 Yes with explanation)
- **Did the CDS query the provider:**
 - 69% Yes (57)
 - 31% No (26)

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Malnutrition Identification HCPPro

RDN Dx

- Severe (89%)
- Non-severe (9%)
- Moderate (2%)

Doctor Dx

- Severe malnutrition (52%)
- Moderate protein-calorie malnutrition (1%)
- Severe nutrition (1%)
- no deferrals/rejections (2%)
- Severe-Moderate Malnutrition (2%)
- Mild Malnutrition (4%)
- Non-severe malnutrition (4%)
- Clinically indeterminate (4%)
- Malnutrition (5%)
- Moderate malnutrition (6%)
- Severe protein-calorie malnutrition (8%)
- blank (11%)

HIMs malnutrition Dx

- Nutritional marasmus (43%)
- Malnutrition of moderate degree (6%)
- Malnutrition of mild degree (4%)
- Other severe protein-calorie malnutrition (23%)
- Unspecified protein-calorie malnutrition (5%)

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Category 261: Nutritional Marasmus HCPPro

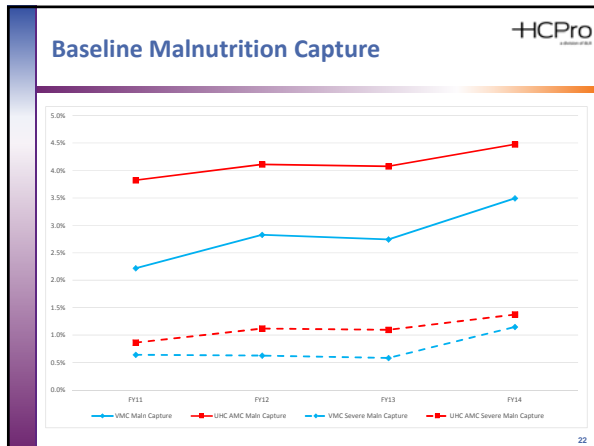
ICD-9

- 261 Nutritional marasmus
 - Includes:
 - Nutritional atrophy
 - Severe calorie deficiency
 - **Severe malnutrition NOS**

ICD-10

- E43 Unspecified severe protein-calorie malnutrition

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AND/ASPEN: Development of Core Competency Program for Education of Dietitians on How to Identify and Document Malnutrition

Severe Malnutrition & Etiology

For example: ICD-10 code 43	Acute illness/injury	Chronic illness	Social/environmental
Weight loss	> 2%/1 week > 5%/1 month > 7.5%/3 months	> 5%/1 month > 7.5%/3 months > 10%/6 months > 20%/1 year	> 5%/1 month > 7.5%/3 months > 10%/6 months > 20%/1 year
Energy intake	≤ 50% for ≥ 5 days	≤ 75% for ≥ 1 month	≤ 50% for ≥ 1 month
Body fat	Moderate depletion	Severe depletion	Severe depletion
Muscle mass	Moderate depletion	Severe depletion	Severe depletion
Fluid accumulation	Moderate → Severe	Severe	Severe
Grip strength	Not recommended in ICU	Reduced for age/gender	Reduced for age/gender

Need a minimum of 2 of the 6 categories listed above

2016 ICD-10 Codes: Centers for Medicare & Medicaid Services
White et al. JPEN, 2012 Consensus Statement

Education: Dietitian Competency-Based Orientation HCPPro

Pre reading

- **Hand grip strength**
- Each participant will read and attest to reading 2 articles and hand dynamometer owner's manual

Initial competency

- **Occupational therapist (subject matter expert)**
- Trained dietitians on use of hand dynamometer to assess for hand grip strength
- Dietitian completed return demonstration

1-3 months annual

- June 2015: Clinical nutrition staff completed competency
- New employees: Training and CBO completed within 3 months of hire

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Malnutrition: Interdisciplinary Approach HCPPro

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Education: Dietitians HCPPro

Training: Identify and train subject matter expert

Ashley Strickland, RDN, LDN, CNSC	Subject matter expert competency
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Training: Vidant Medical Center

Clinical dietitians	Provider, pharmacists, CDI specialists
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Training: Other

Regional and community dietitians	Dietetic interns, home health agencies, case management
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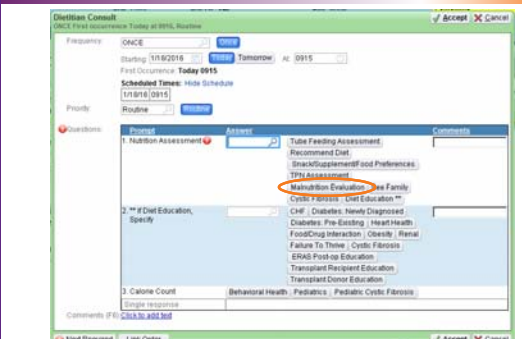
Dietitian and CDI interventions



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Order Entry



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Query Structure

Your professional clinical opinion is requested regarding the following query. Since this is a concurrent query your response will become part of the patient's permanent record; however, also choosing to include your response in the patient's current and future notes will help to maintain chart integrity.

FOR RISK OF MORTALITY & SEVERITY OF ILLNESS PURPOSES, please address the following. This patient has been admitted for loculated pleural effusion likely malignant, and family reported significant loss of appetite/ anorexia at admission. The nutritionist evaluated the patient on 11/20 and notes the patient meets criteria for severe protein calorie malnutrition (in the setting of chronic illness) as evidenced by 20% wt loss within 6mos, est intake 75% or less x1mo or more. The patient's pct intake since admission has remained low at 0-25%. Since diagnosis coding comes from MD documentation, please render your opinion regarding this patient's nutritional status.

--SEVERE PROTEIN-CALORIE MALNUTRITION
 --NON-SEVERE PROTEIN-CALORIE MALNUTRITION
 --OTHER (Please specify)
 --CLINICALLY INDETERMINABLE-This option will close the query with no clarification of the current documentation, thereby limiting accurate representation of the patient's care delivery and complexity.

PLEASE NOTE: To access further information & criteria for MALNUTRITION & other clinical documentation tips & subjects, please go to the Vidant Health Physician intranet page under the Clinical Documentation Tips Section.

HCPPro
Healthcare Professionals

Dietitian Documentation

Comprehensive nutrition assessment

Nutrition interventions & recommendations for provider:

1. Replete electrolytes before starting enteral feeding as pt is at risk for refeeding syndrome.
2. Start Vital AF 1.2 with a very slow progression of rate to help prevent refeeding syndrome. Start Vital AF 1.2 @ 20 mL/hr X 24-36 hrs, if tolerated and electrolytes stable, increase by 10 mL every 24-36 hrs to a goal rate of 50 mL/hr = 1200 mL formula, of which 972 mL are free water, 1440 Kcal, 90 gm pro, 133 gm CHO, 1519 mg Na, 52 mEq K, and 101% RDI.
3. Obtain daily wts here and at home.

Recommended malnutrition diagnosis:
Severe protein-calorie malnutrition
Pt meets criteria for severe protein-calorie malnutrition in the context of chronic illness based on energy intake (less than 75% of est needs for greater than 1 mo) and severe body fat/muscle mass loss.


Nutrition focused physical findings/exam

Braden score: 16
Subcutaneous fat loss locations: Orbital region—severe, triceps region—severe
Muscle loss locations: Temple region—severe, clavicle bone region—severe, shoulder/acromion bone region—severe, dorsal hand region—severe, patellar region—severe
Edema: (LL weeping of extremity)

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Healthcare Professionals

CDS, Coder, and Provider Education



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Healthcare Professionals

Education: Coders and CDSs

- External consultant education
- Dietitian in-service with existing coders
- Coding academy for new coders
- Articles for coder monthly focused education time
- CDS orientation and preceptor for new CDSs
- CDS meeting education for existing CDSs
- Pilot program CDS presentation
- Dietitian presentation at joint CDS and coder meeting
- ASPEN criteria education and references during CDS orientation
- Doc tips
- ASPEN material on shared drive

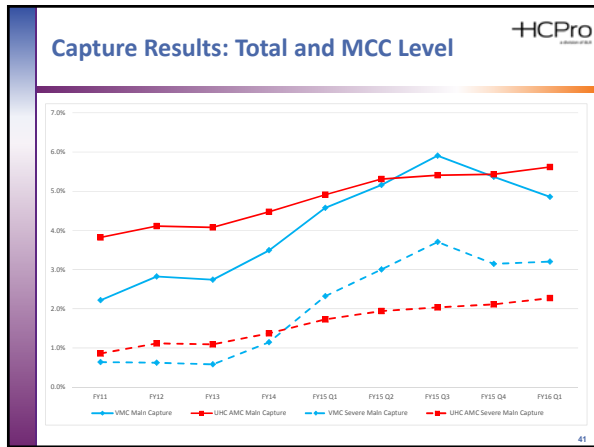
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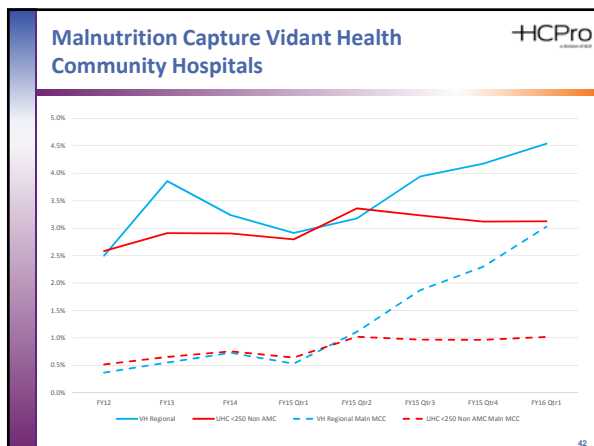
HCPRO
a division of BLR

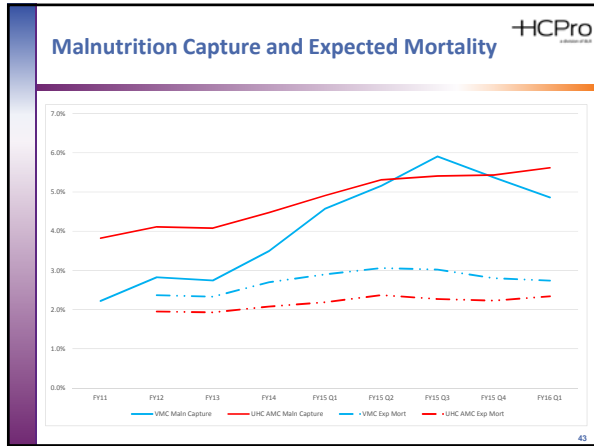
Summary of Impact/Results

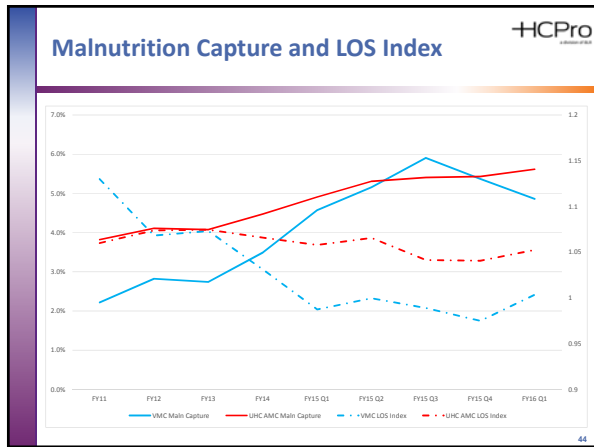


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- ### Summary Points
- Malnutrition is a diagnosis that impacts healthcare across the board and is worth focused effort
 - Assess your baseline and opportunity
 - Support dietitians' training in nutrition-focused physical examination
 - Utilize the expertise and skills of your dietitians in a collaborative fashion for maximum results
 - Make it easy for providers to do the right thing
 - Education, education, education
 - Ensure compliance and clinical validation (education!)
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Dietitian resources

- The Academy of Nutrition and Dietetics Nutrition Focused Physical Exam Workshop: <https://ams.eatright.org/eweb/StartPage.aspx?Site=ACAD2014>

References

- White J, Guenter P, Jensen G, Malone A, Schofield M; Academy of Nutrition and Dietetics Malnutrition Work Group; ASPEN Malnutrition Task Force; ASPEN Board of Directors. 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). *J Acad Nutr Diet*. 2012 May; 112 (5): 730-738
- ICD-10 Code Lookup; Centers for Medicare & Medicaid Services. (n.d.). Retrieved February 1, 2016, from <https://www.cms.gov/medicare-coverage-database/staticpages/icd-10-code-lookup.aspx?Keyword=Malnutrition&bc=AAAAAAAAAAACA=&=&>

Thank you. Questions?

Vaughn.Matacale@vidanthealth.com
Njeri.Njuguna@vidanthealth.com
Ashley.Strickland@vidanthealth.com

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