Objectives

1. Describe the critical role that the healthcare professional plays within the hospital setting to address the malnourished patient.

2. Implement at least one systematic approach for recognizing and documenting malnutrition within your own institution.

3. Apply at least one method for engaging the health care team on the value of nutrition intervention strategies within the malnourished patient population.

Presentation Content - "Creating a Nutrition Culture"

Part One:
- Malnutrition definition/identification + CMS DRG evolution
- Initial UPMC malnutrition recognition program
- Academy “call to action” and outcomes

Part Two:
- Upgrades to UPMC malnutrition recognition program
- Malnutrition interventions → empowerment strategies

Part Three:
- Dietitian empowerment strategies/UPMC outcomes
- Malnutrition Resources

Disclosure

Sherri Jones
Cindy Hamilton

Session sponsored by Abbott Nutrition

2012 FNCE speaker expenses and honorarium underwritten by Abbott Nutrition
Defining Malnutrition

Diagnosis Related Group (DRG-ICD-9)

- 260 Kwashiorkor
  - Nutritional edema with dyspigmentation of skin and hair; syndrome particularly of children, excessive CHO with inadequate PRO intake

- 261 Nutritional marasmus
  - Nutritional atrophy; severe, chronic calorie deficiency; severe malnutrition NOS; Protein-calorie malabsorption or malnutrition in children

- 262 Other severe protein-calorie malnutrition
  - Nutritional edema without mention of dyspigmentation of skin and hair

- 263.9 Other and unspecified protein-calorie malnutrition
  - Dystrophy caused by malnutrition; malnutrition (calorie) NOS

"Malnutrition is most simply defined as any nutritional imbalance."

Jensen and colleagues propose an overarching definition of malnutrition as "decline in lean body mass with the potential for functional impairment"

"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

Academy IDNT Reference Manual

Nutrition Diagnosis: Malnutrition (NI-5.2)

- Inadequate intake of protein and/or energy over prolonged periods of time resulting in loss of fat stores and/or muscle wasting including starvation-related malnutrition, chronic disease-related malnutrition and acute disease or injury-related malnutrition.

Identifying Malnutrition: "Nutrition Risk" Screening

- TJC Standard PC.01.02.03- 7. The hospital completes a nutritional screening (when warranted by the patient’s needs or condition) within 24 hours after inpatient admission

- Academy’s Evidence Analysis Library (EAL) has info on various screening tools and criteria

Malnutrition Reimbursement

CMS Inpatient Prospective Payment System (IPPS) Acute Care Hospitals

1982 DRGs
Oct. 2007 MS-DRGs
Oct. 2008 HACs
Oct. 2012 Non-CC → CC-level

Key:
CMS – Centers for Medicare and Medicaid Services
DRG – Diagnosis Related Group
MS-DRG – Medicare Severity DRG
HAC – Hospital Acquired Condition
CC – Complication Comorbidity
CMS Medicare Severity DRG Structure

<table>
<thead>
<tr>
<th>MCC Level</th>
<th>High $$$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Complications/Co-morbidity (MCC)</td>
<td></td>
</tr>
<tr>
<td>- 261.0 Kwaetortex</td>
<td></td>
</tr>
<tr>
<td>- 282.0 Severe Pre-Cell Malnutrition</td>
<td></td>
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</tbody>
</table>

Complications/Co-morbidity (CC):
- 263.0 Malnutrition of Mild Degree
- 263.1 Malnutrition of Moderate Degree
- 263.2 Malnutrition of Severe Degree
- 956.0 Cachexia

Non-Complication/Co-morbidity (Non-CC) includes:
- 263.1 Malnutrition of Mild Degree
- 263.0 Malnutrition of Moderate Degree
- 263.1 Malnutrition of Mild Degree

The UPMC Malnutrition Journey...

- University of Pittsburgh Medical Center Health System
- ~20 academic, community, and specialty hospitals
- Ranked #10 of Best Hospitals per US News World Report
- UPMC Presbyterian Shadyside – largest, acute care
  - Census 800 \( \times \) 520 = Total ~1,320; Teaching; Level 1 trauma; Adult

UPMC Nutrition Screening Criteria

4-6 Primary Criteria

TPN/Enteral Feeding (MUST Criteria)
- Acute care of days 6 or 6 in hospital
- Critical illness
- Acute illness
- Chronic illness

Nutrition Risk Screening (Evidence Based)

Nutrition Risk Screening (Acute Care Comparison)

Comparison of Nutrition Screening Criteria - Other Facilities Nationally

Source: Academy of Nutrition and Dietetics Evidence Analysis Library

Source: phone/email survey conducted 2009
**UPMC Malnutrition Recognition Program**

**How it got initiated…**

- CMS implemented MS-DRG affecting reimbursement
- Physician Medical Records Director (Dr. Towers) identified increased reimbursement with malnutrition recognition
- Staff RD attended Medical Record Committee meeting
- Dr. Towers approached RD → wants to partner on malnutrition DRGs
- RD forwarded request to Clinical Nutrition Managers (CNMs)

**Partnership/rapport formed between MD and CNMs**

- Dr. Towers became a “nutrition champion”

**UPMC Implementation Steps**

1. Revised ICD-9 code UPMC diagnostic criteria (no standards)
2. Revised nutrition assessment documentation forms
3. Switched med records query form (post D/C) → to MD alert/approval form (real time)
4. Pursued physician/committee approvals → Easy with MD Champion
5. Communicated change to physicians
6. Monitored staff compliance (RDs & MDs)
7. Partnered with Medical Records/Coders to Collect outcome data

**UPMC ICD-9 Criteria (2008 Version)**

**Severe Protein-Calorie Malnutrition (262.0) **MCC

**Depression**

1. Depressed anthropometrics: Weight <60% of standard weight for height, and/or a weight loss of >10% of usual weight in last 6 months and/or BMI <16 kg/m2
2. Depressed visceral protein concentration: serum albumin <3.0 g/dL, and/or serum prealbumin <10 mg/dL, and/or serum transferrin <100 mg/dL
3. Overt muscle wasting
4. Inadequate intake for >7 days
5. Occurs when a marasmic patient is exposed to stress (e.g., trauma, surgery, or acute illness) Characterized by combined symptoms of marasmus and kwashiorkor, a high risk of infection, and poor wound/healing

**Other Protein-Calorie Malnutrition (263.8) **CC (midpoint of mild and moderate)

Any two of the following characteristics must be present:
1. Serum albumin < 3.5 g/dL
2. Weight loss of > 7% pre-illness or usual body weight
3. Weight < 75% standard weight for height (IBW)
4. Serum transferrin <180mg/dL
5. Poor intake for 3 or more consecutive days
6. BMI 16.1 – 18.4

Key: **MCC** = major reimb. **CC** = moderate reimb. **Ø** = no reimb.

**UPMC ICD-9 Code Update**

- **Severe Protein-Calorie Malnutrition (262.0) **MCC

- **Other Protein-Calorie Malnutrition (263.8) **CC

**UPMC Physician Signature Form**

- To be completed and signed “real time”
- Also serves as a post discharge query form

**Nutrition Assessment/Reassessment**

- Handout

- Electronic Health Record = Cerner
UPMC Real Case Example:
• 65 y/o male admitted with abdominal pain, found to have metastatic pancreatic cancer. Nutrition note in Cerner (EHR) documents “Severe Protein Calorie Malnutrition”. Physician notes weight loss, anorexia, but does not write a “diagnosis”. Medical Records query sent to clarify.
• Reimbursement:
  – Before Query: $14,204
  – After Query: $21,946
  – Net Gain: $7,742

UPMC Nutrition-Related ICD-9 Usage
Inpatient Summary - Diagnosis Code Usage
All facilities

Malnutrition Recognition And Treatment: A "Win-Win" For Patients And The Hospital

Academy Call To Action
• Encouraged by Dr. Towers
  (Our “Nutrition Champion”)

• 2/25/09 Posed issue to the Academy through the “Issues Management Committee” at www.eatright.org

• Issue: Consider our professional organization (the Academy) work on developing “standard” criteria for the Nutrition-related ICD-9 codes

Submitting Issues on Academy Website
Formation of a Malnutrition Workgroup → July 2009

- Members: Chair-Jane White, Maree Ferguson, Sherri Jones, Louise Merriman, Pam Michael, Marsha Schofield, Terese Scollard, Annalynn Skipper, Ainsley Malone

Partnered with ASPEN Malnutrition Task Force to identify and standardize markers/characteristics of ADULT malnutrition with following attributes:
- Few in number
- Support nutrition diagnosis
- Characterize severity
- Change over time
- Evidence-based

Academy Journal
May 2012

Malnutrition Information: Clinical Characteristics

4-6 Primary Criteria

- Yes or No response for each criteria

Electronic Health Record = Cerner
Automatic consult/task to RD