**Background**

- It is estimated that 1/3 of patients admitted to the hospital are malnourished and 1/3 of well-nourished patients will become malnourished during a hospitalization.\(^1\)
- Malnourished patients have increased risk of morbidity and mortality including longer length of stay, poor wound healing, increased infection risk, and high readmission rates.
- Early identification of malnourished patients, or those with risk of malnutrition, can improve patient outcomes, reduce costs, and optimized quality of care.
- June 2013 - a review of malnutrition screening processes at UCM found them to be uncoordinated and ineffective. Only 55 (3%) adults admitted were screened at risk for malnutrition and 27 (1.4%) medical records contained proper documentation by a physician for coding purposes.\(^1\)


**The Intervention**

- Data retrieval of the number and classification of adult malnutrition codes from April 2013 were obtained from the Health Information Management’s (HIM) Coding Team.
- The Clinical Nutrition Department made revisions to the malnutrition screening criteria in EPIC “needs assessment”, delineated provider roles for identification of malnutrition risk, and standardized the format to document physical findings of malnutrition in the medical record.
- Registered Dietitians provided education to MD residents, APNs, PAs, and staff RNs on the impact of, the screening for, and the diagnosis of malnutrition; the processes for identifying and documenting malnutrition; and dietitian consultation expectations.

**Aims**

- Coordinate the process of identifying patients with malnutrition, or risk of malnutrition, on admission to UCM and improve communication of those findings.
- Educate MDs, PAs, APN/RNs to properly screen for malnutrition and make referrals to Registered Dietitians when risk is identified.
- Clarify standard definitions of malnutrition severity and provider responsibility to document findings.
- Provide early nutrition interventions to patients identified with malnutrition to prevent further decline and complications during hospitalization.
- Improve MD/PA/APN documentation of malnutrition to streamline the coding process and capture due revenue.

**Results**

- April 2013 - HIM coded 93 cases of malnutrition.
- June 2013 – HIM coded 104 cases of malnutrition.
- June 2013 - Clinical Nutrition RDs screened 166 patients at risk of malnutrition and of the 111 assessed cases of malnutrition, only 58 of these were coded by HIM.
- June 2013 – Of 166 patients screened for malnutrition risk: MDs referred 51 patients for nutrition assessment, 21 of those referrals contained documentation of malnutrition by the MD; and RNs identified malnutrition in “Needs Assessment” of 15 patients, but only 1 RD referral was entered.

**Lessons Learned**

- Malnutrition is profoundly under-diagnosed and misclassified at UCM among hospital practitioners.
- Direct patient care providers must make habit of daily assessment of each patient’s nutritional status and consult a Registered Dietitian for assessment and intervention if any risk factor is identified.
- Improvements are needed with the clinical documentation of malnutrition in the medical record.

**Cases of Malnutrition Identified by RD Screening and HIM Coding**

<table>
<thead>
<tr>
<th>Classification</th>
<th>HIM Apr-13</th>
<th>HIM Jun-13</th>
<th>RD June 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>10</td>
<td>15</td>
<td>55</td>
</tr>
<tr>
<td>Moderate</td>
<td>30</td>
<td>45</td>
<td>80</td>
</tr>
<tr>
<td>Severe</td>
<td>20</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Non-specific</td>
<td>10</td>
<td>15</td>
<td>25</td>
</tr>
</tbody>
</table>

**Next Steps**

- Capture and analyze April 2014 malnutrition coding data.
- Continue to monitor malnutrition assessment/screening documentation by MDs/PAs/APNs and Staff RNs. Provide additional education as needed.
- Implement the new pediatric malnutrition classification guidelines in Comer Hospital and monitor usage of the guidelines.

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