Targeted Nutrition Therapy
Nutrition Risk Screening in Cancer Care

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Description

The prevalence of cancer-related malnutrition ranges 20-80% among cancer patients. The degree of malnutrition is influenced by the patient's age, disease site, and stage. Patients with disease affecting head and neck and upper gastrointestinal tract, and with treatment side effects associated with concurrent chemoradiation, hematopoietic stem cell transplantation, chemotherapy and radiotherapy are especially at increased nutrition risk.

Multiple factors, including tumor-effects, treatment complications and psychosocial factors can further contribute to cancer-related malnutrition. Furthermore, unintended weight loss has a direct correlation to morbidity and mortality.

As part of the team, Registered Dietitians (RDs) play a crucial role in addressing cancer-related malnutrition.

Aim

To increase timely nutrition therapy by the RD on cancer patients at high nutrition risk.

Actions Taken

NUTRISCORE, a nutritional screening tool validated for outpatients with cancer, was embedded into the electronic medical record. Patients with primary disease associated with high nutrition risk were screened at each visit. A patient identified at nutrition risk (NUTRISCORE ≥ 5) was automatically referred to the RD to receive nutrition therapy.
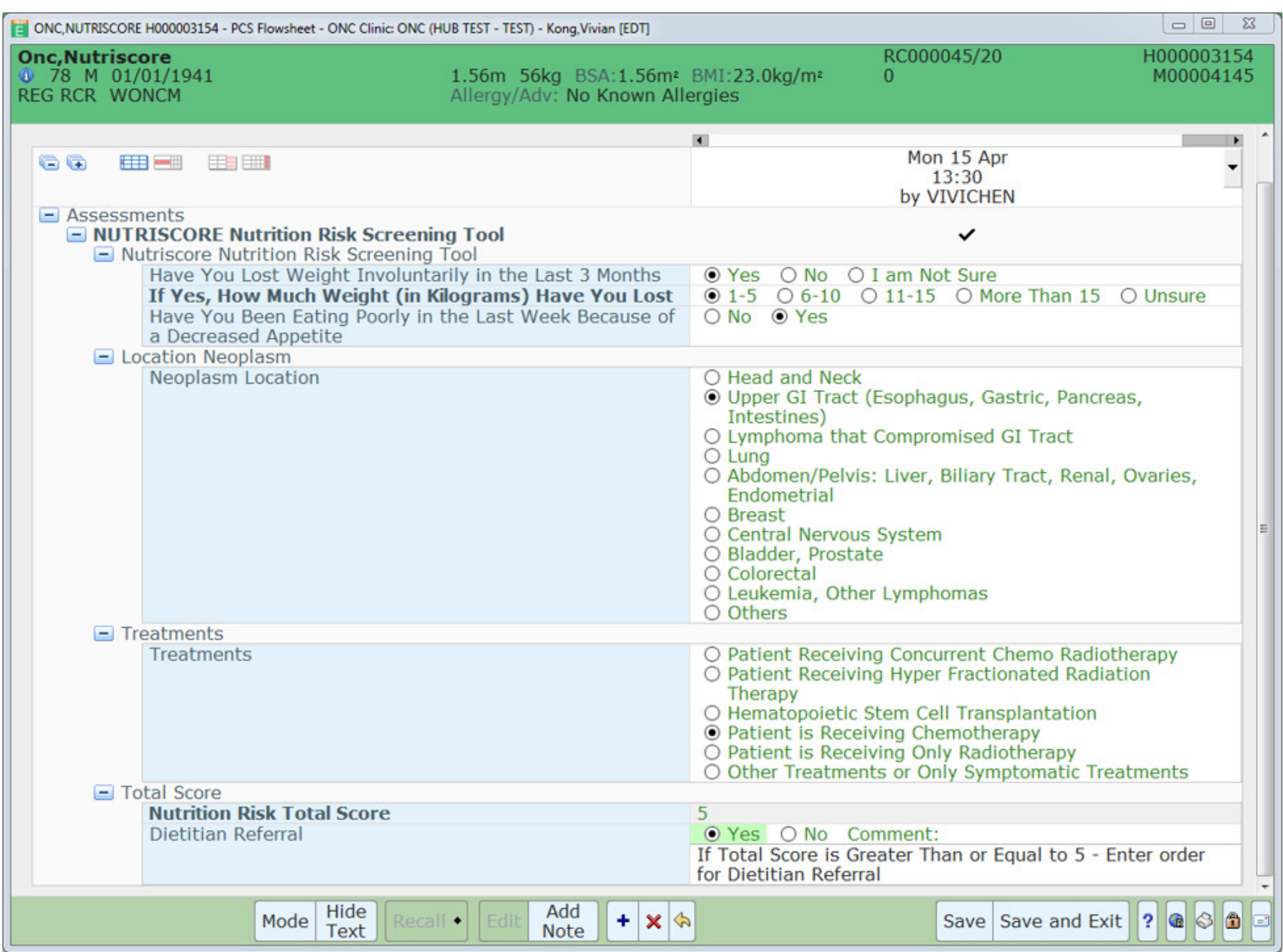

Figure 1. An example of a NUTRISCORE = 5

Summary of Results

The implementation of the NUTRISCORE resulted in a significant increase in the proportion of patient visits identified as high nutrition risk and resulting in receiving nutrition therapy by a Registered Dietitian, from 6.5% of patient visits pre-implementation to 24.9% of patient visits post-implementation, χ^2 (1, N=377)=24.66, p<0.001.

Percentage of patient visits identified at high nutrition risk

24.9%

6.5%

pre NUTRISCORE   post NUTRISCORE

Figure 2. Proportion of patient visits identified as high nutrition risk pre- and post-implementation of NUTRISCORE screening tool

Cancer Clinic Visit

Low & moderate risk primary disease sites
- Lung
- Abdominal and pelvis
- Breast
- Genitourinary
- Colorectal
- Leukemia
- Other lymphomas
- Other Cancers

High risk primary disease sites
- Head and Neck
- Upper GI
- Lymphoma compromising GI

Nutritional concerns identified by team

NUTRISCORE

Yes

No

NUTRISCORE ≤ 4

NUTRISCORE ≥ 5

Referral to RD for nutrition therapy

Patients may contact RD as needed

Routine screening at subsequent visits

Referral to RD for nutrition therapy

Figure 3. RD Workflow with Nutrition Risk Screening