# An adequate protein intake in hospital patients

Key factors and best practices for optimal treatment of malnutrition in hospitals

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### **Description of the initiative**

The new diagnostic criteria for malnutrition (GLIM) facilitate the identification of hospital patients that are malnourished or at high risk. Dietary treatment should be started as soon as possible after (high risk of) malnutrition is diagnosed. A key factor in the dietary treatment of (high risk of) malnutrition in children ( $\geq 1$ year) and adults is an adequate protein intake of  $\geq 1.2$  gram per kilogram of body weight. The treatment of Dutch hospitalized patients who are malnourished or at high risk is monitored by the Dutch Malnutrition Steering Group (DMSG) commissioned by the Dutch Health Care Inspectorate (IGJ). Hospitals are obliged to provide data about the percentage of patients at high risk of malnutrition, both adults and children, that reach an adequate protein intake within 4 days after hospital admission to the IGJ every year (performance data). DMSG receives and analyses this data and results show that the performance data differs between hospitals (range 0 - 100% of adequate protein intake). It is unknown what factors distinguish well performing hospitals from low performing hospitals. This project aims to gain insight into the key factors for an adequate protein intake in hospitalized adults and children who are malnourished or at high risk. These key factors will set a benchmark and provide directions for optimizing the protein intake of hospitalized children and adults in the Netherlands and in other countries.

#### Planned activities & deliverables

The activities involve 5 steps that are done separately for child and adult patients:

- 1. Performance data collected by Dutch hospitals (N=75) in 2016, 2017 and 2018 will be combined and analysed to rank hospitals from highest to lowest performing.
- 2. Gaining detailed insight into the process of reaching adequate protein intake in the top 15 ranked hospitals through analysing hospital protocols and conducting interviews with dietitians, nurses and quality officers from each hospital.
- 3. Constructing the ideal process for adequate protein intake and establishing key factors based on step 2
- 4. Online survey among dietitians, nurses and quality officers from all Dutch hospitals (N = 75) assessing key factors being present or absent in each hospital.
- 5. Data analysis and writing report presenting the key factors (benchmark), description of best practices in Dutch hospitals and an outline of the ideal process and in-hospital protocol for adequate protein intake in child and adult patients. Steps 1,2,3 will be achieved in the first 12 months, steps 4 and 5 in 24 months.

## **Resources & enablers**

A project manager will be appointed for 320 hours (€ 19.000 incl. VAT). The senior project leader will support the project manager for 64 hours (€ 6.200 incl. VAT) with the section-members of DMSG and will be offered back-office support by the DMSG-office for 24 hours (€ 2.300 incl. VAT). Additional costs are € 2.500 incl. VAT. The project manager is responsible for the conduct of the activities above. DMSG already possesses the performance data collected by Dutch hospitals in 2016, 2017 and 2018. In addition, DMSG has good experience in collecting data from Dutch hospitals, a survey (2016) assessing food concepts in all Dutch hospitals had a response rate of 96%. Hospitals already contact the DMSG regularly to ask for support with screening and treatment of malnutrition. We are therefore convinced that the project will be carried out successfully.

# Results/outcomes & expected impact

The final report will be written in English and disseminated through the Dutch and English websites of DMSG, and the website of NESPEN and through the activities of both organisations and their partners. Hospitals in the Netherlands and other countries can access the report and outline for the ideal process/inhospital protocol free-of-charge and adapt it to their own hospital. The project is innovative, because exploring the key factors for adequate protein intake in hospital patients among a large selection of high performing hospitals has not been done before, to our knowledge. The results of this project stimulate hospitals in the Netherlands and other countries to improve their policies and quality of patient care. It will also stimulate other countries to improve national strategies for fighting malnutrition by learning from the Dutch approach.

