From PG-SGA SF score to interdisciplinary nutritional interventions

Building a triaging algorithm for proactive nutritional care worldwide

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Description of the initiative

- **Background/context:**

The Patient-Generated Subjective Global Assessment Short Form (PG-SGA SF)[1] is 1 of the 5 screening tools recommended by the GLIM Working Group Risk of Malnutrition to screen for risk of malnutrition, suitable for all populations/healthcare settings. The multidimensional PG-SGA SF includes both risk factors for and signs of malnutrition, which enables linking scores on each of the 4 PG-SGA SF boxes (weight history, food intake, nutrition impact symptoms, activities/function) to tailored interdisciplinary interventions and referrals, to prevent or treat malnutrition.

- **Rationale for the initiative:**

While general PG-SGA triage recommendations are available, global consensus on how to translate PG-SGA box and total scores into tailored interdisciplinary interventions are lacking, and thus professionals may hesitate to act. By offering clear guidance on triaging for interdisciplinary interventions based on PG-SGA SF box scores, this project will guide personalized and efficient interdisciplinary nutritional care, bridging the gap between GLIM recommendations for screening for malnutrition risk[2,3] and future guidance from the Global Leadership Initiative on Nutrition Therapy.

- **Objectives and scope:**

We aim to: 1) develop an innovative interdisciplinary triaging algorithm that translates PG-SGA SF box scores and total scores into evidence-based interventions to treat or prevent malnutrition, and 2) to evaluate the algorithm for feasibility, acceptability, practicality, limited efficacy[4] and satisfaction among patients and professionals. This project advances interdisciplinary nutritional care by closing the gap between screening for risk of malnutrition and subsequent nutritional treatment. By providing strategies to implement tailored interventions into routine care and improving coordination across healthcare settings, it facilitates improvement of patient outcomes.

Planned activities & deliverables

- **Key steps:**

Applying the design-based Double Diamond model (Figure 1), with 4 phases: 1. *Discover*: literature research and qualitative research to identify facilitators, barriers, wishes and needs for proactive interdisciplinary nutritional interventions by patients and professionals; 2. *Define*: maximum of 3 co-creative design sessions to identify the 'ingredients' of the triaging algorithm; 3. *Develop*: Integrating the 'ingredients' into the triaging algorithm; 4. *Deliver*: pilot testing of the algorithm and its resulting interventions in practice: 1 hospital (n≥50 patients + n≥15 professionals) + 1 primary care organization (n≥30 patients + n≥10 professionals).

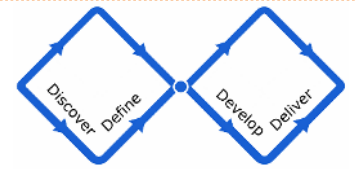


Figure 1: Double Diamond model

- **Concrete deliverables:** Evidence-based and tested triaging algorithm + 3 scientific publications, describing results of the Discover+Define, Develop, and Deliver phase, respectively.
- **Progress and achievements in the next 12 and 24 months:**

Months 1-12: execution of Discover, Define, and Develop phases; months 13-24: execution of Deliver phase. Milestones: in month 12 algorithm ready for testing; in month 24 publication of the first article.

Resources & enablers

- **Personnel, financial needs:** Funds will be spent on dedicated researcher time to coordinate and conduct the project activities, i.e., collecting data, building the algorithm, and writing the manuscript.
- **How the grant will be spent:** The requested €40,000 will be spent on: personnel costs of researcher (€35,000), fees for participating patients and professionals (€3,000), dissemination costs (€2,000).
- **Factors making the project successful:** The algorithm will be developed by a research group with longstanding expertise on and experience with the PG-SGA SF and skilled in design-based clinical nutrition research, and built from the expressed needs of practising dietitians, nurses, and physicians.
- **Other funding:** No other financial support has been planned or requested for the project.

Results, expected outcomes & impact

- **Results:** 1) an interdisciplinary PG-SGA SF triaging algorithm, 2) insight in its feasibility, acceptability, practicality, limited efficacy, and satisfaction among patients and professionals.
- **Outcomes:** The interdisciplinary PG-SGA SF triaging algorithm will enable various health care professionals to easy and quickly translate screening results into interventions and referrals to prevent or treat malnutrition.
- **Implementation of findings:** The algorithm will be integrated in electronic health records (e.g., Epic) and included in nutritional guidelines nationally and internationally.
- **Impact:**
  - This project is innovative as the algorithm enables a uniform, globally applicable approach to triaging patients at risk of malnutrition that will help to implement and advance nutritional care in clinical practice.
  - By standardizing this process, it also creates a foundation for future research on the (cost-)effectiveness of PG-SGA SF–based screening, which will be the next step after this project.
- **Project transferability to other care settings/geographical regions**

The project is easily transferable internationally, as the PG-SGA SF is available in >10 languages (e.g., Dutch, English, German, Italian, Japanese, Polish, Spanish, Swedish) and nutritional care requires interdisciplinary organization globally. Testing the algorithm in hospital and primary care settings ensures its suitability across diverse healthcare settings.

X **Please tick to confirm the PEN letter of endorsement is attached. Incomplete submissions will not be considered.**

References:
1. Jager-Wittenaar H & Ottery FD. Curr Opin Clin Nutr Metab Care 2017;20(5):322-329
2. Sealy MJ et al. To be submitted
3. Naumann E et al. To be submitted
4. Bowen DJ et al. Am J Prev Med 2009;36(5):452-7