Malnutrition in Patients with Overweight & Obesity

Developing a Data-Driven Screening Tool for Improved Recognition

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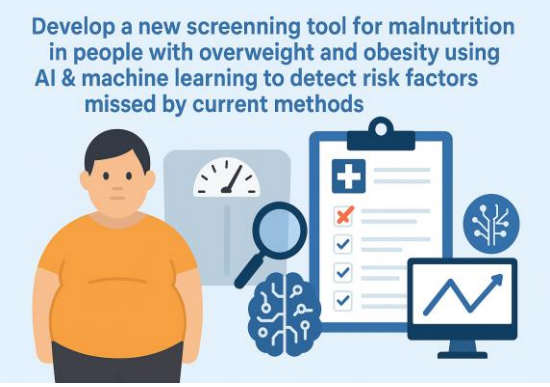
1. Description of the initiative

- The Screening for Malnutrition and Overweight and Obesity in Patients with COVID and Other Diseases **(SCOOP)** research project addresses the often-missed risk of **malnutrition in individuals with overweight and obesity**, especially in hospitalised patients.
- **Poor clinical outcomes** in these patients, (e.g. in COVID-19 cases), highlight the need for improved screening tools.
- SCOOP started in **Sept 2023 with literature & database** analysis[1,2]
- Since **Sept 2024 → Data collection** in 7 Dutch hospitals **(multi-centre study)** https://www.kenniscentrumondervoeding.nl/scoop/

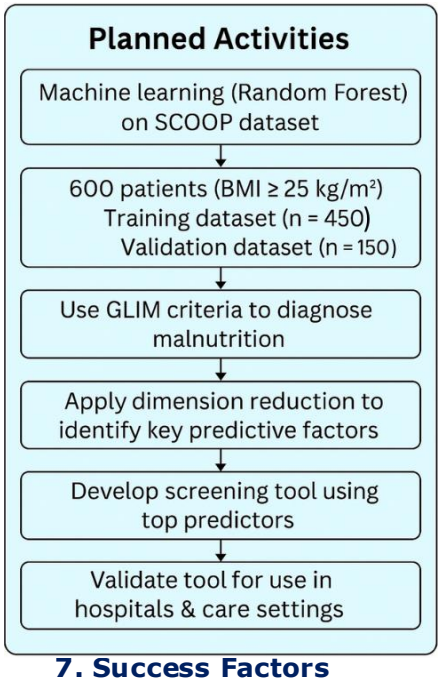
2. Rationale for the initiative

- **0–30%** of adults in care settings are malnourished.
- **More than 50%** of the Western population has overweight or obesity.
- Malnutrition in obesity is **often missed**—it is less visible and harder to detect.
- Existing malnutrition screening tools use **BMI <18.5 kg/m² and low muscle mass** to recognise malnutrition. These criteria do not apply to this population[1,3].
- **Weight loss** in obesity is frequently seen as positive, even when it's harmful[2].

3. Objectives & scope



4.



5. Deliverables & achievements

- **Data analysis** identifying **key risk factors** for malnutrition in individuals with overweight/obesity.
- Development of **a data-driven digital screening tool.**
- **Dissemination** of research findings to stakeholders and healthcare institutes
- **Presentation** of research findings at local and international conferences or seminars.
- **Publication** of research findings in national and international journals and a press release announcing the tool.
- **Improved screening, recognition, and treatment** of malnutrition, facilitated by an implementation project.

6. Grant Budget

Category	Description	Estimated Cost
Postdoc researcher	Salary, postdoc working on machine learning (0.05 fte, 18 mo)	€ 28,908
Implementation	Program implementation costs (e.g. materials, training events)	€ 4,000
Dissemination	Funds allocated for dissemination (e.g., webinars, publications, outreach)	€ 4,000
Stakeholder input	Reimbursement for patients, health care providers, dietitians	€ 3,000
TOTAL		€ 39,908

7. Success Factors

- Funding initiated via **ZonMw grant** and **data collection completed** (July 2025).
- **Strong interdisciplinary** team.
- **High societal relevance** (increasing malnutrition & obesity prevalence).
- **Collaboration** with key partners (patient representatives, nurses, GPs, MDs etc).
- **Healthcare networks** in hospitals & primary care settings.

8. Innovation & Influence

- Currently, **no validated** screening tool for malnutrition in overweight and obesity exists.
- **Policy influence and transferability:** The SCOOP project is expected to guide (inter)national nutrition policy by providing a validated tool for malnutrition screening in patients with overweight and obesity.
- **GLIM:** alignment with GLIM initiative to adapt GLIM for patients with overweight & obesity

9. Results/outcomes & expected impact

- **Improved recognition of malnutrition** in individuals with overweight or obesity.
- **Enhanced referral and treatment** pathways for affected individuals.
- **Increased awareness** among healthcare professionals about the unique risk factors of malnutrition in obesity.

References
1. Mwala NN et al. **Nutr Res Rev.** 2024. doi: 10.1017/S095442242400012X
2. Borkent JW et al. **Clin Nut.** https://doi.org/10.1016/j.clnu.2025.04.009
3. Mwala NN, in 't Hulst J et al. **Clin Nutr ESPEN.** In press, 2025

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