Identification of the most effective and fastest tool for nutritional diagnosis (VGS, GLIM, CIE-10 coding using NA) in hospitalized patients.

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Description of the initiative

- **Background:** There is controversy over what is the best way to screen and diagnose disease related malnutrition (DRE). Various approaches based on biochemical parameters, clinical or body composition have been published. The recent publication of the GLIM Criteria (Global Leadership Initiative on Malnutrition) proposes short and easy-to-use criteria for the diagnosis of malnutrition. Moreover it recommends validation and feedback studies of such criteria.
- **Rationale:** This project is focused on discerning if there is concordance among different screening and diagnostic validated strategies used in clinical practice and new GLIM Criteria. It will exhibit if they are equivalent and therefore, can be used indistinctly to effectively diagnose DRE, as well as reducing the prevalence of non-diagnosed malnutrition. An effective diagnosis will lead to a better and more individualized treatment.
- **Objectives:** To estimate the nutritional diagnostic concordance degree among the criteria proposed by the Global Leadership Initiative Malnutrition (GLIM), the Global Subjective Assessment (SGA) the International Classification of Diseases 10th edition (CIE-10) based on a complete nutritional assessment (NA), that includes SGA, anthropometric, and biochemical parameters. Secondarily it aims to estimate which anthropometric, bioelectrical impedance (BIA) and functional parameters reflect best the muscular mass.

Planned activities & deliverables

- A cross-sectional observational study will be performed during next 12 months in 1000 adult patients recently admitted to Clinical Nutrition Unit in La Paz University Hospital of Madrid, Spain.
- A database containing clinical, anthropometrical, BIA , functional and biochemical parameters categorized by percentile and cut-off values as well as the diagnosis made, according to GLIM, VGS and NA criteria will be statistically analyzed. Afterwards, the findings will be published.
- In the next 12-24 months the degree of concordance among such diagnostic strategies will be identified and best anthropometrical, BIA and biochemical parameters will be proposed .

Resources & enablers

- A multidisciplinary clinical nutrition team, from La Paz University Hospital will evaluate and diagnose the above-mentioned patients, according to their usual clinical practice.
- It will require 29.000 € which will be spent on 2 years professional services, and 1.000 € on anthropometric validated devices.
- Counting with skilled and trained professionals, and their wide understanding and experience diagnosing malnutrition would enable this project to be successful.

Results/outcomes & expected impact

- If concordance is identified, GLIM Criteria, along with best measures and parameters, would be implemented in daily hospital practice, representing an easy, concise, no time consuming, methodology to diagnose everyday malnutrition in hospitals.
- Before a new method can be implemented in daily clinical practise, it is necessary to assure its reliability diagnosing malnutrition. Discerning whether there is existing agreement among new GLIM criteria and the malnutrition screening and diagnostic methodologies commonly used, is fundamental in order to contribute to a better nutritional care.
- This project is innovative because GLIM criteria have been published recently. Consequently, there is not enough feedback studies of their reliability and concordance with other clinical practice strategies.
- The publication of the findings would likely influence national nutrition policy, prompting to review and update the existing national clinical practice guidelines. Furthermore it would be transferable to other countries, as the malnutrition diagnostic methodologies evaluated in this project are international, allowing different countries to have a clearer understanding of the concordance among the different validated methodologies.