Nutrition therapy quality assessment: app monitoring

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Description of the initiative

• **Background / context:** To address hospital malnutrition, systematic nutritional screening strategies, the implementation of nutritional therapy (NT), and interdisciplinary collaboration are crucial. However, the successful execution of NT requires meticulous attention due to potential adverse effects and complications, which could compromise patient safety if not carefully managed and monitored. Evaluating the effectiveness of NT is paramount, necessitating the development of quality indicators in nutritional therapy (QITN) to facilitate audits and assessments. The insights gleaned from QITN assessments, coupled with performance development initiatives, should inform corrective measures and guide ongoing improvements. Additionally, they can serve as a foundation for team training and knowledge dissemination about NT, thereby enhancing the overall quality of nutritional therapy services and contributing to improved patient outcomes.

• **Rationale for the initiative:** Nutritional therapy (NT) continues to be overlooked by a significant portion of healthcare professionals worldwide, perpetuating high rates of malnutrition in hospital settings. A previous investigation conducted by our team assessed 33 hospitals in Minas Gerais, Brazil, examining 172 medical records. The results demonstrated that although most hospitals have NT teams, protocols, and quality indicators in place, the actual implementation of nutritional therapy often deviates from recommended practices, highlighting the persistent need for education in this area. Another study conducted by our team evaluated the applicability of QITNs involved 123 patients, with a total of 1,173 days of NT assessed. The study revealed a significant level of non-compliance with QITNs, particularly regarding the adequacy of protein and energy administration. These findings emphasize the imperative to pinpoint critical issues related to nutritional therapy and to develop continuous educational strategies aimed at improving the delivery of nutritional therapy.

• **Objectives and scope:** To evaluate the quality of nutritional therapy in two hospitals, outlining permanent education strategies, with subsequent evaluation of the impact of these actions on QITN over time by developing an app that will allow clinicians to assess the implemented QITNs easily, allowing quick interventions and corrections.

Planned activities & deliverables

• **Outline the steps to be taken:** 1. Selection of hospitals – one private and one public hospital. 2. Diagnosis of the quality of practiced nutritional therapy and adequacy of QITNs - Data collected through interviews with members of the clinical staff/interdisciplinary, NT team and audits of clinical protocols. Medical records will be used to assess the quality of practice nutritional therapy and determine the future QITNs to be implemented. 3. Training the professionals directly involved with nutritional therapy on general issues related to TN and the implementation of QITNs. 4. Development of the app with the inclusion of the QITNs to be assessed (between 2 to 10) 5. After two, six, and 12 and 24 months, reassessment of the quality of nutritional therapy and the adequacy of QITNs, as well as the performance of the app and the impact on clinical practice.

• **What are the concrete deliverables of the project?** Diagnosis of the practice quality of nutritional therapy; implementation and detection of the main obstacles to the correct implementation of QITNs; elaboration of protocols and interventions aimed at solving the problems encountered; constant updating of the team of professionals; an app to easily and quickly help solve inadequacies.

• **What achievements are possible in the next 12 and 24 months?** At 12 months, steps 1 to 3 will be completed, and by 24 months, steps 4 and 5 will be completed.

Resources & enablers

• **Describe personnel, financial needs:** nutrition students; medical and nutrition researchers; professional statistician and programmer to assist with app development. We will need $39100,00.

• **Specify how the grant will be spent:** 03 scholarships for researchers ($600/month = $7200,00/each); transportation ($1000,00); computers ($2000,00); payment for statisticians for data analysis ($1000,00); payment for article publication ($2500,00); participation in congress ($2000,00); develop of app ($9000,00)

• **What factors will make it successful?** The team is made up of researchers with expertise in the area. They have already conducted research on the topic and have published on the subject.

Results/outcomes & expected impact

• **How will the findings be implemented?** The results will guide hospital interventions in NT with continuous education.

• **How will this project advance patient care / contribute to optimal nutritional care?** It will identify low-quality NT, which directly and negatively impacts patient care, and will help intervene quickly to improve the QITNs and patient care.

• **What makes the project innovative?** To our knowledge, there is no hands-on by the patient side app that allows the quick identification of the quality of NT, which will allow immediate guidance of education programs

• **Will the project be likely to influence national nutrition policy?** Yes, since the early assessment inadequate practices, make it easy to implement and train professionals.

• **Is the project transferable to other settings / countries?** Yes, it could be adapted to different environments in which NT is inserted.

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

2024 MNI Grant Submission_Initiative/Research Project for Optimal Nutritional Care