



# Design and Evaluation of a New Nurse-Led Intervention for the Management of Bariatric Surgery Patients

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#### **INTRODUCTION**

Obesity is considered a 21st century epidemic, with more than 4 million deaths worldwide (1)

Chronic disease and risk factor for numerous other pathologies and consequently worse health outcomes (2)

Bariatric surgery emerges as a treatment for severe and morbid obesity and its associated diseases, with proven success rates (3)



#### INTRODUCTION

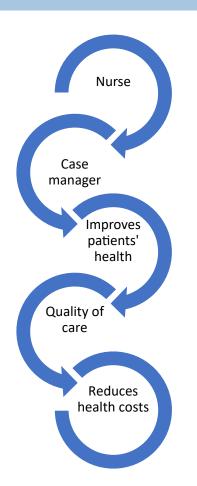
It is necessary to prepare the patient who is not the cure of obesity, effectively measured by the percentage of weight lost (4)

Surgical success is dependent on several factors and one of them is the preparation for surgery, with multidisciplinary guidance, which focus on health promotion, well-being and self-care, functional readaptation and pre-habilitation, consistent with patient satisfaction (5)

There are differences between the expectations of professionals and patients. (6)



#### **INTRODUCTION**





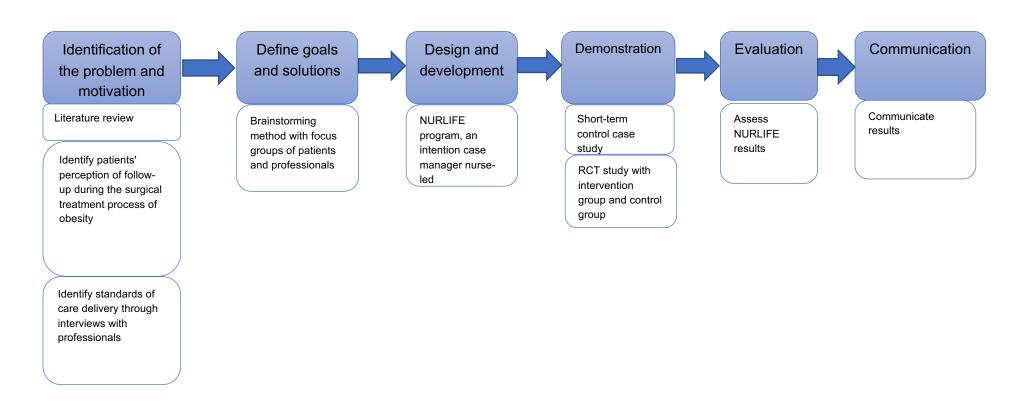
The follow-up of the patient by a case manager, who guides the provision of specialized care focused on adapting the patient to the new reality, can prove to be essential to achieve positive results (7, 8, 9)



# Aims

Design an intervention (casemanaging program) aimed at patients undergoing bariatric surgery Analyze the influence of the new intervention in the perioperative period and impact on several clinical and humanistic endpoints of these patients





Proposed DSRM Cycle for this project, with the definition of research tasks in each of the activities



## **METODOLOGIA**

	CICLO DESIGN SCIENCE RESEARCH METHODOLOGY	
Atividade da DSRM	Objetivos	Método/Tarefas
Atividade 1	Identificação do problema e motivação	Revisão sistemática da literatura
		Conheça o contexto em estudo
Atividade 2	Definir objetivos para a intervenção	Focus Group - Método de Brainstorming Patient-reported outcome measures – PROM's
Atividade 3	Design and development of the NURLIFE program	Programa e-health nurse-led case management
Atividade 4	Demonstração da intervenção NURLIFE	Estudo de caso de controlo a curto prazo
Atividade 5	Avaliação dos resultados do NURLIFE	Estudo de RCT, com grupos de intervenção e grupo de controlo, com duração aproximada de 14 meses
Atividade 6	Comunicação de resultados	Comunicar resultados de todos os pontos de desenvolvimento





#### Sample

- Based on the number of patients operated in the previous year
- reference of 100 patients
- Included all patients who agree to participate
- Excluded secondary bariatric surgery
- Randomization



#### Variables

Defined based on DSRM cycle activities

Quality of life

Physical activity

Anthropometry

Clinical Data

Patient satisfaction with specialized nursing care



### Primary endpoint

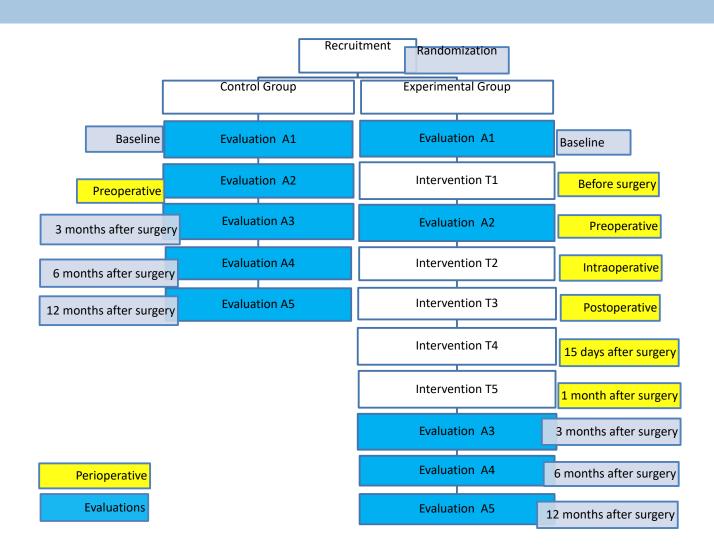
- Primary endpoint
- Proportion of patients maintaining their primary weight loss at the end of the first year measured by the percentage of weight loss and weight gain rate (10)



#### Secondary endpoint

Patient Reported Outcome
 Measures – PROM's







### **RESULTADOS**

In the long-term, the good result of bariatric surgery depends on how patients experience, understand and accept the changes that develop in the postoperative period. It is in this context that the "nurse-led case-management" interventions may allow better management of the surgical process, through health education and promotion of healthy lifestyles supported by a multidisciplinary team, contributing to very positive results in self-reported quality of life, mental health and reduction of cardiometabolic risk.



#### **CONCLUSIONS**

- 1. Design a new service based on specialized nursing interventions
- 2. Check how the nurse *case manager* can contribute to the quality of the management and adaptation process after bariatric surgery
- 3. Understanding the impact of interventions *nurse-led* long-term weight maintenance and

Patient-reported outcome measures



#### IMPLICATIONS FOR CLINICAL PRACTICE

This project aims to be the first study to investigate the effect of specialized *nurse-led* interventions on patients who are candidates for bariatric surgery, with evidence based on mixed, *face-to-face* and *e-health* programs, on the management and results of bariatric surgery.



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