

# Program of Technological Rehabilitation Nursing

## Relevance

“People on board: transforming healthcare by blending agility, responsiveness, and resilience” and digital and technology driven transformations are undoubtedly underlying the program presented here.

The Tâmega e Sousa Hospital Center (CHTS) covers 5% of the Portuguese population, distributed over two thousand square kilometers. The geographical characteristics of the region where it is inserted, makes it distant from the majority of its users.

Physical distance, when it comes to health care, is in itself a barrier when quality care is sought, centered on the user; customization of services, humanization and quickness in providing assistance in different areas.

Increasingly people are talking about taking the hospital to the patient's home. The + P.E.R.T.O., “Program of Technological Rehabilitation Nursing”, wishing to mean “+ near”, meets this need and, in innovative and pioneering way, aims to respond very quickly to a group users.

Annually we perform about 220 total knee arthroplasties (TKA), in which users remain hospitalized for an average of 3 to 5 days.

+ P.E.R.T.O. aims to implement a digital rehabilitation program, accompanied by a communication and monitoring channel, via APP, for these eligible users and caregivers to join.

Figure 1. Phases



Figure 2. App display



## Context and aims

The team of orthopedic rehabilitation nurses has always been concerned with preoperative preparation, providing tools for safer surgery, with follow-up calls, but at this moment, there is a need to follow the evolution, update and still better rehabilitation nursing care where proximity, availability and on-time monitoring are some of the strengths.

Objectives of the APP: physical, psychological, preoperative preparation and increase of the person's capacities for a better surgical experience, potential, empowerment in their rehabilitation process and postoperative recovery.

Table 1. + P.E.R.T.O. fundamental sections

Section 1	Exercise program aimed at rehabilitation: <ul style="list-style-type: none"> <li>• Phase 1 - preoperative (preparation);</li> <li>• Phase 2 – hospitalization;</li> <li>• Phase 3 - post-operative (recovery).</li> </ul>
Section 2	Useful information section with feedback system.
Section 3	On-time monitoring and follow-up section.
Section 4	Section “ talk to the rehabilitation nurse ”, a communication channel that it also allows to assist the user and caregiver in decision making in aspects such as: pain, edema and surgical wound. It also allows you to make a video call to monitoring of exercises in real time.

The preoperative nursing consultation will be the starting point. There, an education extended to the user and caregiver, you will be provided with the credentials of access and from that moment on they will have access to a set of information and exercises that will prepare you for surgery and help you with your functional recovery until 6 weeks.

## Findings

A better transition in the health/disease process of these users, increased awareness of the real recovery, functionality and post-operative expectations.

## Innovative contribution to policy, practice and/or research

The existence of something like this in rehabilitation nursing care is unknown and offers the possibility of becoming transversal to other groups with regard to this specific care, providing more quality of life to a greater number of people.

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