# Proactive demonstrative project for care management

Submission date	Recruitment status	Prospectively registered
04/08/2025	Recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
26/08/2025	Ongoing	Results
Last Edited	Condition category	Individual participant data
26/08/2025	Other	[X] Record updated in last year

## Plain English summary of protocol

Background and study aims

There's a global shortage of nurses, and by 2030, the World Health Organization expects a shortfall of 4.5 million nurses. This could affect the quality of healthcare. To help address this, researchers in Catalonia, Spain are testing a new digital tool that helps hospitals better match nursing care to each patient's needs. The goal is to improve patient outcomes, reduce stress for nurses, and make hospital care more efficient.

#### Who can participate?

The study involves healthcare professionals and patients in selected hospital units. Participation is limited to those working or receiving care in the pilot hospitals involved in the study.

## What does the study involve?

For patients, the study involves having their care needs assessed using a new digital tool when they are admitted to hospital. For nurses and other professionals, it means adjusting staffing levels based on these assessments and providing feedback through surveys. The study also includes tracking health outcomes and staff satisfaction.

#### What are the possible benefits and risks of participating?

Benefits may include better care for patients and improved working conditions for nurses. Risks are minimal, as the study mainly involves data collection and adjustments to staffing based on patient needs. No treatments are being tested, and patient safety remains a priority.

#### Where is the study run from?

The study is run by the Corporació de Salut del Maresme i la Selva, in collaboration with six hospitals in Girona and Barcelona (Spain)

When is the study starting and how long is it expected to run for? May 2023 to May 2026.

#### Who is funding the study?

The study is funded by the Catalan Health Service (CatSalut) and is part of a wider initiative to improve healthcare in Catalonia (Spain)

Who is the main contact? Eva Taravilla Suros, etaravilla@salutms.cat Joana Blazquez Martinez, jblazquez@salutms.cat

# Contact information

## Type(s)

Public, Scientific, Principal investigator

#### Contact name

Mrs Joana Blazquez Martinez

#### Contact details

Sant Jaume 209-217 Calella Spain 08370 +34 937 69 02 01 jblazquez@salutms.cat

#### Type(s)

Scientific

#### Contact name

Mrs Eva Taravilla Suros

#### **ORCID ID**

https://orcid.org/0009-0006-8422-2058

#### Contact details

Cala Sant Francesc 5 Blanes Spain 17300 +34 972353264 etaravilla@salutms.cat

# Additional identifiers

# Clinical Trials Information System (CTIS)

Nil known

# ClinicalTrials.gov (NCT)

Nil known

#### Protocol serial number

PT-182023-UCH

# Study information

#### Scientific Title

Proactive demonstrative project for care management: adaptation and new roles for the needs of hospitalized patients

#### Acronym

**PT-CURAS** 

#### **Study objectives**

Evaluate whether the implementation of the digital tool or platform that calculates the patient's Care Intensity Index (CII) upon admission is effective in adjusting the use of nursing resources in the hospital care process, contributes to improving patient quality and safety, and enhances professional satisfaction.

# Ethics approval required

Ethics approval required

#### Ethics approval(s)

approved 26/02/2025, Maresme Healthcare Consortium (Research Unit (basement 2, door 5) Mataró Hospital, Carretera de Cirera, s/n 08304 Mataró – Barcelona, Barcelona, 08304, Spain; +34 937417730; assajosclinics@csdm.cat), ref: 87/24

#### Study design

Multicentric observational phase I retrospective cohort

#### Primary study design

Observational

## Study type(s)

Safety, Efficacy

# Health condition(s) or problem(s) studied

Improve perception of professional satisfaction

#### **Interventions**

Phase I: Register the variables agreed upon to establish a Care Intensity Index (CII) and apply it to a sample of 10 patients per entity (in collaboration with six hospitals in Girona and Barcelona). Data extraction will be done through conventional statistical analysis to perform a preimplementation study of the digital tool using an Excel document, where time and procedures will be manually recorded. Health indicators will be collected before the tool's implementation, and surveys will be conducted using the OMICE and NSS stress scales via URL.

#### Phase II and III:

- 1. Create and implement the tool in a sample of patients, adjusting nursing staff by patient profiles and care load in a pilot unit at each center.
- 2. Evaluate the tool's functionality using the SUS scale for usability.
- 3. Measure effectiveness during a two-month period using a manual checklist. The same Excel document from Phase I will be used to track the CII and verify its established variables

Propose stress and neglect scales for healthcare professionals prior to the implementation phase of the digital application and subsequently in phase 3.

Provide a Likert satisfaction scale for the management population. Pilot test in phase 3 of an internal medicine unit in the participating hospitals.

#### Intervention Type

Other

#### Primary outcome(s)

- 1. Stress factors of healthcare professionals in hospitalization measured by the validated Spanish version of the NSS (Nursing Stress Scale) in phase I and phase III
- 2. Omission of nursing care measured by he Survey on OMISION OF NURSING CARE (OMICE) Spanish version (Spain) of the MISSCARE

instrument in healthcare professionals in hospitalization during phase I and phase III

- 3. Management satisfaction measured with the satisfaction survey of management professionals who will use the digital tool in phase I prior to implementation and in phase III
- 4. Manual cures intensity index measured using the Barthel scale, medical order sheet, monitoring of vital signs and frequency according to medical indication and record of cures and PRN (project research nursing) in Phase II or validation
- 5. Cure intensity Index IIC measured using the digital tool or APP in phase III
- 6. The usability of the application or digital tool was measured using the Computer System Usability Questionnaire (CSUQ) for management professionals in Phase III

#### Key secondary outcome(s))

There are no secondary outcome measures

#### Completion date

31/05/2026

# **Eligibility**

#### Key inclusion criteria

- 1. Care professional in the MI unit and patients over the age of 18 years admitted to that unit
- 2. Professional manager who uses the digital application

# Participant type(s)

Patient, Health professional

# Healthy volunteers allowed

No

## Age group

Adult

# Lower age limit

18 years

#### Sex

All

# Key exclusion criteria

- 1. Patients not used Internal Medicine Unit
- 2. Under 18 years of age

#### Date of first enrolment

01/07/2025

#### Date of final enrolment

28/02/2026

# Locations

#### Countries of recruitment

Spain

# Study participating centre Corporacion salud del Maresme y la Selva

Sant Jaume 209-217 Calella

Spain

08370

# Sponsor information

#### Organisation

Corporacio de Salut del Maresme i la Selva

# Funder(s)

## Funder type

Government

#### **Funder Name**

CatSalut

# **Results and Publications**

# Individual participant data (IPD) sharing plan

All data generated or analysed during this study will be included in the subsequent results publication

# IPD sharing plan summary

Published as a supplement to the results publication

# **Study outputs**

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet Participant information sheet 11/11/2025 No Yes