

# Impact of advanced practice nurses in hospital units on the implementation of clinical guidelines

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<b>Registration date</b> 11/02/2022	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 14/12/2022	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

The incorporation of best evidence into clinical practice is key for increasing the quality and efficacy of healthcare, though a continuous challenge for healthcare teams. Advanced practice nurses may facilitate this transference due to their influence on other professionals' performance and attitudes.

This research aims to evaluate whether the inclusion of advanced practice nurses in hospitalization wards teams improves patient indicators and the adherence of other nurses to the best evidence, by monitoring variables related to pressure ulcer prevention and vascular access devices management.

### Who can participate?

Adult inpatients aged 18 years and above, admitted to the participating hospital wards, except patients in terminal palliative care.

### What does the study involve?

We will include advanced practice nurses in the intervention wards, who will provide support and education to health teams, motivating changes in attitude, skills, knowledge, and abilities regarding two clinical guidelines used in the Balearic Islands health system (pressure ulcer prevention and vascular access devices management). Control wards will continue their current protocols and practice.

We will measure clinical indicators related to both clinical guidelines, by bedside direct observation and review of nursing records.

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

The intervention is expected to reduce pressure ulcer and catheter-related complications in the intervention wards, compared to those in which the intervention is not provided. Due to the nature of the intervention (education and support), we do not expect any undesired effects in the patients attended in these units.

Where is the study run from?

The study is managed collaboratively by the Healthcare Office of the Balearic Islands Health Services and the Nursing and Physiotherapy Department of the University of the Balearic Islands (Spain)

When is the study starting and how long is it expected to run for?

February 2018 to September 2019

Who is funding the study?

The study is funded by the College of Nurses of the Balearic Islands (Spain)

Who is the main contact?

Dr Miguel Angel Rodriguez Calero, mianrodriguez@ibsalut.es

## Contact information

### Type(s)

Principal investigator

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**Additional identifiers****Clinical Trials Information System (CTIS)**

Nil known

**ClinicalTrials.gov (NCT)**

Nil known

**Protocol serial number**

PI217/2019

**Study information****Scientific Title**

Impact of advanced practice nurses in hospital units on compliance with clinical practice guidelines: a quasi-experimental study

**Acronym**

EPAH

**Study objectives**

The advanced practice nurses will increase the adherence of team nurses to guidelines recommendations regarding pressure lesions and peripheral catheterization. This will reduce complications and improve patient-related indicators.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 27/06/2018, Comité de ética en la investigación de las Islas Baleares [Balearic Islands Research Ethics Committee], (Calle del calçat, 2A, 2ª planta, Polígono de Son Valentí, 07011 Palma, Illes Balears, Spain; +34 971 177 378; [ceic\\_ib@caib.es](mailto:ceic_ib@caib.es)), ref: IB-3662/18-PI

## **Study design**

Prospective quasi-experimental study

## **Primary study design**

Interventional

## **Study type(s)**

Other

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

Prevention of pressure ulcer and catheter-related complications in hospital care

## **Interventions**

The intervention consists of the incorporation of an advanced practice nurse within each intervention unit involved, to participate in activities appropriate to the context in question, with a specific interest in providing support to health teams, motivating attitudinal change regarding skills, abilities, and knowledge and seeking to ensure the implementation of guidelines recommendations and the avoidance of low-value practices. Among other actions, the advanced practice nurses extend awareness of the project, assist in the implementation of the guidelines, work with the team to establish objectives, provide training for the health team, contribute to the planning of changes in circuits, materials, techniques, evaluate the results obtained, provide periodic feedback to the health team, adjust the interventions as necessary, and offer support and mentoring. Participating nurses hold monthly meetings with the research team, and took part in a specific training program, not provided to the control wards teams. The control wards do not receive any interventions, continuing with usual protocols and guideline implementation standards.

The process and outcome variables are measured once a month, in all inpatients admitted on that day.

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

1. Prevalence of pressure ulcer is measured by in-situ inspection at baseline and monthly during 1 year.
2. Prevalence of catheter-related adverse events s measured by in-situ inspection at baseline and monthly during 1 year.

## **Key secondary outcome(s)**

1. Overall adherence to pressure ulcer and catheter care recommendations are measured by in-situ follow-up of process indicators.
2. Mean number of recommendations fulfilled for each patient x100 / Total number of guideline recommendations

## **Completion date**

30/09/2019

## **Eligibility**

**Key inclusion criteria**

Hospitalised adults (>18 years old).

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

3742

**Key exclusion criteria**

Patients in terminal care

**Date of first enrolment**

01/04/2019

**Date of final enrolment**

30/09/2019

**Locations****Countries of recruitment**

Spain

**Study participating centre****Hospital Manacor**

Ctra Manacor-Alcudia s/n

Manacor (Mallorca)

Spain

07500

**Study participating centre****Hospital Universitario Son Espases**

Ctra Valldemossa, 79

Palma (Mallorca)

Spain  
07210

**Study participating centre**  
**Hospital Comarcal de Inca**  
Ctra Vieja de LLubí, s/n  
Inca (Mallorca)  
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## Sponsor information

**Organisation**  
Balearic Islands Health Services

**Organisation**  
University of the Balearic Islands

## Funder(s)

**Funder type**  
University/education

**Funder Name**  
Nursing College of the Balearic Islands

## Results and Publications

### Individual participant data (IPD) sharing plan

The datasets generated and/or analysed during the current study will be published as a supplement to 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?
	Outcome results				

<a href="#">Results article</a>	29/11/2022	14/12/2022	Yes	No
<a href="#">Protocol article</a>	16/05/2020	11/02/2022	Yes	No