

VARIABILITY IN RHEUMATOLOGY DAY CARE HOSPITALS IN SPAIN: A DESCRIPTIVE ANALYSIS OF THE VALORA STUDY

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INTRODUCTION

Rheumatology day care hospitals (DcH) in Spain have become a genuine health care model for a wide spectrum of complex rheumatology patients, with an increasing range of services. The knowledge of its actual use considering resources and peculiarities of the context in which lends itself is essential to improve care delivery.

The **aims** of VALORA project are: 1) to describe the variability of Rheumatology DcH in Spain, in terms of resources, organization, management, and quality standards application, and 2) To identify factors associated with avoidable variability and barriers for the implementation of quality standards

The current study is based on the previous definition of these quality standards, identified in a previous project, both in the framework of the Plan ICARO for the Quality of Care Improvement from the Spanish Society of Rheumatology

METHODS

Cross-sectional descriptive multicenter study (116 preselected centers with DcH from 17 autonomous regions) conducted in two phases:

1. Quantitative study collected data through a self-administered questionnaire, previously agreed by a scientific committee and piloted in 3 centers. Variables analyzed include hospital (H), Rheumatology Units (RU) and DcH features, to assess the level of compliance with the quality standards on the Structure, Processes and Outcomes domains, previously defined by the SSR. Data were analyzed with STATA and described the frequency of categorical variables, and mean (standard deviation) or median (interquartiles range IQ) for quantitative variables

2. Qualitative study of national scope included 14 Focus group Discussion (8 of rheumatologists, 4 of nurses and 2 of patients). Participants selected with theoretical sampling. The sessions have been recorded, transcribed and categorized with the software Atlas.ti7. Content analysis was used.

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RESULTS: QUANTITATIVE STUDY

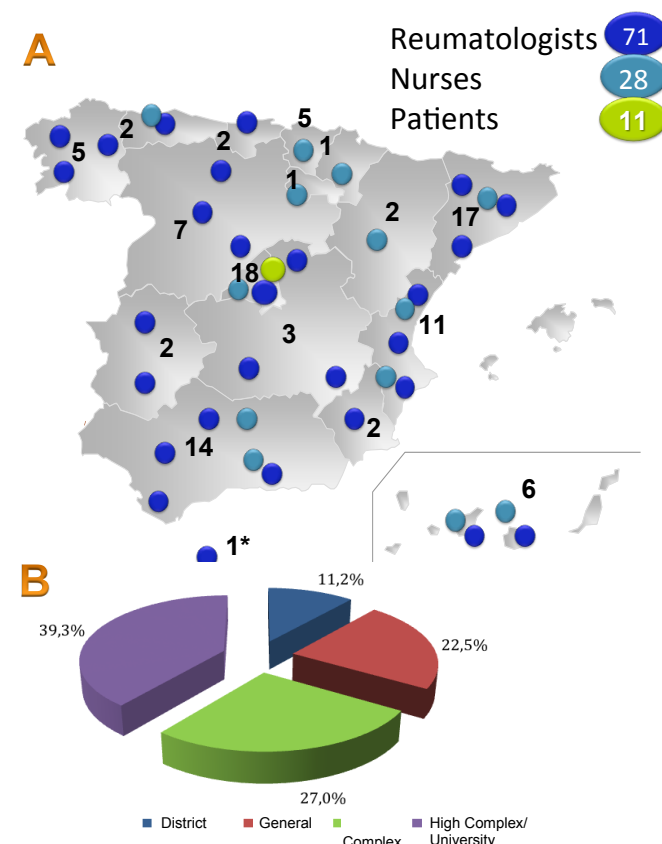


Fig 1. Geographic distribution of centers and structural variability of Hospitals

1A. Seventy one rheumatologists and 28 nurses from 89 Hospitals (H) in 16 Regions and Melilla* were involved, with high variability of structural characteristics (levels 1-4) where university H predominated (1B).

Table 1. Characteristics of participant Rheumatology Units	
Beds assigned (median, IQ)	4 [0-6]
Annual admissions (median, IQ)	59 [24-130]
Annual Procedures in Day Care Hospital (median, IQ)	667 [300-1250]
Rheumatologists (mean, IQ)	5 [4-8]
Nurses allocated to Unit (mean, IQ)	2 [0-4]
Nursing outpatient clinic (%)	52
Monograph outpatient clinics (%)	73%
University teaching (%)	62
Postgraduate (fellow) training (%)	46
Public funded research by H level 1-4 (%)	40-74
Clinical trials research (%)	90

Day care Hospital standards: structure

- 92% are multidisciplinary, with nurses (50%) or rheumatologists (30%) as managers and a defined physician assigned to DcH in 48%
- Opening hours: 94% attended patients from Monday to Friday. 51% of the day hospitals have morning shifts, whereas 49% have morning and evening shifts.
- Electronic support: 78% have digital medical records, 73% electronic citations and 69% data collection by protocol

Table 2. Day care Hospital structure standards	
	% DcH
No physical barrier access	94
Reception area	81
Administrative support	70
Clinical Guidelines and recommendations	88
Standard operating procedures	50
Defined portfolio of services	64
Claim and suggestion records	61
Manual of Organization	63
Quality Plan	50
Contingency Plan	49

DcH standards: process and outcomes

- Nursing processes are well defined
- Electronic prescription is available in 50% and coordination with pharmacy is considered efficient in 88%
- DH contents in training programs are insufficient, both in undergraduate (25%) postgraduate programs (40%).
- Activity and performance evaluation is the rule and includes costs estimations in 60%.

Table 3. Day care Hospital process standards	
	% of DcH
Waiting list < 14 days	91
Phone attention and consultation	84
Patient education	73
Simultaneous Procedure and consultation	80
Checklist	54
Use of Informed consent forms	84
Discharge reports	50
Patient satisfaction surveys	33
Contingency Plan	49
External Quality certification	18

CONCLUSIONS

- There is a substantial variability in features and functioning of Rheumatology DcH, although they share certain homogeneity in structure standards. A polarity is revealed (50/50%, 60/40%) in implementing several process and outcome domain standards
- Satisfaction of rheumatologists, nurses and patients about the status and performance of the current DcH is general. However, the current context highlights the uncertainty and fears about the immediate future.
- The detection of factors for unjustified variability and barriers helps to identify areas of improvement that should be prioritized for their relevance and feasibility.

RESULTS: QUALITATIVE STUDY

Fig 2. Word cloud. Obtained from data analysis of focus groups



- Extensive use of DcH linked to growing use of biologics
 - Improvement in the quality and safety of clinical practice, greater adherence to treatments and high quality of life of the patients
- Professionals: preference for monographic DcH due to organizational advantages and high specialization of nursing.
- Economic restriction framework defines future trends that directly impacts on resources and operation of the DcH. The detected barriers suggest some difficulties:
 - Derived from local and regional biological regulatory committees, for the rheumatologists
 - Management of adverse effects, for nurses
 - The fears for the suspension or reduction of treatments for patients.