

# EHMA 2024

Shaping and managing  
innovative health ecosystems

## The organisational and economic impact of the frequent users': re-designing the healthcare network within the hospital and the territorial settings

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#EHMA2024

# Outline

- The current healthcare scenario
- Frequent users' phenomenon
- Research methodology
- Results
- Discussion & Conclusions

# The current healthcare scenario

1

## Territorial and organizational fragmentation

The fragmentation is based on multiple healthcare professionals and specializations, different data flows and scarce data integration but also is caused by the presence in Italy of 21 Regional Healthcare Services

2

## Lack of coordination

The fragmentation of the supply network could lead to a lack of coordination between different healthcare facilities, making difficult to ensure integrated and consistent care pathways for the patients

3

## Waiting time

Long waiting lists for treatments and medical services could generate negative clinical outcomes or reduce the effectiveness of treatments, demonstrating the systems' inability to meet patients' demand promptly

## EMERGENCY DEPARTMENTS (EDs) ISSUES

70% of Italian EDs' accesses are for less urgent clinical conditions (identified with white and green priority codes), with chronic conditions being a primary cause for patients' repeated accesses to healthcare services

# Frequent users' phenomenon

“Frequent ***users***”, also known as frequent patients or “*high utilisers*”, are **individuals requiring multiple and frequent hospital care over a relatively short period of time**

- Complex or chronic medical conditions: frequent users suffer from complex or chronic medical conditions, requiring constant monitoring and treatment, leading to frequent hospital accesses
- Lack of adequate primary care: hospital care is required for issues that are effectively managed in an outpatient setting
- Complications: complications or negative clinical outcomes could cause repeated hospital accesses
- Socioeconomic disadvantages: socioeconomic factors such as poverty, housing instability, and lack of access to a balanced diet could contribute to the need for frequent hospital care
- Mental health issues: individuals with severe mental disorders may be more prone to access to hospital care

# Research methodology

## Data collection

A **real-life data collection** was performed in 2022 within a health organisation located in the **Northern Italy** and articulated in different local hospitals

## Frequent users' identification

A quantitative analysis was conducted analysing the EDs accesses to understand the **sample of reference and the sub-sample of "frequent users"** patients with at least three re-accesses during the year, focusing on the patients with chronic diseases

## Economic and organisational impact assessment

Focusing on the frequent users, the following items are deeply assessed:

- **assistance time**
- **volume of hospital's admissions**
- **outpatient services' volume**
- **hospital costs**

# Results: Frequent users' identification



Number of EDs' accesses	Number of patients
1	6527
2	1819
3	474
4	162
5	71
6	30
7	20
8	8
9	1
10	1
11	1
12	2
14	3
16	4
23	1
26	1
29	1



**For the 70.8% of the patients, only one access is registred**

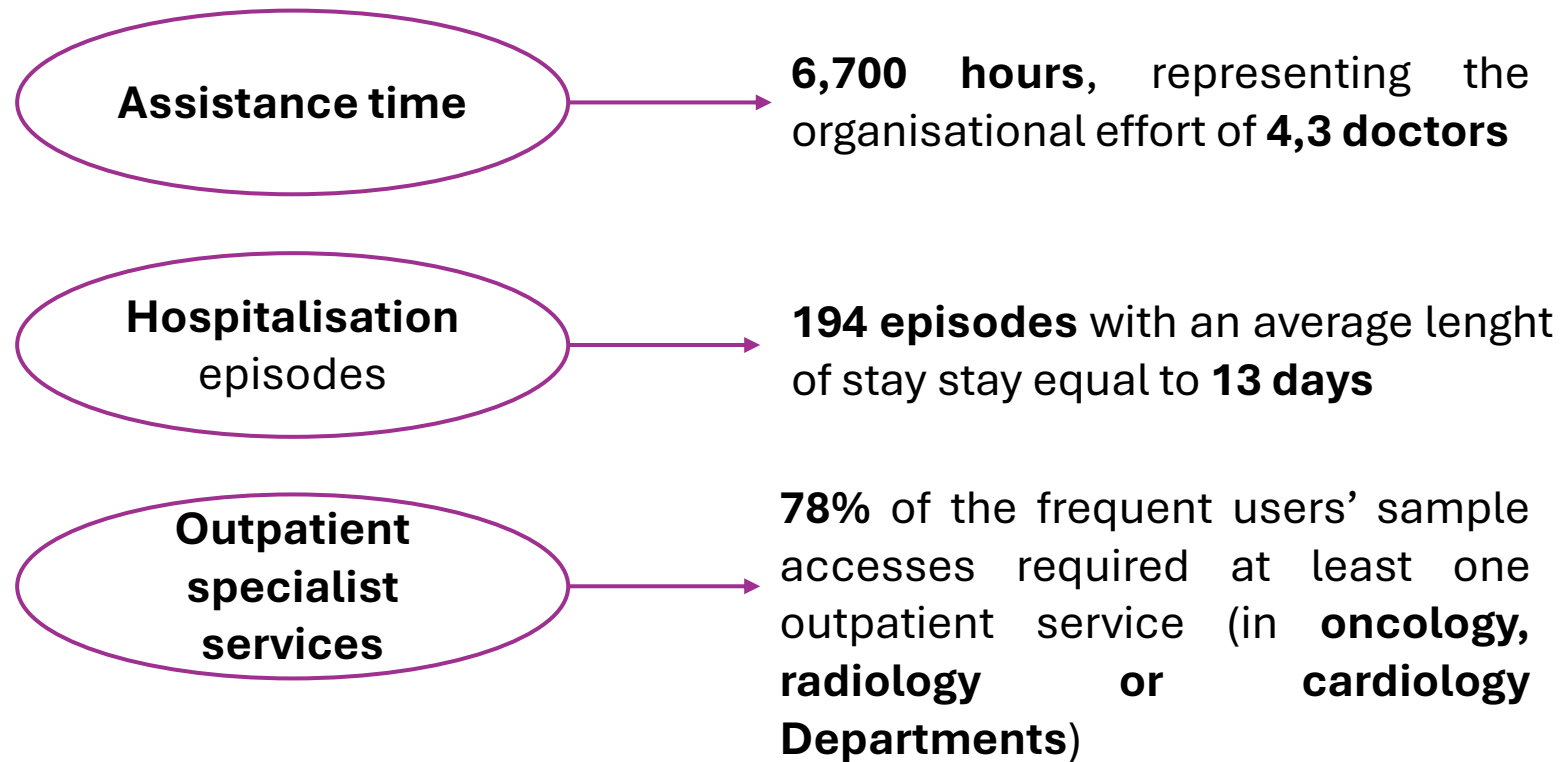
9,216 patients for a total amount of 13,212 accesses to the Eds (an average of 1.4 access per patient)

**780 patients for a total amount of 3,047 accesses to the Eds (with an average of 3.9 accesses per patient)**



**168 patients present a chronic condition = 1.8% of the total population**

# Results: Economic and organizational impacts of frequent users' phenomenon

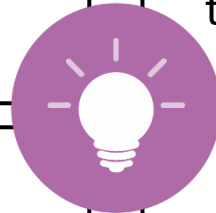


Hospital economic resources absorption = **121,734€**

# Discussion & Conclusions

**Redesign** of the service network and **transition** of the healthcare system towards a **proactive approach**, focused on different **user groups health and assistance needs**

Definition of **alternative care pathways**, incorporating multi-professional and proximal community-based facilities such as “Case della Comunità”, integrating the hospital and the territorial perspectives or other clinical pathways to guarantee the taken in charge of the difficult patients such as oncologic ones



The territorial facilities could provide more **accessible care**, helping to **reduce inappropriate ED visits**, with significant consequences on EDs' operations and resources

Patient data could enhance **predictive algorithms and artificial intelligence tools**, supporting the reorganization of healthcare activities at both the hospital and community levels





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# Thank you for the attention!

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