

# Psychiatric emergencies in two different emergency department models – a comparative analysis

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## INTRODUCTION

Through the last decades there has been a progressive increase in psychiatric conditions episodes in Emergency Departments (ED), which has led to the development of various models of psychiatric ED<sup>1</sup>.

It is estimated that psychiatric emergencies (PE) account for 5-15% of all ED episodes<sup>2,3</sup>.

In Portugal, there are numerous psychiatric EDs, however, several mental health crisis are being managed in general EDs, without specialized psychiatric care.

## OBJECTIVES

This work aims to compare outcomes and indicators of PE in two different ED models in Portugal: a psychiatric ED and a general ED.

## METHODS

We compared PE from a metropolitan psychiatric wing within a tertiary hospital ED (Oporto Metropolitan Psychiatric ED - UMPP) and a general ED within a secondary hospital (Tâmega e Sousa Hospital - CHTS). All PE from 2015 and 2016 were analyzed in those units (27532 episodes at UMPP, 11257 at CHTS), using electronically collected administrative data, obtained in 2017.

PE at UMPP were defined as patients oriented to Psychiatry ED at triage; PE at CHTS were defined as patients with psychiatry-related triage flowchart, discriminator or discharge diagnosis.

		UMPP		CHTS		p value
		n	%	n	%	
MTS bracelet colour	Blue and white	153	0.6	465	4.2	<0.001
	Green	2047	7.5	5650	50.9	
	Yellow	21864	79.6	4017	36.2	
	Orange	3409	12.4	969	8.7	
	Total	27523		11257		
Discharge destination	Psychiatric hospitalization	6414	23.3	0	0	<0.001
	LWBS	156	0.6	144	1.3	<0.001
	Discharge against medical advice	392	1.4	29	0.3	<0.001
	Non-psychiatric hospitalization	211	0.8	77	0.7	0.227
	Exterior	20350	73.9	10943	97.8	<0.001
	Total	27523		11257		
Frequent users (episodes by)	24h	2124	13.5	460	4.1	<0.001
	48h	790	5.0	131	1.2	<0.001
	72h	1014	6.5	216	1.9	<0.001
	Total	1164	7.4	271	2.4	<0.001
Readmissions	24h	790	5.0	131	1.2	<0.001
	48h	1014	6.5	216	1.9	<0.001
Times (in minutes)	Triage-observation	27456	37.0 (45.6)	11143	60.3 (59.7)	<0.001
	Observation-discharge	27496	179.2 (187.7)	11257	186.5 (226.6)	0.033

Table I -Summary of outcomes and indicators for each Emergency Department (ED). UMPP Urgência Metropolitana de Psiquiatria do Porto; CHTS: Centro Hospitalar do Tâmega e Sousa; LWBS: Left without being seen; MTS: Manchester Triage System.

## RESULTS

Table I presents a summary of outcomes and indicators. Relevant and statistically significant differences were found in terms of bracelet color (higher proportion of severe categories at UMPP), proportion of episodes by Frequent Users (13.5% at UMPP vs 4.1% at CHTS); Readmissions (at 72h, 7.4% at UMPP vs 2.4% at CHTS); times of Triage-observation (23.3 minutes longer at CHTS) and Observation-discharge (7.3 minutes longer at CHTS).

## DISCUSSION

This work reveals several important differences between these two models. Higher frequency of episodes by Frequent Users as well as higher frequency of Readmissions at the psychiatric ED might point to greater susceptibility to misuse in this unit.

These results contribute to better understand the dynamics of psychiatric emergencies and EDs, which may be of use to future changes in health care services.

However, this work faces important limitations, since the operationalization of the inclusion criteria was not equal for both units; also, the absence of national identification number for all the episodes reduced substantially the sample for some analysis and might have introduced bias.

## REFERENCES

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