





#### **DESCRIPTION OF A CLINICAL PHARMACIST INTERVENTION FOCUSED ON**

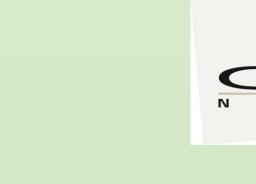
### MANAGEMENT OF A CHRONIC DISEASE AT HOSPITAL:

## THE EXAMPLE OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

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## **Background and importance**



- COPD is currently the fifth leading cause of death with about 17 000 deaths by year in France,
  - Despite having national recommendations, many care non-conformities are observed in COPD patients management.

# **Aim and Objectives**

 $\bigcirc$  Describe the intervention of a **Clinical Pharmacist** focused on COPD management recommendations emitted by the French Health Autority (*HAS*).

#### Materials and methods



#### **Observational study** conducted between January and July 2022.

Clinical Pharmacist included hospitalized COPD patients and performed a pharmaceutical interview focused on COPD management:



- -medical follow-up by a pneumologist
- -smoking
- -vaccination against pneumococcus
- -COPD medication
- -medication adherence
- -proper use of inhalation devices



- $\rightarrow$  Collect the type and number of non-conformities to recommendations
- → Collect the type and number of propositions emitted by Clinical Pharmacist

#### Results

N= 85 patients Mean age : 70.5 years

Type and proportion of non-conformities observed		
Inhaler misuse	37%	
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**<u>173 non-conformities</u>** detected on 79 patients

2,1 non-conformities/patient
At least one non-conformity was observed in 93% of patients

Non-conformities detected :

- misuse of inhalation devices (77.2%)
- absence of vaccination against pneumococcus (67.1%)
- no follow up by a pneumologist (64.7%)
- active smokers (32,9%)
- prescriptions considered to be non-compliant (31.2%)

#### 109 propositions :

- 57 pneumococcus vaccines

No mistake	18 (22.8%)
≥ 1 mistake	61 (77.2%)
1 mistake	27 (34.2%)
2 mistakes	23 (29.1%)
3 mistakes	11 (13.9%)
Type of mistake	
Don't exhaled before the puff	56 (70.8%)
Insufficient inspiration	18 (22.7%)
Don't block breathing	13 (16.5%)
Patient-inadapted device	13 (15.3%)
Vaccination anti pneumoccocal	32%
Vaccination complete	28 (32.9%)
No vaccination or incomplete vaccination	57 (67.1%)
Smoking	16%
Smoker	28 (32.9%)
Non-smoker	57 (67.1%)
Prescription error	15%

- 22 medical help to stop smoking
- 12 switch of device
- 12 patients were referred to their general practitioner
- 8 inhalation chamber

Conclusion

Tot	al = 27 (31.2 %)	
	Molecular redundancy	5 (5.9%)
	Prescribing error	11 (12.9%)
	Patient's error compared to the prescription	8 (8.4%)
	Long-term prescription of corticosteroids	3 (2.8%)

# Clinical Pharmacist <u>can detect non-conformities and make propositions</u> to optimize COPD management during patient hospitalization.

This kind of focused intervention could also be used for patients suffering from other chronic disease such as heart failure, asthma or diabetes.

Keywords : COPD, non-conformities, clinical pharmacy