

MONITORING LENGTH OF STAY AND
READMISSIONS OF CHRONIC
OBSTRUCTIVE PULMONARY DISEASE
(COPD) PATIENTS: A LONGITUDINAL
ANALYSIS ON NATIONAL
READMISSION DATA (NRD)

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PRESENTATION PLAN

Introduction

Objective of the Study

Research Methodology

Systematic Literature Review

Inclusion & Exclusion Criteria

Findings

Next Steps

Q&A

INTRODUCTION

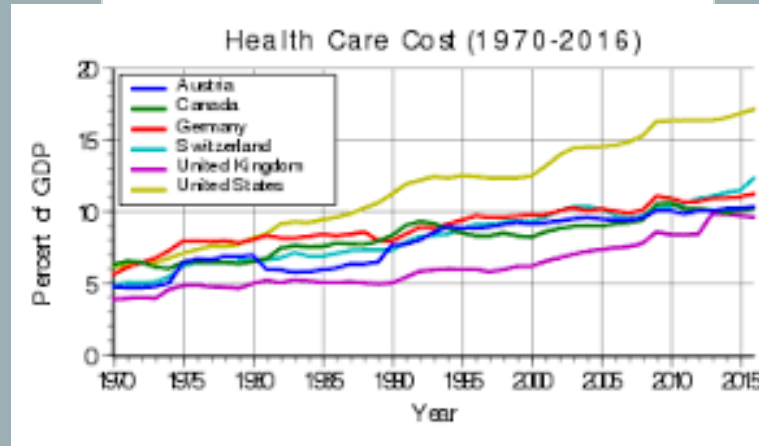
Costs

- Exponentially increasing costs in healthcare industry



Share in GDP

- Increasing share of healthcare industry in GDP in the U.S.



Medical Errors

- In the U.S., over 250,000 people die annually from medical errors, which is about 10% of annual U.S. deaths, and ranks as the third leading cause of death behind heart failure and cancer (Makary & Daniel, 2016).



INTRODUCTION

Expectations

- Safety
- High quality



Expectations

- Lower cost
- Decreasing medical errors



Expectations

- Shorter LOS
- Improved performance
- Improved patient outcomes



INTRODUCTION

COPD patients
and their LOS

COPD patients
and their
readmissions

Reduce
readmission and
LOS for COPD
patients

OBJECTIVE

The objective of this study is to analyze the relationship between LOS and readmissions of COPD patients in the National Readmission Data (NRD) provided by Healthcare Cost and Utilization Project (HCUP) managed by the Agency for Healthcare Research and Quality (AHRQ).



**Agency for Healthcare
Research and Quality**



RESEARCH METHODOLOGY

Literature review

Hypothesis Development

Data Analysis

Statistical Inferences

RESEARCH METHODOLOGY

Literature review

Systematic Literature Review

The systematic literature review was conducted advance searches through the Eastern Library databases. The advanced searches were done through ABI Inform, CINAHL, Pub Med, PubMed Central, Science Direct, and Web of Science. The purpose of this is to discover articles that pertain to the abstract search of full articles in order to learn more about the LOS and readmissions of COPD disease.

ProQuest®
ABI/INFORM COLLECTION


WEB OF SCIENCE

PubMed

ScienceDirect

ELSEVIER

CINAHL®
Advanced Searching Tutorial

Available via EBSCOhost®

SYSTEMATIC LITERATURE REVIEW



RESEARCH QUESTION

What are articles analyzing the relationship between LOS and readmissions of COPD patients that were published in peer-reviewed journals that meet the inclusion/exclusion criteria?

Systematic Literature Review

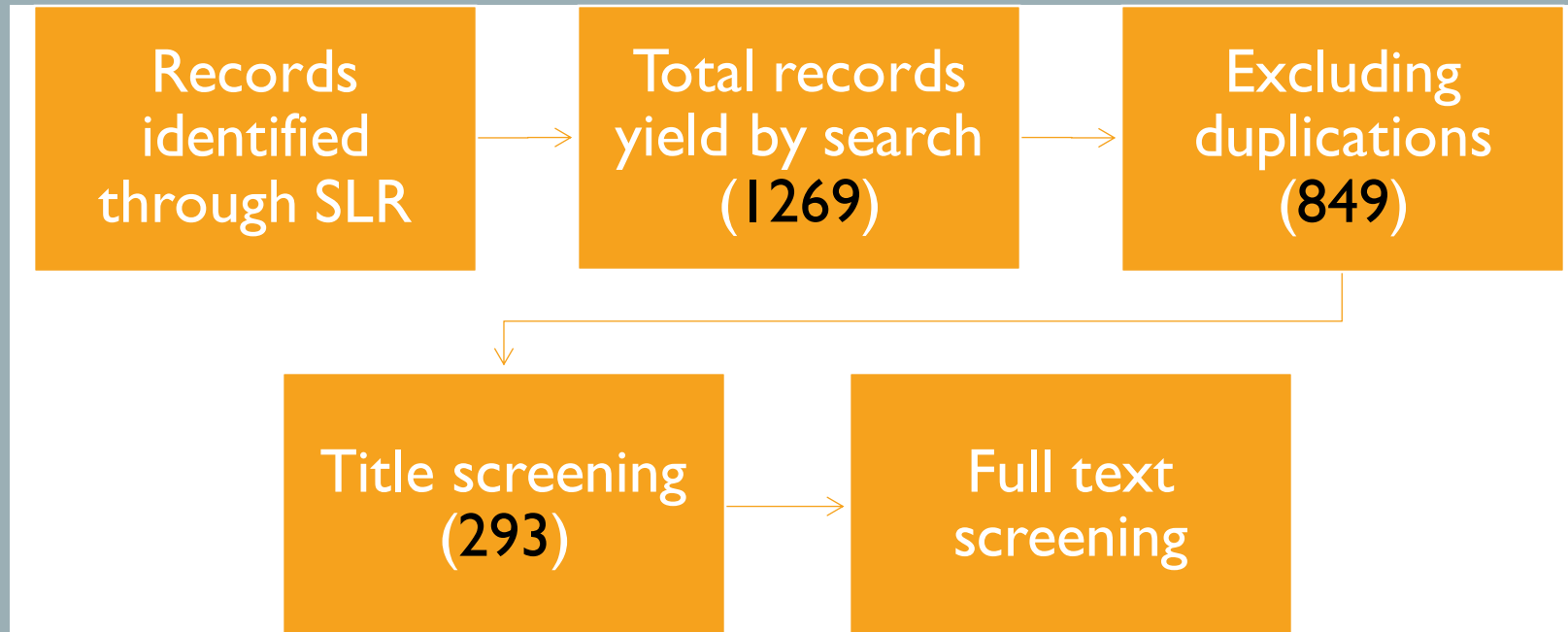
INCLUSION & EXCLUSION CRITERIA

Criteria	Items
Inclusion criteria	<ul style="list-style-type: none">• Full-text articles published in scholarly journals• Published in English between 2000 and 2022• The publications found in selected digital databases in primary search• The articles including identified key words (chronic obstructive pulmonary disease, COPD, length of stay, readmission)• The articles used in the previous literature reviews (secondary search)
Exclusion criteria	<ul style="list-style-type: none">• Articles published in non-scholarly journals• Not full-text articles• Materials published in other languages• Duplicated studies• Conference proceedings

SYSTEMATIC LITERATURE REVIEW

DATABASES	chronic obstructive pulmonary disease AND length of stay	chronic obstructive pulmonary disease AND readmission	chronic obstructive pulmonary disease AND length of stay AND readmission
ABI/INFORM Collection (Proquest)	19	22	5
Web of Science	50	50	35
CINAHL with Full Text (researchIT CT)	86	95	23
Science Direct	354	320	90
PubMed	10	10	7
PubMed Central (PMC)	N/A	N/A	93

SYSTEMATIC LITERATURE REVIEW



NEXT STEPS

Completing full text screening

Data analysis using logistic regression

- Dependent variable: readmission
- Independent variables: LOS, age, gender, payer, type of hospital

Q & A

