

## THE CORRELATION BETWEEN CLINICAL VARIABLES AND HEALTHCARE RESOURCE USE IN RELATION TO THE STATUS OF HEALTHCARE COORDINATION IMPLEMENTATION IN PATIENTS WITH RESPIRATORY DISEASES

Sylwia I. Szafraniec-Buryło<sup>1</sup>, Marika Guzek<sup>2</sup>, Marta Duda-Sikuła<sup>3</sup>, Grzegorz Bukato<sup>2</sup>, Artur Prusaczyk<sup>2</sup>, Paweł Żuk<sup>2</sup>, Bożena Mroczek<sup>4</sup>, Alina Szewczyk<sup>5</sup>, Andrzej Śliwczyński<sup>6</sup> and Donata Kurpas<sup>5</sup>

<sup>1</sup> Department of Pharmacoeconomics, Institute of Mother and Child, 17a Kasprzaka St., 01-211 Warszawa, Poland;

<sup>2</sup> Medical and Diagnostic Centre, 2 Kleeberg St., 08-110 Siedlce, Poland;

<sup>3</sup> International Scientific Projects Section, Wrocław Medical University, 1 Pasteura St., 50-367 Wrocław, Poland;

<sup>4</sup> Department of Humanities in Medicine, Faculty of Health Sciences, 48 Żołnierska St., 70-204 Szczecin, Poland;

<sup>5</sup> Department of Family Medicine, Wrocław Medical University, 1 Syrokomli St., 51-141 Wrocław, Poland;

<sup>6</sup> Division of Quality Services, Procedures and Medical Standards, Medical University of Łódź, 1 Gen. J. Haller Pl., 90-647 Łódź, Poland

Chronic respiratory diseases have become a great problem and our current healthcare delivery model is poorly adapted to the management of chronic diseases. Modifying the model to include team-based care in concert with patient-centred technologies provides a great opportunity for improvement. The aim of the study was to examine the correlation between clinical variables and healthcare resource use in relation to the status of healthcare coordination implementation in patients with chronic respiratory diseases in Eastern Mazovia. We included in our study a sample of 533 patients being treated at the pulmonology outpatient clinic located in the Eastern Mazovia region, which has been following a coordinated care model since 2012. Our study was based on the retrospective analysis of medical records from 2006 to 2016. The most common pulmonological diagnosis found during each visit was bronchial asthma (J45). It was found that the following clinical variables: FVC, FEV1, FEV1% FVC were significantly statistically and negatively correlated with the data on the healthcare resource use of each studied type after the change of model to coordinated care. This connection between clinical variables and resource use was less visible during the time before adopting the new model by the clinic. The advantageous effects of healthcare coordination on the connection between clinical variables and the healthcare resource use of patients with chronic respiratory diseases and therefore on the ability to predict and plan the resource use persisted over the three-year period of care coordination being reviewed.

**Keywords:** Chronic diseases - Primary Healthcare - Healthcare - Healthcare services - Respiratory Tract Diseases