

# EVALUATION OF THE EFFECTIVENESS OF THE CHEST PAIN UNIT DEPARTMENT IN OUTCOMES OF PATIENTS WITH ACUTE CORONARY SYNDROME

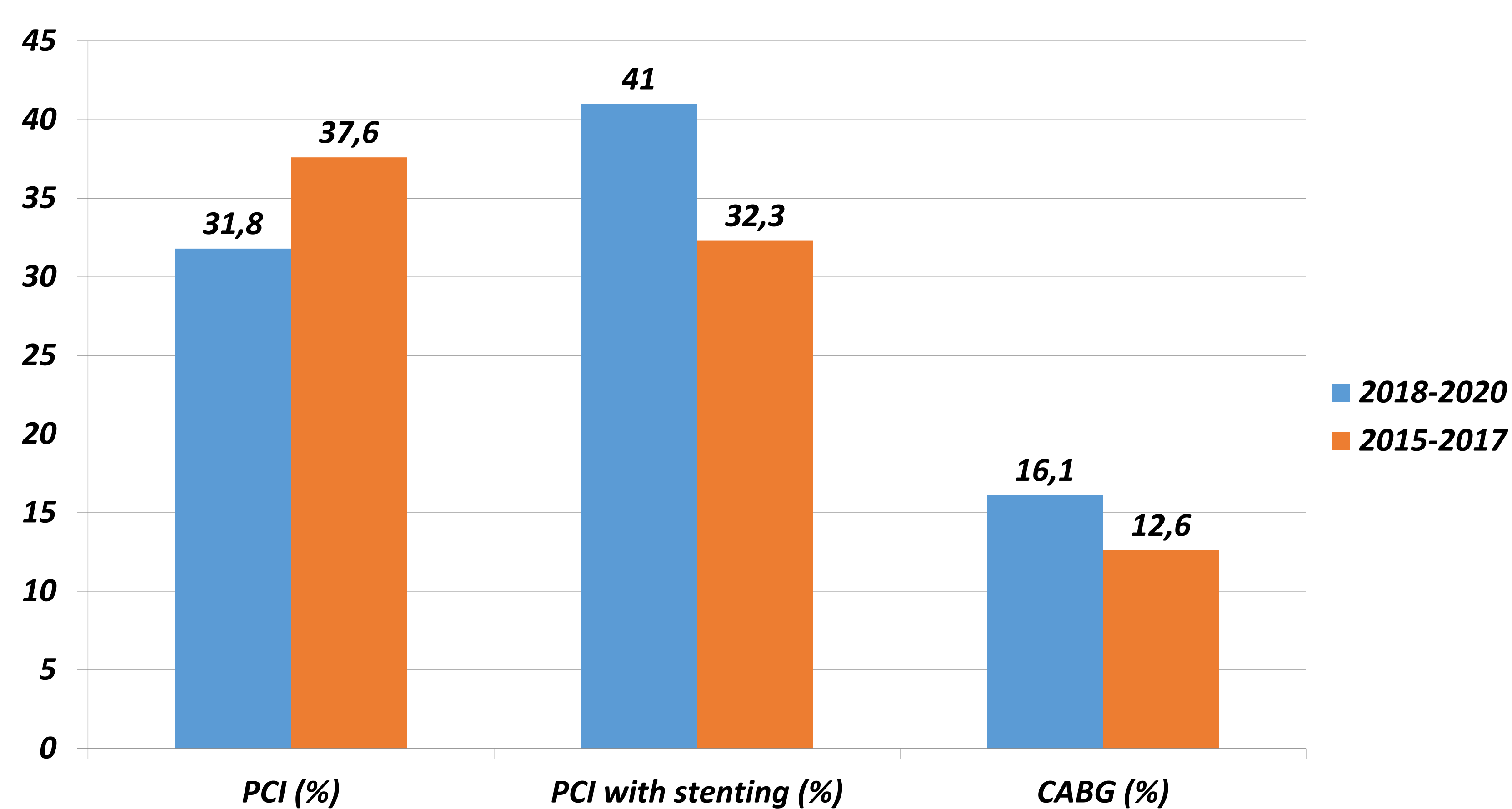
Vakpayev D, Umbetzhanova A, Derbissalina G, Koikov V, Bekbergenova Zh  
NJSC "Astana Medical University", Astana, Kazakhstan

Chest pain units (hereinafter - CPU) - are units for the treatment of chest pain and are defined as organizational units of short stay with special treatment protocols designed to facilitate and optimize the diagnosis of patients with chest pain in the emergency room. The successful CPU program model not only includes cost-effective and evidence-based treatment approaches and initiatives to rapidly identify and stratify the risk of all types of chest pain, but also aims to reduce the time to treat acute myocardial infarctions (AMI) and reduce unnecessary hospitalizations.

**OBJECTIVES:** To evaluate the effectiveness of CPU for patients with ACS in the National Scientific Medical Center (NSMC) in the period from 2018-2020.

**METHODS:** A case-control study was performed. The total number of patients in case group was 2656. As a control group, patients treated in the period 2015-2017 (before organizing CPU) in the amount of 1584 patients were taken.

**RESULTS:** During the indicated period, 2656 patients diagnosed with ACS were hospitalized, PCI was performed in 844 patients (31.8%), PCI with stenting - in 1089 patients (41%), CABG - 428 (16.1%). The comparison group consisted of 1584 patients diagnosed with ACS, of which 595 patients (37.6%) underwent diagnostic PCI, 512 patients (32.3%) underwent PCI with following stenting, and 199 (12.6%) underwent CABG. The detection of ACS increased by 67%, a decrease in cases of unreasonable hospitalization by 5.8%, an increase of reasonable coronary stenting by 8.7%, an increase reasonable myocardial revascularization by CABG by 3.5%.



**CONCLUSION:** Due to the work of CPU department, the total number of reasonably hospitalized patients has increased by 67%, which in the long term leads to a decrease in the number of unnecessary hospitalizations, and therefore boost up the efficiency of cardiological care for the population. In the global context, each prevented unreasonable coronary intervention reduces the likelihood of a medical error and its consequences, economic costs, and each reasonable hospitalization reduces subsequent mortality and disability.

Contact person: MD, PhD-student  
Ayagyozy Umbetzhanova,  
ayatemir@mail.ru

