

Scheduling 7-day Follow-up Appointments to Help Prevent Readmissions in Patients with Acute Exacerbation Chronic Obstructive Pulmonary Disease

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Objectives: Prior studies have shown that patients hospitalized for acute exacerbation of chronic obstructive pulmonary disease (AECOPD) have a high hospital readmission rate and that close outpatient follow-up may reduce the need for hospital readmission. The objective of this study is to analyze the effect of scheduled 7-day post-hospital follow-up appointments on 30-day readmission in patients hospitalized with AECOPD.

Methods: A quasi-experimental, multicenter, prospective cohort design with retrospective observation as part of the Integrated Michigan Patient Centered Alliance in Care Transitions (I-MPACT) was used. Each of the four participating hospitals in Michigan selected AECOPD as their target Intervention and were incentivized to increase overall rates of scheduled 7-day post-hospital follow-up for all patients discharged in this target Population using a pay-for-performance system. A random sample of patients discharged with AECOPD was included and patients were excluded if discharged or transferred to another hospital, left against medical advice, died during initial hospitalization, were known to have died within 30 days of discharge without readmission, or were discharged to a skilled nursing facility. Analyses were done using Pearson chi-square and Multivariate logistic regression modeling.

Results: Of the 686 patients with a diagnosis of AECOPD, 29.5% (N=202) received a scheduled follow-up while 70.65%

(N=484) did not. The sample was 57% female, 73% White, and 13% on Medicaid with a mean age of 66 years. Based on a risk-adjusted model, patients who received a 7-day post-hospital follow-up appointment had a 43% lower likelihood of readmission compared to patients who did not receive an appointment (OR=0.57; p=0.03). Additionally, patients who received a scheduled follow-up with a Primary Care Provider had a 53% lower likelihood of Readmission compared to patients who did not receive a scheduled appointment (OR=0.47; p=0.01).

Conclusion: For patients hospitalized for AECOPD, scheduling outpatient follow-up appointments within 7 days of hospital discharge was associated with a reduction in 30-day hospital readmissions. Scheduling early post-hospital follow-up appointments for patients with AECOPD may reduce readmission rates.

Keywords: Acute exacerbation chronic obstructive pulmonary disease

- Discharge planning
- Hospital readmission
- Quasi-experimental study design
- Quality improvement
- Care transitions
- Early follow-up