

00234 **The Effectiveness of a Patient Navigator-led Integrated Care Bundle on Healthcare Resource Utilization Among Patients With Chronic Obstructive Pulmonary Disease (COPD): A Quasi-experimental Study**

Chew Suet Mei¹, Kannusamy Premarani², Lee Siew Ling¹

¹Singapore General Hospital, ²SingHealth

Aims: This study was aimed to evaluate the effectiveness of a Patient Navigator (PN)-led Integrated Care Bundle (ICB) in reducing healthcare resource utilization among COPD patients.

Methodology: A quasi-experimental study was conducted to 124 subjects, comprising a prospective interventional cohort (n = 62) and historical controls (n = 62) in a tertiary hospital in Singapore. Intervention group (IG) received a PN-led ICB during their hospitalization. It included structured education on COPD and action plan for self-management, discharge planning and post-discharge follow-up. On the other hand, control group (CG) was sampled consecutively via retrospective medical records review of COPD patients. At that juncture, the ICB was yet to be implemented, enabling comparison pre- and post-implementation. The primary outcome was healthcare resource utilization, which included rate of readmission and Emergency Department (ED) visit within 30 days. The secondary outcomes were 90-day event-free survival rate from readmission and percentage of patients readmitted at least once within 90 days.

Result: No statistical difference was observed between groups in the 30-day readmission and ED visit rate (P = 0.82, 0.49 respectively). Time to readmission was not statistically different between groups (log rank test P = 0.08). No significant difference was found in the percentage of subjects readmitted at least once within 90 days, although a larger proportion of IG subjects (n = 29, 46.8%) was readmitted as compared to CG (n = 18, 29.0%).

Conclusion: The PN-led ICB did not demonstrate reduction in readmission and ED visit rate. This could possibly be attributed to the insufficient intensity of the ICB to generate a significant impact. Additionally, the IG patients may possibly stand a higher readmission risk as they were referred by healthcare professionals, who deemed that these patients required more care. A more intensive care plan may be necessary while future research should adopt a more rigorous study design.