

Evaluasi Proses Pelayanan Intervensi Koroner Perkutan Primer pada Pasien IMA-EST di RSUD Jayapura: Analisis Kendala dengan Pendekatan Theory of Constraints dan Diagram Ishikawa

Manurung, Joel Herbet Marudut Hasiholan

Deskripsi Lengkap: <https://lib.fkm.ui.ac.id/detail.jsp?id=139465&lokasi=lokal>

Abstrak

<div style="text-align: justify;">Latar Belakang: Penyakit jantung koroner, khususnya Infark Miokard Akut dengan Elevasi Segmen ST (IMA-EST), merupakan kegawatdaruratan kardiovaskular yang membutuhkan terapi reperfusi cepat melalui Intervensi Koroner Perkutan Primer (IKPP). Keberhasilan IKPP sangat ditentukan oleh pencapaian door to balloon time (DTB) ≤90 menit. Namun, implementasi pelayanan IKPP di RSUD Jayapura masih menunjukkan keterlambatan yang bermakna dan belum pernah dievaluasi secara komprehensif dari aspek manajemen pelayanan. Tujuan: Penelitian ini bertujuan mengevaluasi implementasi pelayanan IKPP pada pasien IMA-EST di RSUD Jayapura, mengidentifikasi titik kendala utama (bottleneck), menganalisis akar penyebab keterlambatan dengan pendekatan Theory of Constraints (TOC) dan Diagram Ishikawa, serta merumuskan rekomendasi strategis perbaikan pelayanan. Metode: Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus. Data sekunder diperoleh dari buku registrasi cathlab terhadap 125 kasus IMA-EST periode Januari 2024 hingga April 2026, sedangkan data primer diperoleh melalui observasi partisipatif, Focus Group Discussion (FGD), dan Consensus Decision Making Group (CDMG) pada tiga kasus terpilih. Analisis dilakukan secara deskriptif, menggunakan TOC untuk identifikasi kendala utama dan Diagram Ishikawa untuk analisis akar masalah. Hasil: Hasil penelitian menunjukkan rata-rata DTB tahun 2024, 2025, dan 2026 berturut-turut sebesar 553,6 menit, 2663,9 menit, dan 1656 menit, jauh melebihi standar. Pada observasi tiga kasus, ditemukan rentang DTB antara 694–2207 menit. Analisis TOC mengidentifikasi bottleneck utama berada pada fase persiapan tindakan menuju cathlab, terutama terkait keterbatasan kapasitas cathlab dan kesiapsiagaan tim di luar jam kerja. Analisis Ishikawa menunjukkan faktor dominan berasal dari aspek Man dan Method, berupa keterbatasan SDM, sistem aktivasi manual, dan belum adanya sistem siaga 24/7. Kesimpulan: Pelayanan IKPP di RSUD Jayapura belum optimal dalam mencapai target DTB akibat kendala sistemik dan multifaktorial. Perbaikan harus difokuskan pada penguatan kapasitas cathlab, peningkatan jumlah dan kesiapan SDM, penyempurnaan sistem aktivasi IMA-EST, serta monitoring DTB secara berkelanjutan.</div><hr /><div style="text-align: justify;">Background: Coronary artery disease, particularly ST-segment Elevation Myocardial Infarction (STEMI), is a cardiovascular emergency requiring rapid reperfusion therapy through Primary Percutaneous Coronary Intervention (PPCI). The success of PPCI is highly dependent on achieving a door to balloon time (DTB) of ≤90 minutes. However, PPCI service implementation at Jayapura Regional Hospital has shown significant delays and has never been comprehensively evaluated from a healthcare management perspective. Objective: This study aimed to evaluate the implementation of PPCI services for STEMI patients at Jayapura Regional Hospital, identify the main bottlenecks, analyze the root causes of delays using the Theory of Constraints (TOC) and Ishikawa Diagram, and formulate strategic recommendations for service improvement. Methods: This study employed a qualitative case study design. Secondary data were obtained from the cathlab registry involving 125 STEMI cases from January 2024 to April 2026. Primary data were collected through participatory

observation, Focus Group Discussion (FGD), and Consensus Decision Making Group (CDMG) involving three selected cases. Data were analyzed descriptively using TOC to identify the main constraints and Ishikawa Diagram to explore root causes. Result: The results showed that the average DTB in 2024, 2025, and 2026 were 553.6 minutes, 2663.9 minutes, and 1656 minutes, respectively, all far exceeding the recommended standard. In the three directly observed cases, DTB ranged from 694 to 2207 minutes. TOC analysis identified the main bottleneck at the transition phase from preparation to cathlab intervention, primarily related to limited cathlab capacity and team readiness outside regular working hours. Ishikawa analysis revealed that the dominant contributing factors were Man and Method, including limited trained personnel, sequential manual activation systems, and the absence of a 24/7 standby system. Conclusion: PPCI services at Jayapura Regional Hospital have not yet achieved optimal DTB performance due to systemic and multifactorial constraints. Improvement efforts should focus on strengthening cathlab capacity, increasing workforce availability and readiness, optimizing STEMI activation systems, and implementing continuous DTB monitoring.