

Triaging Primary Care Patients Referred for Chest Pain to Specialist Cardiology Centres: Efficacy of an Optimised Protocol

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Abstract

Introduction: Patients referred for chest pain from primary care have increased, along with demand for outpatient cardiology consultations. We evaluated 'Triage Protocol' that implements standardised diagnostic testing prior to patients' first cardiology consultation. **Materials and Methods:** Under the 'Triage Protocol', patients referred for chest pain were pretriaged using a standardised algorithm and subsequently referred for relevant functional diagnostic cardiology tests before their initial cardiology consultation. At the initial cardiology consultation scheduled by the primary care provider, test results were reviewed. A total of 522 triage patients (mean age 55 ± 13 , male 53%) were frequency-matched by age, gender and risk cohort to 289 control patients (mean age: 56 ± 11 , male: 52%). Pretest risk of coronary artery disease was defined according to a Modified Duke Clinical Score (MDCS) as low (<10), intermediate (10-20) and high (>20). The primary outcome was time from referral to diagnosis (days). Secondary outcomes were total visits, discharge rate at first consultation, patient cost and adverse cardiac outcomes. **Results:** The 'Triage Protocol' resulted in shorter times from referral to diagnosis (46 vs 131 days; $P < 0.0001$) and fewer total visits (2.4 vs 3.0; $P < 0.0001$). However, triage patients in low-risk groups experienced higher costs due to increased testing (S\$421 vs S\$357, $P = 0.003$). Adverse cardiac event rates under the 'Triage Protocol' indicated no compromise to patient safety (triage vs control: 0.57% vs 0.35%; $P = 1.000$). **Conclusion:** By implementing diagnostic cardiac testing prior to patients' first specialist consultation, the 'Triage Protocol' expedited diagnosis and reduced subsequent visits across all risk groups in ambulatory chest pain patients.

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