

# Impact of an Asthma Carepath on the Management of Acute Asthma Exacerbations

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## Abstract

**Introduction:** Clinical pathways are being developed to standardise the management of acute asthma with the aim of improving asthma care. We evaluated the impact of an asthma carepath (CP), developed and instituted at a large community-based teaching hospital. **Materials and Methods:** Case records of consecutive asthma cases were reviewed after the implementation of a new asthma CP (November 1999 to March 2000). Data from July to October 1998 were used as historical control data [pre-carepath (pre-CP)]. Data collected included patient demographics, investigations performed, treatment prescribed, use of peak expiratory flow rate (PEFR) monitoring, length of stay (LOS) and asthma relapse rates. **Results:** One hundred and eighteen consecutive cases treated according to CP were compared with 67 pre-CP controls. There was no significant difference between the two groups with regard to LOS, use of PEFr monitoring, use of systemic steroids in hospital or asthma relapse after discharge ( $P > 0.05$ ). A significant decrease in sputum tests (34.3% pre-CP versus 18.6% CP,  $P = 0.017$ ) and use of antibiotics (62.7% pre-CP versus 30.4% CP,  $P < 0.001$ ) was observed for patients on CP. The proportion of patients who had their salbutamol reviewed (49.3% pre-CP versus 73.7% CP,  $P = 0.001$ ) and oxygen reviewed (25.8% pre-CP versus 73.8% CP,  $P = 0.004$ ) was also significantly higher for cases on CP. **Conclusion:** Although the asthma CP did not significantly reduce LOS or early relapse, it was associated with a significant reduction of the use of sputum tests and antibiotics. Review of salbutamol and oxygen as treatment was also more likely.

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**Key words:** Asthma management, Clinical pathway

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