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Paediatric asthma clinical pathway : Impact on cost and quality of care

(Article)

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Abstract

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INTRODUCTION: Uncontrolled asthma may cause an increase in healthcare utilisation, hospital admission and productivity loss. With the increasing burden of asthma in Malaysia, strategies aimed at reducing cost of care should be explored. OBJECTIVE: This study aims to determine if a clinical pathway (CPW) for inpatient paediatric asthma would reduce average length of stay (ALOS), improve asthma management and decrease cost. METHODS: A quasi-experimental, pre-post study was used to evaluate the CPW effectiveness. Paediatric inpatients aged 5-18 years old, admitted for acute asthma exacerbation from September 2015 to April 2016 were prospectively recruited. Data from patients admitted from January-July 2015 were used as control. CPW training was carried out in August 2015 using standardised modules. Direct admission cost from the provider's prospective was calculated. Outcomes compared were differences in ALOS, discharge medication, readmission within 28 days of discharge and cost. RESULTS: ALOS is 26 hours lower in the CPW group for severe exacerbations and underlying uncontrolled asthma (19.2 hours) which is clinically significant as patients have shorter hospital stay. More newly-diagnosed intermittent asthmatics were discharged with relievers in the CPW group (p-value 0.006). None of the patients in the CPW group had readmissions (p-value 0.16). Mean treatment cost for patients in the intervention group is higher at RM843.39 (SD ±48.99, versus RM779.21 SD±44.33). CONCLUSION: This study found that management using a CPW may benefit asthmatic patients with uncontrolled asthma admitted with severe exacerbation. Further studies will be needed to explore CPW's impact on asthma management starting from the emergency department.

SciVal Topic Prominence

Topic: Critical Pathways | Length of Stay | Care pathway

Prominence percentile: 73.562

Author keywords

Asthma | Clinical pathway | Cost | Outcomes | Paediatric

Indexed keywords

EMTREE drug terms: bronchodilating agent | corticosteroid

EMTREE medical terms:

adolescent | algorithm | Article | asthma | child | childhood disease | clinical pathway | controlled study | cost effectiveness analysis | disease control | disease exacerbation | disease severity | female | follow up | health care personnel | health care quality | health care utilization | hospital admission | hospital cost | hospital readmission | hospitalization | human | length of stay | major clinical study | Malaysia | male | outcome assessment | oxygen supply | pneumonia | quality of life | questionnaire | training

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References (29)

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1 Lai, C.K.W., Beasley, R., Crane, J., Foliaki, S., Shah, J., Weiland, S., Aït-Khaled, N., (...), Wong, G.

Global variation in the prevalence and severity of asthma symptoms: Phase Three of the International Study of Asthma and Allergies in Childhood (ISAAC) (Open Access)

(2009) *Thorax*, 64 (6), pp. 476-483. Cited 542 times.
http://thorax.bmj.com.ezproxy.um.edu.my/cgi/reprint/64/6/476
doi: 10.1136/thx.2008.106609

View at Publisher

2 Wong, G.W.K., Kwon, N., Hong, J.G., Hsu, J.-Y., Gunasekera, K.D.

Pediatric asthma control in Asia: Phase 2 of the Asthma Insights and Reality in Asia-Pacific (AIRIAP 2) survey

(2013) *Allergy: European Journal of Allergy and Clinical Immunology*, 68 (4), pp. 524-530. Cited 28 times.
doi: 10.1111/all.12117

View at Publisher