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## 635. What Drives Prescribing of Asthma Medication to Children?

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### BACKGROUND:

Diagnosing children with asthmatic symptoms remains a challenge, particularly in preschool children. This creates space for variability in prescribing, as has been found in previous studies.

### OBJECTIVES:

To investigate how and to what degree patient, family and physician influence prescribing of asthma medication in children.

### METHODS:

A population based cohort study. Setting: The second Dutch national survey of general practice, 2001. Participants: 46,371 children aged 1–17 years belonging to 25,537 families registered with 109 general practitioners (GPs). Statistical analysis: A multilevel multivariate logistic regression analysis with three levels. Main outcome measure: Prescribing of asthma medication, defined as at least one prescription for beta2-agonists, inhaled corticosteroids, cromones or montelukast in the one-year study period.

### RESULTS:

On all three levels (child, family and GP) characteristics significantly associated with prescribing of asthma medication were identified. The variance in prescribing between GPs was significantly higher in children below the age of six than in older children (95% CI 3.5 to 25.2% versus 2.4 to 13.4%; Chi-square=7.3). Several diagnoses other than asthma and asthmatic complaints were strongly associated with prescribing of asthma medication, including bronchitis/bronchiolitis (OR 9.04; 95%CI 7.57 to 10.8).

### CONCLUSIONS:

Our study shows a much higher variance in prescribing between GPs for children below the age of six compared to older children, which could be a direct result of the diagnostic complexities present in young children with asthmatic symptoms. Thus diagnostic gaps may lead to more physician driven prescribing irrespective of the clinical context.