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**Title:** Screening for asthma-like symptoms and acute care utilization can be used to identify children in the community who may be at risk for undiagnosed asthma

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**Body:** Asthma prevalence is increasing but it is difficult to identify children at risk for asthma, thus many at-risk children remain undiagnosed. We hypothesized that a screening tool that included a history of asthma-like symptoms and acute care visits to a clinic, emergency department, or hospital for respiratory symptoms within the previous year would be useful to identify children with undiagnosed asthma. **Method:** After local IRB approval, we recruited 103 children from a local church and a school. Parents responded to a questionnaire about whether or not their children experienced four different asthma-like symptoms in the past year (wheezing, night time cough, exercise limitation, or prolonged colds lasting for  $\geq 10$  days) and acute care visits. Twenty of the children had been diagnosed with asthma by a physician. We compared their asthma-like symptoms with 83 children who had not been diagnosed with asthma. **Results:** The prevalence or pre-test probability that a child in this community may have asthma was 19.4%. The combination of night time cough and any acute care visit was reported by 65% (n=13) of children with asthma and 14.6% (n=12) of children without a diagnosis of asthma. Based on a likelihood ratio of 4.4, the post-test probability that children in the community who experience exercise limitations and any type of acute care may have asthma increased to 52%. The odds that a child with this combination had asthma were 10.8 times greater than children who experienced other symptom/acute care combinations. **Conclusion:** This brief screening tool can be useful to identify children with potentially undiagnosed asthma.