

IMPROVED PEDIATRIC ASTHMA OUTCOMES WITH IMPROVED INHALER TECHNIQUE

GINA M NICKELS-NELSON MSN, FNP-BC, DNP STUDENT - THE UNIVERSITY OF TEXAS AT TYLER

Why is it a problem?



Asthma Prevalence:
Pittsfield MA 15.7%
National 8.4%



5th highest ER rate in MA:
1,003 visits (2010)
National: 805,200 (2010)



US: \$14.4 M missed days school
Pittsfield \$72 lost per missed school day
Parental missed day work \$137



Inhalers mainstay treatment; average 40% children use correctly

PICOT Question:

In pediatric patients with asthma, how does hands on inhaler education compared to verbal only education affect inhaler technique, follow up clinic exacerbation visits, ER utilization, school attendance, parent work attendance over a 3 month period of time?

Literature Review:

CINAHL, Cochrane, PubMed, Psych Info, Academic Search, Scholar Works & Henderson Library

Keywords: pediatric asthma; inhaler technique, nebulizers/vaporizers, emergency room/department, school

TOTAL: 1040

Discarded: 963 (population, intervention); 51 (duplicates)

YIELD: 26

Implementation to begin August, 2018 from EBP synthesis.

Therefore:

- ❖ Providers inhaler technique evaluated
- ❖ Inhaler use Checklist
- ❖ Asthma Control Test
- ❖ Hands on & verbal inhaler technique training in clinic
- ❖ Integrate FMHO nursing model and asthma quality of life survey

Expected Outcomes:

- ❖ At least 1 step improvement in technique
- ❖ Improved asthma control
- ❖ Improved quality of life
- ❖ Ownership of illness