



**Rainelle Medical Center:  
Integration of an Electronic Asthma Action Plan**

**Public Health Problem**

Written asthma action plans have a history of low implementation rates in primary care. However, research indicates that use of these plans benefits patient care through reductions in:

- hospital admissions
- ER visits
- unscheduled doctor visits
- night time symptoms
- missed school/work days<sup>1-2</sup>

**Program**

Improving the quality of patient care is foremost at Rainelle Medical Center (RMC), located in Greenbrier County, WV. In 2010, RMC and the West Virginia University Office of Health Services Research (OHSR) formed a partnership to focus on chronic disease quality of care improvement. These efforts center on meaningful use of patient data and best practices in patient care. The initial focus of these efforts centers on asthma.

**Asthma Action Plan**  
The following is to be completed by the PHYSICIAN: (pg 1 of 1)

Last Name Last First Name First  
School Igo Here School  
Date of Birth 1/1/2005 Today's Date 3/15/2011

1. Asthma severity: (check one)  
 Intermittent  Mild persistent  Moderate persistent  Severe persistent

2. Medications: (at school and home)

	Medication Name	MDI, Oral, Neb	Dosage or Number of Puffs
Quick-Relief	Albuterol (pre-mixed) - Ventolin	Neb	2.5 mg
Routine	Budesonide - Pulmicort Respules	MDI	0.5 mg (once/twice daily via nebulizer)
Before PE / Exertion			

3. For students on inhaled medications: (all students must go to health office for oral medications)  
 Assist student with medication in office  
 Remind student to take medication  
 May carry own medication

4. Check Known Triggers:  
 Tobacco  Pesticide  Animals  Birds  
 Cleansers  Car exhaust  Perfume  Mold  
 Cold air  Stress  Exercise  Cockroach  
 Dust Other: \_\_\_\_\_

5. Peak Flow: To determine yellow and red zone values, multiply by .8 and .5, respectively

100% GREEN ZONE Peak Flow 100 %    80% YELLOW ZONE Peak Flow 80 %    50% RED ZONE Peak Flow 50 %

RMC is heading an effort to incorporate an electronic asthma action plan within the electronic health record used at their health center. OHSR is assisting RMC in making this a reality. Success of this effort will offer: real-time access for providers, school nurses to the most up-to-date information in the action plan; consistent information for the patient and/or caretakers; consistent data capture across all patients with asthma; and promotion of the use of national care guidelines. This work is set to begin April, 2011.

For questions and additional information on work, please contact:

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#### References

1. Gibson PG, Powell H, Coughlan J, *et al.* Self-management education and regular practitioner review for adults with asthma (Cochrane Review). *The Cochrane Library*. Issue 1. Oxford 2003.
2. Gibson PG, Powell H. Written action plans for asthma: An evidence based review of the key components. *Thorax* 2004; 59: 94-9.