Improving School and Medical Home Asthma Care Through Coordinated Training and Electronic Linkages

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BACKGROUND

Primary care providers lack capacity to monitor asthma and deliver education for self-care. In December 2012, Asthma Ready Communities and Kansas City Quality Improvement Consortium combined efforts for a community project named Kansas City Teams Up for Asthma Control (KC TUAC) to deliver standardized asthma self-management education to students in three school districts in tandem with national asthma guideline training for health professionals in neighboring clinics, schools and hospitals with funding by Health Care Foundation of Greater Kansas City/Safety Net Grant.

COORDINATED TRAINING

School Nurse Training

School nurses are trained by standardized modules and given essential resources and equipment to apply Expert Panel Report 3 guidelines (EPR3). "Teaming Up for Asthma Control© (TUAC) is designed to improve asthma outcomes for children in grades K to 6. TUAC is based on IMPACT Asthma Kids©.

Child and Family Asthma Literacy: Teaming Up for Asthma Control© (EPR3). "Teaming Up for Asthma Control" (TUAC) is designed to improve asthma care by school nurses in participating urban school districts, as well as providers and staff at neighboring clinics and hospitals.

EDUCATIONAL DESIGN AND APPROACH

KC TUAC will track asthma assessment and administrative claims data to target special care, education and trigger abatement services to improve outcomes for children with asthma impairment and risk. Interventions include multimedia asthma literacy training at school, inhalation instructions with an In-Check® Dial™, identification of students’ inhaler medications by color chart, a take-home activity workbook and multimedia program for families, and ICS Star Check® to improve adherence. Assessments include a validated functional impairment scale, forced expiratory volume in one second, inhalation technique, student-reported passive smoke exposure and inhaled corticosteroid adherence. Children with uncontrolled asthma can be referred to local asthma trained providers, guiding them to a medical home. Asthma assessments and claims data will be analyzed to coordinate care between schools and clinics. The Asthma Control Monitor© is an expert system designed to guide provider asthma care decisions. Data exchange is supported by tablet and cloud technology to track improvement of asthma outcomes. With family permission, a provider can request the school nurse to do asthma assessments at school. Improved communication between school nurses and providers has the potential to improve care and management not only for asthma but other common pediatric conditions.

KC TUAC School Nurses focus on 4 Key Asthma Messages:

1. Know Asthma
2. Emergency Care
3. Inhaled Corticosteroid (ICS) Twice Daily
4. Inhalation Technique

KC TUAC Participant Early Feedback*

School nurses who were asked to complete a survey and provide feedback on how students benefited from KC TUAC indicated:

• The education provided in the video really helped my students have a better understanding of their asthma and the proper management.

• "Some of the parents appear to be taking meds and the condition more seriously."

• "I was able to work closely with a student who otherwise would have no intervention, significantly improved his understanding of asthma, improved his inhaler technique and fostered independence and ownership of his asthma."

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Asthma Ready® Telecommunications

Kansas City, MO 64105

Missouri Asthma Prevention and Control Program

Columbia, MO 65201

Asthma Ready® Communities

573-884-8629

Child Health-Pulmonary Department

www.kcqic.org

My Asthma Control©

(Designed to help school nurses guide the child and family to improve asthma self-care and treatment decisions)

Asthma Control Monitor©

(Designed to inform provider care decisions by illustrating asthma impairment and risk)

Electronic Linkages

KC TUAC will be collecting asthma assessment data by tablet through a secure cloud application and HIPAA compliant unit. These data will be transferred through a virtual personal network tunnel to a secure University of Missouri server. The University of Missouri server will merge claims data with these assessment data to produce two reports: "My Asthma Control©" and "Asthma Control Monitor©". The "My Asthma Control© Report" will be available to the school nurse for working with students and families to improve asthma self-care. The "Asthma Control Monitor©" will give providers a clearer picture of asthma impairment and risk by illustrating administrative claims and assessment data.