

Asthma Ready® St. Louis Surge Project: Integrated Health Network

- Sixty-four St. Louis African American children with asthma accompanied by parents came to the Better Family Life, Cultural, Educational, and Business Center to learn more about how to manage their chronic disease at a fun-filled, fast-paced event called the St. Louis Asthma Ready Surge project on Saturday, October 26, 2013, from noon to 5 p.m. These self-management techniques were taught through games and evidence based cartoon videos with asthma control messages stimulated learning for parents and children.
- An asthma health assessment (check-up) by trained Asthma Ready® staff from Community Asthma Partnerships throughout the state, and other community resources (which included equipment such spacers and peak flow meters) were provided for each child to identify steps that can be taken by parents and children to improve asthma health. The project, “Asthma Ready St. Louis Surge” was a collaborative event conceived by the Asthma Ready® Communities (ARC) program of University of Missouri Health Systems.
- Since 2003 the University of Missouri has maintained a team of health care professionals to develop and implement innovative public health approaches to asthma care and management. ARC is funded by the Centers for Disease Control and Prevention and the Missouri Foundation for Health.
- The St. Louis Integrated Health Network, a key partner for the event, has been working with ARC and community safety net health centers to enhance services to improve asthma health outcomes for over a year. Other IHN members and partners for this event include the City of St. Louis Department of Health, St. Louis County Department of Health, the Asthma and Allergy Foundation of America – St. Louis Chapter, and the safety net community health centers.
- Nineteen formal letters were sent to known primary care providers by Asthma Ready Communities to alert them that the child is either “not well controlled” (10 children) or “very poorly controlled” (9 children) based on assessment impairment and claims data analysis. Follow-up phone calls, Asthma Ready provider referrals, and home visits are being planned for in 30-90-180 day increments to help families improve care of these children.

Kansas City Teams Up For Asthma Control

- Another ARC comprehensive community initiative project, Kansas City Teams Up for Asthma Control (KC TUAC), is being conducted in the greater Kansas City area for the years 2012-2014 to deliver standardized asthma self-management education to six participating school districts (2087 Medicaid children in Jackson County suffering from persistent asthma) in tandem with local hospitals/clinics provider and clinical trainings surrounding the urban core. The community initiative project is supported by the Kansas City Quality Improvement Consortium (KCQIC:partnering organization), Kansas City Black Health Care Coalition, the Missouri School Board Association, and the Greater Kansas City Health Care Foundation. KC TUAC in conjunction with KCQIC received national recognition in the spring, 2013 for innovation by the Robert Wood Johnson Foundation*.
- All educational and health care action interventions for 121 participating KC TUAC children will be stratified as per EPR-3 national guidelines for improving asthma control

based on standardized assessments including measures of airway obstruction and impairment. TUAC is currently being evaluated for the Centers of Disease Control.

- Innovative quality improvement measures to track progress in care include the daily possession rate of inhaled corticosteroids and acute care visit days. ARC is collaborating with Solutions for Quality Improvement (SQI) of Health Metrics Systems to advance the use of a sophisticated asthma registry at several participating clinic settings.
- Data exchange linkages of clinical and administrative claims data will be used for ongoing coordinated patient care that aligns with the medical home model. For example, school nurses will be using “smart tablets” to message clinics with standardized asthma risk and impairment assessment data. These data will merge with Medicaid claims data to populate the Asthma Control Monitor/My Asthma Control© application at the clinical setting. 35 school nurses will pilot the use of these technologies to improve care for children in the Kansas City area. ARC Coaches help school nurses use these tools.

Shooting hoops, bike riding, walking up stairs, jumping rope, dancing, or playing an instrument (things that use less energy or action)

NOT AT ALL A BIT SOME A LOT TOTALLY

Walking (things that use a little energy or action)

NOT AT ALL A BIT SOME A LOT TOTALLY

Sleeping all night (not awakened by coughing or difficulty breathing)

NOT AT ALL A BIT SOME A LOT TOTALLY

HOW OFTEN DO PEOPLE SMOKE AROUND YOU?

NOT AT ALL A BIT SOME A LOT TOTALLY

Has this student has taken albuterol (or Xopenex) in the last 4 hours?

No

DATE OF VISIT 1

Does student take ICS medication? Yes

NAME OF ICS Alvesco

WEEKLY ICS DOSES 2

DEVICE

Student knows TARGET TIME? No

Asma-1

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School Nurse Tablet Assessment View:

School nurses will collect and enter asthma check-up data to be transmitted to HIPPA compliant units for ARC analysis after merges with Medicaid claims data.

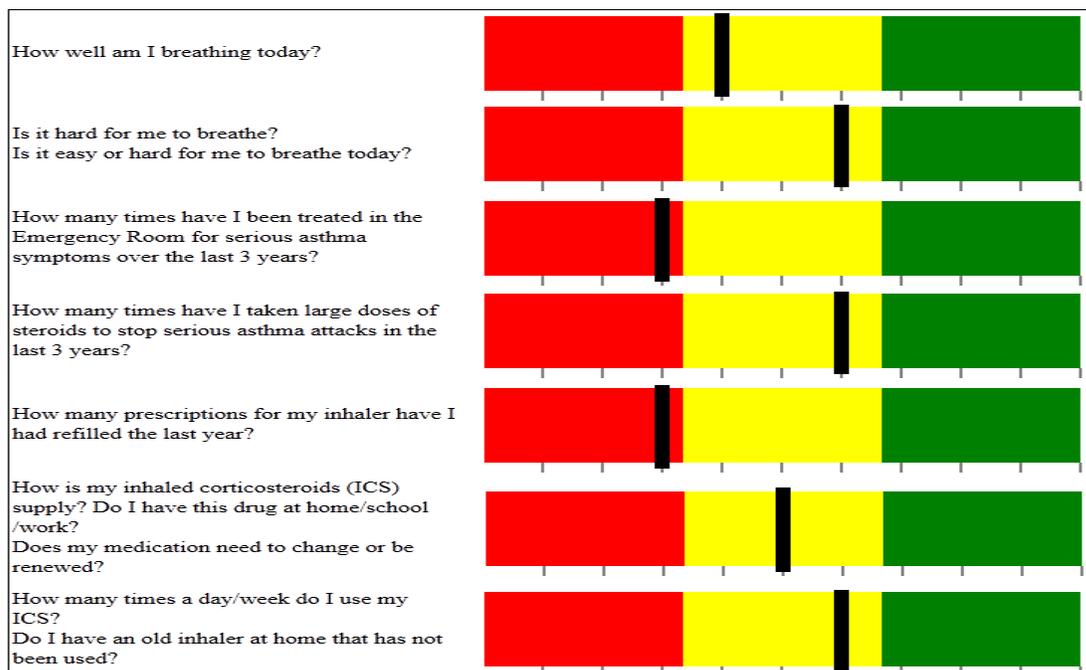
These analyzed data will then populate My Asthma Control© reports for families, school nurses and community health workers.

The analyzed data will also populate the Asthma Control Monitor© for provider displays of asthma control and severity.

- The My Asthma Control/ Asthma Control Monitor(MAC-ACM©) is an innovative application tool that graphically describes the current level of asthma control in accordance with national asthma guidelines in two display formats - one to enable patients to make better treatment decisions and one to improve provider decision-making . One parallel application, My Asthma Control (MAC©) displays for the family, school nurses, and community health workers graphic asthma educational messages for guiding self care and management of asthma control.
- Summary fields in the Asthma Control Monitor ACM© provide “clickable” links to detailed tables stamped by date and source. Assessment data (functional impairment score, FEV1, inhalation technique-inspiratory flow rate and time, and environmental risk) from school nurses, pharmacists, community asthma educators and clinical staff can be merged with claims data (ER visits, hospitalizations, medication use problems) and displayed for clinical providers to determine asthma severity and control.

My Asthma Control

Dennis Richie



Asthma Control Monitor

Choose a patient:

Indicator/Measure	Well Controlled	Not Well Controlled	Very Poorly Controlled
FEV ₁	> 80% of personal best Or % predicted	60%-80%	< 60%
FEV ₁ /FVC	Normal	reduced by 6%-10%	reduced by > 10%
Impairment Score	None	Some	Lots
Short-Acting Beta Agonist (SABA)	< 3 doses/week	3-6 doses/week	> 7 doses/week
Systemic Steroid Burst	< 2/year	2-3/year	> 3/year
Acute Care Days (ACD)	< 2 days/year	2-6 days/year	> 6 days/year
Inhaled Corticosteroids (ICS)	Low/Medium	High	Sub-therapeutic
Antibiotics	< 2/year	2-4/year	> 4/year
High Fidelity	< 2	2-3	> 3
Influenza Vaccine	< 1 year	1-2 years	> 2 years
Inhalation Technique (IT)	Good	Inadequate	Poor
Cost (Total Care)	< 120%	120%-200%	> 200%
Environmental Risk	> 65	50-65	< 50
Co-morbidities:			
Summary: Very poorly controlled, high risk with impairment, urgent follow-up appointment indicated, inadequate ICS dispensing, impairment includes night awakenings, difficulty running/playing hard, etc. Total cost of care is very high with more than 6 days per year of acute care for asthma.			
Recommendations:			
<ul style="list-style-type: none"> • increase ICS adherence • offer ICS STAR Chart incentive • schedule CPT 98960 (ACE) • complete Childhood Asthma Risk Assessment Tool • consider Home Trigger Reduction Visit 			

- Two Kansas City fall 2013 events also spotlighted Kansas City Teams Up for Asthma Control projects statewide. One was “Asthma Ready Day” on November 9, 2013. This was another event similar to the St. Louis Surge project, but conducted on a smaller scale. Thirty-six African American children and parents received asthma education, resources, and asthma check-ups. All enrolled in KC TUAC. Event was sponsored by the Black Health Care Coalition, Kansas City Quality Improvement Consortium, and Greater Kansas City Health Care Foundation. Children also signed up for Safe and Healthy Homes for environmental risk abatement services through collaboration with Kansas City Children’s Mercy Hospital and Clinics.
- The other major Kansas City event was the Asthma Ready Communities Training Part One for providers in Kansas City on November 20, 2013. 40 providers attended the Category One CME event for three objectives: 1) Review the four critical components of asthma care, key practice standards and related performance measures 2) Introduce methods for objectively assessing airflow and inhalation technique 3) Identify keys to a partnership with individuals and families to improve asthma outcomes and satisfaction with care. Swope Health Services sent 25 providers to the event for training and plans to support Asthma Ready Clinic training for seven inner city Kansas City clinics representing over 700 children receiving care for their asthma.



Map of KC TUAC area



“Now that I am in the asthma program, I can have more fun at school. I understand my asthma better and don’t worry about it as much,” said Talia Powell. Powell, with the support of her mother, Taneise Jones, participated in Kansas City Teams Up for Asthma Control (KC TUAC), at her school that helps her understand her disease.*

ARC Springfield School-Clinic Initiative

- Sixty Asthma Ready® school nurses in the Springfield School District are planning to deploy the use of the Asthma Ready Check-up/Assessment Tablet System in spring, 2014 and will be messaging trained providers at Jordan Valley Federally Qualified Health Center, as well as 15 other clinics targeting 1000 students suffering from asthma.
- ARC has developed a workforce of asthma educators, trained providers and clinical sites in Springfield for the past several years. There is a strong infrastructure of collaboration and coordination of care that the new advanced ARC innovations will enhance. Trend data suggest that the Springfield region is well below state averages for emergency room visits and hospitalizations, but there is still progress that can be made in improving quality of care and cost efficiencies given the new ARC initiatives.

Missouri Primary Care Association-ARC Collaboration

- Asthma was designated as a priority chronic disease by the Missouri Primary Care Association in 2012-2013. During this period, Asthma Ready Communities presented at four quarterly Federally Qualified Health Center Medical Director meetings. Response from Medical Directors was very positive as engagement for ARC trainings were expedited rapidly in 2013. Eight Federally Qualified Health Centers received provider trainings (either ARCT I, ARCT II, or both). These FQHCs were representative of the state as a whole (two in Kansas City, three in St. Louis, three in various parts of the state including rural). Over one hundred FQHC providers representing 2730 pediatric asthma patients were trained in national guidelines for asthma care in 2013. Also, eight Federally Qualified Health Centers were designated “Asthma Ready®” and received recognition at the Missouri Primary Care Association Annual Awards Luncheon in Branson on October, 2013.



- In addition, the following childhood Asthma Ready® Performance Measures at selected FQHCs were developed and in the planning stages for implementation through local EHR templates using benchmarked patient percentages: documentation of FEV1/FVC for 493.9 CPT coded visits; documentation of FEV1 Percent Predicted for 493.92 visits; documentation of inspiratory flow rate and time for 493.9 visits; inhaled corticosteroids prescriptions provided for 90% of pediatric patients (improved to benchmark after ARC training in 2013 by Katy Trails FQHC) ; asthma action plans provided for all 493.9 visits.
- Five FQHCs are engaged in implementation of My Asthma Control/Asthma Control Monitor and Tablet System. Five more FQHCs are planning to receive further Asthma Ready Clinical Training programs in early 2014.

Missouri Asthma Prevention and Control Program

- All these above efforts are supported by the Missouri Asthma Prevention and Control Program (MAPCP) in collaboration with Missouri Asthma Coalition and other stakeholders. This collaboration is involved in several activities with the goal of providing comprehensive EPR-3 compliant asthma services, promoting reimbursement by public and private insurers and yielding efficiencies and overall cost savings through these approaches.
- Asthma Ready® Communities plans to sponsor a statewide Missouri Asthma Prevention and Control Program Invitational Workshop in Columbia on July 25-26, 2014 for collaborative partners and key people in pediatric asthma care in Missouri including among others the St. Louis Integrated Health Network, Kansas City Quality Improvement Consortium, the Kansas City Black Health Care Coalition, Asthma and Allergy Foundation of America-St. Louis chapter, and local Community Asthma Partners (CAP) from as far as Kennett, Potosi, and Bolivar in rural Missouri representing different regions of the state. Statewide priorities for policy and practice goals will be discussed.



*Aligning Forces for Quality, Robert Wood Johnson Foundation. (2013). *Kansas City, MO: On the front lines of asthma treatment*. Retrieved from <http://forces4quality.org/kansas-city-mo-front-lines-asthma-treatment>