

WEDNESDAY JUNE 8, 2016

3:15 – 4:45 PM

BUILDING YOUR WORKFORCE
PANEL DISCUSSION

SUMMARIZED PROGRAM DESCRIPTIONS

- CHILDREN'S MERCY – ASTHMA FRIENDLY HOME
PARTNERSHIP
- ASTHMA NETWORK OF WEST MICHIGAN
- ASTHMA CAREPARTNERS PROGRAM
- MILWAUKEE FIRE DEPARTMENT INTEGRATED
HEALTHCARE PROGRAM

Jordan's family has some visitors. The four-year-olds parents have been struggling to manage his asthma and he's had several visits to the doctor's office recently and, unfortunately, a hospitalization. The visitors are from a program that can help the family understand possible asthma "triggers" (a new term for them) in and around their home that, when Jordan is exposed, makes his asthma worse or even difficult to control. (A short video about Jordan and this program is here: <https://www.youtube.com/watch?v=GwPdBwKmfXo>)

Millions of families across the nation face an everyday struggle to manage a child's asthma. Despite the evidence showing that asthma trigger avoidance is extremely effective in reducing symptoms, many families are unaware of what the triggers are or how they can cause or exacerbate symptoms severe enough to send a child to the hospital, or sadly, to even be fatal. Children like Jordan are taken to hospitals around the country on a daily basis—a logical choice when parents need help managing a flare up of a chronic health condition.

Asthma Friendly Home Partnership: To respond to this need, Children's Mercy Hospitals and Clinics (CMH) developed the Asthma Friendly Home Partnership (AFHP) program. The goals for the program include following standard asthma management practice, teaching patients effective self-management of their disease and providing a systematic case management system that works with caregivers over a multi-visit process to ensure learning, asthma action plan compliance, and to assess for any potential environmental risks in the family's home(s).

Families of asthma patients are referred to the AFHP, through any in-patient department or outpatient CMH clinic, or can be referred by a community health provider, or from any safety net clinic. Once referred, CMH uses a simple predictive index we developed (Hanson, 2016) that uses past utilization based on asthma acute care visits (ACVs) to initially stratify asthma patients in risk categories based on the likelihood of a future ACV. This same utilization index is used to establish if a patient qualifies for the high-risk asthma protocol that includes an automatic referral to the Department of Environmental Health. The ACV review is used in conjunction with the results of an administered Asthma Control Test (ACT), and an environmental risk test (ERT) to determine the patient's total asthma risk. Using this total asthma risk, patients are stratified into low, medium, or high risk to determine the level of service offered. The higher a child's asthma risk, the more intensive the level of case management, home assessment and interventions offered to the family.

Environmental contaminants (i.e., particulate matter, environmental tobacco smoke, cockroach and rodent excretions and body parts, pet allergens, mold, and biologic allergens) can cause asthma symptoms. Indoor exposures to these common household triggers play an important role in the consequences associated with respiratory diseases such as asthma. Environmental assessments of homes are used to identify and reduce exposure to asthma triggers and are recommended by the NHLBI EPR-3 guidelines. Environmental control is one of the main components of asthma management because it provides an opportunity to reduce morbidity and improve health through simple changes in the environments where patients spend time.

All AFHP families receive healthy home education and a healthy home resource manual. All AFHP families receive an Asthma Friendly Healthy Home Kit. The kit includes cleaning supplies, pest management supplies and high efficiency furnace filters. Some families receive mattress encasements and a vacuum cleaner. For high-risk families, the AFHP refers families to community partners specifically identify and repair any asthma-related home deficiencies identified during the home assessment by the CMH-CEH team.

To successfully help families it is essential we have partners in the community who share our mission. We've been fortunate over the years to have more than a hundred partners—key community partners who provide additional resources and services to families including home repair. Hundreds of families have come through the AFHP over the years and we have been fortunate to receive a number of program grants to support our efforts.

In the most recent review of the total acute care visits (ACVs) and ACT score of AFHP participants, of the 71 families that received a home assessment and basic interventions, we showed a statistically significant ($p < 0.05$) reduction in ACVs for these asthma patients pre/post participation, and for 44 children where the ACT score was available pre/post participation, we found a statistically significant ($p < 0.05$) improvement in ACT scores for these patients. (internal statistics, not peer-reviewed).

For our dedication to helping families through the asthma disease management program, we were awarded the first annual National Environmental Leadership Award for Asthma Management in 2005. Our story is listed here: http://www.epa.gov/asthma/award_winners.html#Childrens_Mercy. In 2015, we were fortunate to be recognized with the HUD Secretary's Award for Healthy Homes. Our story is listed here: https://www.huduser.gov/portal/about/healthyHomesAward_2015_2.html



The Asthma Network of West Michigan (ANWM) is an award-winning asthma program operating in Grand Rapids, Michigan, whose mission is *to improve the health and quality of life of individuals with asthma*. ANWM has been helping patients effectively control their asthma through comprehensive, holistic strategies, including: home-based asthma education and case management services, psychosocial interventions, and health care provider education and consultation. ANWM has been providing intensive in-home asthma education – its case management component – to at-risk children and adults with uncontrolled asthma in 3 West Michigan counties since 1996. ANWM is believed to be the **first** asthma coalition in the nation to receive reimbursement for these services from managed care organizations.

The Asthma Network of West Michigan has two different, but complementary goals: 1) to educate those caring for individuals with asthma -- the physicians, nurses, school and daycare personnel, parents, children, adults and family members – through community outreach and education, and 2) to intensively case-manage low-income children and adults with moderate to severe asthma. The achievement of both these goals, we believe, leads to a decrease in the morbidity and mortality associated with asthma - the mission of the Asthma Network of West Michigan.

Services include:

- Home visits conducted by nurses (RNs) or respiratory therapists (RRTs) - all of whom are certified asthma educators
- Care conferences conducted with each patient's primary care provider
- School/daycare visits to educate about and assist with managing asthma in those settings
- Full-time licensed master's level social worker (LMSW) who performs clinical assessments of each patient and addresses psychosocial issues identified



Asthma CarePartners Program

Asthma CarePartners (ACP) is a comprehensive asthma management program for children and adults living with the disease. The home visit, CHW-led program, based on SUHI's previous asthma interventions, started in 2011 when SUHI formed partnerships with a Medicaid managed care organization and a private insurer. The yearlong intervention educates individuals and their caregivers about the disease, triggers and management in their own home. Four previous asthma interventions with rigorous results and demonstrated cost savings have proven the effectiveness of SUHI's CHW model, leading to this venture to incorporate the model within standard healthcare delivery. Currently SUHI collaborates with Family Health Network to provide the program to its members with uncontrolled asthma.

MFD Mobile Integrated Healthcare

MFD MIH Overview:

The primary purpose of the Milwaukee Fire Department (MFD) Mobile Integrated Healthcare (MIH) program is to address the needs of the underserved citizens of Milwaukee who are the recipients of disparate healthcare. These citizens often have a myriad of healthcare issues but do not have ready access, perceived or real, to quality healthcare. These citizens often have unmet social or mental health needs which exacerbate their medical issues. In the past, MFD's response to these patients has been to respond to their 9-1-1 call, mitigate issues to the extent of our ability and possibly transport the patient to a receiving Emergency Department.

Through our referral process, the MIH program will serve as a bridge that connects healthcare silos. In a healthcare navigator role the Community Paramedic (CP) will follow up with patients after discharge to reaffirm understanding and adherence to discharge instructions. The CP will perform a baseline evaluation by assessing the client's medical, social and mental healthcare needs in their home.

Once the assessment process is complete, an individualized care plan will be developed in conjunction with the discharging hospital or PCP. This care plan will outline future steps for the client, including multiple home visits/checkups, with the overarching goal of ensuring that the client has appropriate medical oversight. The CP will help the client navigate the healthcare minefield connecting them with the appropriate services. Through the healthcare navigation process the following areas will be addressed in collaboration with hospitals:

- Readmission Avoidance: COPD, CHF, pneumonia, post MI, post hip/knee arthroplasty
- High frequency utilizers of Emergency Departments and 911 system
- Hospice Recidivism and Revocation
- Chronic Illness Management (asthma, HTN, DM)

The Milwaukee Fire Department MIHP will also address other *Milwaukee specific* concerns that include but are not limited to:

- Project Sleep Safe/Infant Mortality
- Smoke Detector/Carbon Monoxide Installs
- Firearm Safety
- Addiction Cessation Services
- New Parent Information and Services.
- Homeless outreach

The Milwaukee Fire Department Mobile Integrated Healthcare Program working in a collaborative manner with local hospitals will pair underutilized resources with the underserved.

MFD Mobile Integrated Healthcare

Community Paramedic Qualifications:

In order to participate in the training to become a Community Paramedic, the following criteria must be met:

- Licensed Paramedic (EMT-P)
- Must possess FULL PRACTICE PRIVILEGE status from Milwaukee County EMS at the time of application.
- Attend and successfully complete Community Paramedic Training

Community Paramedic Training:

UW-Milwaukee College of Nursing will provide instruction using the North Central EMS Institute's Community Paramedic Curriculum (v.3):

Core Modules:

- a. Role of the Community Paramedic
- b. Social Determinants of Health
- c. Public Health and the Primary Care Role of the Community Paramedic
- d. Developing Cultural Competence
- e. The Community Paramedic's Role Within the Community
- f. The Community Paramedic's Personal Safety and Wellness
- g. Care Modules: To include pathophysiology, assessment and priority setting
- h. -Congestive heart failure
- i. -Hypertension
- j. -Asthma
- k. -COPD
- l. -Diabetes
- m. -Neurologic conditions: Stroke/TBI/MS/MD
- n. -Wound care
- o. -Oral care
- p. -Mental health
- q. -Newborn/maternal assessment

Training is designed to allow paramedics to operate at the top of the state defined paramedic scope of practice; MFD Community Paramedics will be operating in an expanded role, NOT an expanded scope.

Successfully integrating Community Paramedics into the Milwaukee healthcare landscape will involve focusing on the 6 C's:

- ✓ **Community:** addressing a current unfulfilled need
- ✓ **Complementary:** enhancement without duplication
- ✓ **Collaborative:** interdisciplinary practice

MFD Mobile Integrated Healthcare

- ✓ **Competence:** qualified practitioners
- ✓ **Compassion:** respect for individuals
- ✓ **Credentialed:** legal authorization to function

PILOT

Target Population:

For the pilot program, we will be looking at the sub-population of 911 users that call at least 5 times in a 3-month time frame. This sub-population, the High Utilizer Group, will be contacted on a non-emergent basis to ascertain if they would be willing to participate in the voluntary pilot program, free of charge. The pilot program is scheduled to run for 3 months. The High Utilizer Group will only include citizens of Milwaukee with a sample size of 10-20 individuals.

High Utilizer Group Identification:

The Milwaukee Fire Department has access to 911 dispatch data. The pilot program will use mined data to determine individuals that meet the criteria for the High Utilizer Group.

Delivery Model for High Utilizer Group:

For this sub-population, the primary roll will be to assess and refer; in this regard, the community paramedic's role is that of a healthcare navigator.

Source of Funding:

The MFD is moving forward utilizing existing resources for training and procurement of vehicles and equipment. The MFD has applied for a FEMA Assistance to Firefighters Grant to cover education, vehicles, and equipment; however award announcements have not been made at this time. Regardless of being awarded the FEMA grant, the MFD is committed to moving forward and implementing a Mobile Integrated Healthcare Program and training Community Paramedics with UWM.

