Report Highlights:

◊ Recent research related to patients living with asthma, including:
  • Emergency department readmissions,
  • Patient engagement,
  • Phenotypes and biomarkers, and
  • Health literacy.
◊ Program updates and upcoming educational opportunities.

News

Join us at the Becoming an Asthma Educator and Care Manager course following the conclusion of the Montana Society for Respiratory Care Practitioners Conference.

April 7, 2017 at Fairmont Hot Springs Resort.

umt.edu/sell/cps/asthma

Research Updates

Asthma and inhaled corticosteroids (ICS)


Researchers examined pharmacists’ and pharmacy technicians’ perceptions of patients’ beliefs about ICS, and compared the ICS beliefs of pharmacists and technicians with those of people living with asthma. 136 community pharmacists, 90 pharmacy technicians, and 161 patients with asthma completed questionnaires based off of the Beliefs about Medicines Questionnaire (BMQ). Pharmacists and technicians filled out the questionnaire according to how they thought their patients would complete it. Pharmacists and technicians thought patients 1) had more concerns about ICS use than patients actually reported, 2) had stronger beliefs in their personal need for ICS than patients reported, and 3) attributed a higher level of necessity to ICS than patients reported. Pharmacists who completed the BMQ also underestimated their patients level of concern about their asthma.

Emergency department (ED) readmissions


A total of 95 patients with multiple asthma readmissions were included in a chart review spanning ten years, from 2002 to 2012. 39% of patients were readmitted for asthma within 30 days, and 61% were readmitted anywhere from 30 to 365 days after their first admission. Demographic characteristics were not noticeably different from one group to another. Researchers found that non-allergic asthma patients on multiple medications with multiple prior admissions, ED visits, inpatient hospitalizations, a history of GERD, sinusitis, and anxiety, are more likely to be readmitted within 30 days regardless of other factors. Researchers recommend patients with these characteristics be assessed for interventions in an effort to reduce early readmissions.
Individualizing therapy


300 children aged 12 to 59 months with asthma necessitating treatment with a daily controller medication participated in the Individualized Therapy for Asthma in Toddlers study: a multicenter, randomized, double-blind clinical trial. Three treatment strategies were used:

1. Daily inhaled corticosteroids,
2. Daily leukotriene receptor antagonists, and
3. As-needed ICS treatment co-administered with albuterol.

The primary analysis determined 1) differential response and 2) assessment of whether aeroallergen sensitization, previous exacerbation, and sex predicted a differential response.

- The probability of best response was highest for a daily ICS and predicted by aeroallergen sensitization, but not exacerbation history or sex.
- The probability of best response to ICS was increased in children with both aeroallergen sensitization and blood eosinophil counts of 300/μl or greater.

Researchers concluded that in young children with asthma necessitating Step 2 treatment, “phenotyping with aeroallergen sensitization and blood eosinophil counts...could identify children with a high exacerbation probability for whom treatment with a daily ICS is beneficial despite possible risks of growth suppression” (p. 1610).


While patients with severe asthma represent approximately 5 to 10% of the total number of people with asthma, these patients consume about 50% of the global asthma budget. The authors argue that a "one-size fits all" therapeutic strategy may not be effective enough to achieve good control of symptoms and reduce the risk of exacerbation in patients due to the heterogeneity of asthma, and that phenotypes could play a role in guiding treatment decisions.

They propose that, whenever possible, a patient with a possible asthma diagnosis should be referred to a pulmonologist for functional evaluations and then to an allergy specialist for specialized evaluations that can relate to the asthma phenotype. Also, they suggest the inhaler device should be carefully selected to ensure optimal performance and consistency to encourage patient adherence to medication; features like dose counters are seen by the authors as particularly useful. Finally, the authors recommend working with pharmacists to monitor patient adherence, stating that they can play a “key role” in the early detection of worsening symptoms or other “red flags.”
Adherence


Researchers held 6 focus groups that included 38 asthma stakeholders (patients, pulmonologists, and allied health care professionals). The most commonly mentioned theme involved when and how asthma education should be approached to improve patient adherence. The stakeholders suggested that successful interventions include three things: 1) make an effort to understand patients experiences and negotiate the treatment regimen, 2) consider treatment as a shared responsibility involving the patient, health care provider, and the patients’ social network, and 3) take into account different stakeholders concerns, needs, perspectives, and knowledge.

Congratulations to Gia Holiway and her staff at Wheatland Memorial Hospital for embarking on the Diagnose and Manage Asthma health care quality improvement grant program.

To learn more about support for conducting quality improvement activities related to asthma, in either the clinic or ED setting, contact the MACP at asthmainfo@mt.gov.

Health literacy and self-management


The objective of this study was to test whether or not navigation skills, or their ability to access health care to obtain diagnosis and treatment, are related to other self-management skills and health literacy. 250 adults participated and took a 21-item questionnaire regarding “navigating ability,” were evaluated on ICS technique, and completed a 10-item quiz on knowledge of ICS function. A higher health care navigation score was associated with correct ICS score, knowledge of ICS, and better print literacy and numeracy. Researchers concluded that patients with poor navigational ability are likely to also have poor inhaler technique and limited understanding of ICS function, in addition to limited numeracy and print literacy. They recommend that clinicians consider the impact these self-management skills have on asthma care.
For more information, contact: asthmainfo@mt.gov

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Upcoming Events

Montana Society for Respiratory Care
Annual Conference
April 5-7, 2017
Fairmont Hot Springs
For more information, visit www.msrcmt.org

Becoming an Asthma Educator and Care Manager, offered through the Association of Asthma Educators (AAE)
April 7, 2017
Fairmont Hot Springs
For more information, please contact Anna Bradley at abradley@mt.gov

Montana Diabetes Advisory Coalition
April 21, 2017
Best Western PLUS Heritage Inn, Great Falls
For more information, please contact Susan Day at sday@mt.gov

MACP Spring Webinar: Complementary and Alternative Medicines (CAM) and guidelines-based care for asthma
May 18, 2017
Via WebEx
For more information, please contact Anna Bradley at abradley@mt.gov

Montana Asthma Advisory Group
May 19, 2017
Butte, MT
For more information, please contact Sarah Brokaw at sbrokaw@mt.gov

Montana Cancer Coalition Spring Statewide Meeting
May 16, 2017
Radisson Colonial Hotel, Helena
For more information, please contact Nicole Campbell at ncampbell@mt.gov or visit mtcancercoalition.org

PROGRAM UPDATES
• The MACP just held the 2017 Big Sky Pulmonary Conference, with over 150 people in attendance. Thanks for making this year a success! We hope you can join us in 2018.

• The MACP has hosted two trainings to build capacity for asthma home visitors in 2017; learn more about where home visiting is available in Montana on the MACP website.

• All programs in the Montana Dept. of Health and Human Services are taking steps to ensure materials on the web are in accessible formats. Check in to the MACP website over the course of the next year to see our progress.

Online Resources
dphhs.mt.gov/asthma

• Archived asthma-related webinars with free CEUs
• Archived surveillance reports on asthma-related subjects
• Resources for health care facilities, asthma educators, schools and school nurses, coaches, day care providers, and people living with asthma