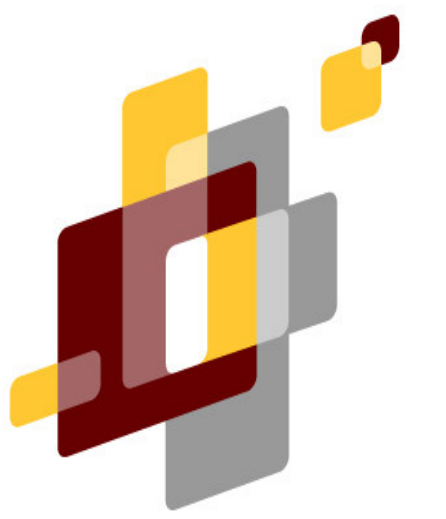


DISSEMINATING EVIDENCE-BASED PRACTICE FOR ASTHMA CARE AT THE INDIVIDUAL AND COMMUNITY LEVELS USING THE OMAHA SYSTEM



Karen A. Monsen, PhD, RN¹, Madeleine J. Kerr, PhD, RN¹, Erica Fishman, MSW, MPH², Meghan B. LaVelle, BSN, RN, CEN^{1,3}, Diane C. Cassady, BSN, RN, CEN, CCRN^{1,4}, Julie A. Kilpatrick, BSN, RN⁵, Debra L. Lee, BSN, RN⁵

¹University of Minnesota, Minneapolis, MN ²Minnesota Department of Health, St. Paul, MN ³Woodwinds Health Campus, Woodbury, MN

⁴University of Minnesota Medical Center, Minneapolis, MN ⁵Washington County Public Health and Environment, Stillwater, MN

Background: Washington County Public Health and Environment participated in the Minnesota Department of Health planning process to create a five year state asthma plan. Through this process they discovered that one of the assets in the community was widespread use of the Omaha System in local public health agencies.

Purpose: to disseminate best asthma care practices in a standardized way throughout Minnesota

Method: pathways were developed by clinical experts, and critiqued by graduate nursing students for alignment with current evidence and asthma care guidelines

Dissemination: pathways were disseminated electronically for use in computerized documentation systems through e-mail lists and Web sites, and will be included in an asthma toolkit



Clinical experts: Public health nurses, respiratory therapist, certified asthma educator, state asthma project staff, graduate nursing students

Asthma Pathway (Individual)

Category	Target	Care Description Note
S	Continuity of care	Adherence to asthma action plan
S	Durable Medical Equipment	Use of peak flow meter, nebulizer, inhaler and holding chamber
S	Signs/Symptoms-Physical	Chest tightness, wheezing, cough, shortness of breath, sleep
TGC	Durable Medical Equipment	Peak flow meter, nebulizer, inhaler and holding chamber
TGC	Wellness	Annual influenza vaccine, exercise, handwashing
TGC	Signs/Symptoms-Physical	Individual triggers: viral infection, allergies, emotions/stress, exercise
TGC	Environment	Air Quality Index; Pollen counts
TGC	Anatomy/physiology	Pathophysiology of asthma
TGC	Signs/Symptoms-Physical	Evidence of Disease/Infection: Signs and symptoms of asthma
TGC	Exercises	Regular physical activity
TGC	Medication Action/Side Effects	Purpose/Benefits: Current asthma management practices, controllers and relievers, and side effects
CM	Medical/Dental Care	Coordination Among Providers: Primary care, asthma care specialist, allergist, school nurse
CM	Other community resources	Financial, housing, transportation, health insurance, educational support, tenants rights

Sanitation

Category	Target	Care Description Note
TGC	Environment	Relationship to disease
S	Environment	Mold and moisture
S	Environment	Pests such as rodents, cockroaches
S	Environment	Feathery and/or furry pets (cat, dog, bird, hamster, other)
S	Environment	Dust, excess clutter
S	Environment	Consumer products such as cleaning products personal care products, fragranced products, and ozone air cleaners
S	Environment	Odors
S	Environment	Supplemental Heating Sources such as wood burning stove, fireplace, unvented kerosene or gas space heater
TGC	Durable Medical Equipment	Products to reduce environmental triggers include bed and pillow encasements, HEPA vacuum cleaner, portable HEPA air cleaner, furnace filters, dehumidifiers
TGC	Environment	Cleaning and vacuuming (frequency and proper technique)
TGC	Environment	Integrated pest management, health effects of pesticides
TGC	Environment	Emphasize environmental triggers in bedroom

Substance Use

Category	Target	Care Description Note
S	Substance use cessation	Use pattern
S	Environment	Environmental tobacco smoke
CM	Other community resource	Telephone information/reassurance: direct referrals may be made to smoking cessation programs on behalf of clients

Asthma Pathway (Community)

Respiration

Category	Target	Care Description Note
TGC	Signs/symptoms physical	Training for all environmental and community health staff on asthma
TGC	Environment	Training for all staff on environmental triggers and management
TGC	Environment	Training for home visiting public health nurses about environmental management for families with asthma
TGC	Respiratory care	Training for home visiting public health nurses about asthma management strategies including medications and devices
TGC	Medical/dental care	Training for home visiting public health nurses about local asthma experts (providers)
TGC	Environment	Training for environmental health specialists to conduct "walkthroughs" for homes, schools, and child care centers, identify asthma triggers, and recommend low or no-cost solutions
TGC	Respiratory care	Training for child care providers about asthma management strategies including medications and devices, and environment
TGC	Sickness/injury care	Training for school health personnel on asthma management strategies
TGC	Communication	Public service announcements, Web site, displays, brochures to increase knowledge of the general public about asthma symptoms, asthma triggers, and asthma management at locations such as WIC, immunization, and EPSDT clinics, health fairs, county fairs, worksites
S	Environment	Offer environmental "walkthroughs" to all schools and child care centers to identify asthma triggers, and recommend low or no-cost solutions
CM	Communication	Plan and implement community event to raise awareness of asthma such as "Super Asthma Saturday", "Asthma Walk", "Brown Bag", or "Inhaler Assessment"
CM	Supplies	Provide asthma management supplies to school health offices (peak flow meters, medication delivery devices, nebulizers)
CM	Substance Use Cessation	Advocate for smoke free public policy
CM	Education	Provide asthma-focused student practicum experiences
CM	Communication	Convene and facilitate local asthma coalition

Communication with Community Resources

Category	Target	Care Description Note
CM	Education	Disseminate "Coach's Asthma Clipboard" program - www.winningwithasthma.org to all schools and voluntary athletic organizations
CM	Environment	Work with school districts and other organizations to reduce diesel emissions in school buses (e.g. Project Green Fleet)
CM	Interaction	Coalition building - engaging community partners in asthma coalitions

Health Care Supervision

Category	Target	Care Description Note
S	Signs/symptoms physical	Incidence/prevalence of asthma in community; need for public health intervention to promote current best practices in asthma prevention and management
S	Medical/dental care	Use of current asthma management practices among local health care providers
TGC	Medical prescription	Training for health care professionals in NAEP asthma management guidelines (including that referrals may be made to smoking cessation programs on behalf of clients)
CM	Interaction	Coalition building - engaging health care providers in coalition