

## USING HOME VISITS TO IMPROVE FAMILY ASTHMA CARE FOR SCHOOL-AGED RURAL CHILDREN

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**Purpose:** To discuss the use of home visits to deliver an educational intervention to a tri-ethnic sample of parents of school-aged rural children who have asthma.

**Background:** Asthma affects 6%-11% of school-aged children. Poverty, ethnicity, and poor access to care are major contributing factors to the rise in asthma morbidity, as evidenced by a 128% increase in asthma-related office visits and 50% increase in absenteeism (CDC, 2002). There is a greater prevalence of chronic illnesses, poverty, and lower educational levels in rural areas than in urban areas (Hanson et al., 2000), all contributing to rural families having more problems with asthma management (Mueller, Patel, & Boilesen, 1998). This is compounded by a lack of rural health care providers and the greater distance a family must travel to obtain care (Crago et al., 1998). The economic burden for asthma is estimated at \$10.7 billion annually with half attributed to indirect costs of lost wages and out-of-pocket expenses (Lara et al., 2001). This results in significant health disparities among rural people and most especially among members of ethnic minority groups.

**Intervention:** A two-pronged educational intervention was provided to 58 families of school-aged children who have asthma [16 (28%) Mexican-American, 24 (41%) African American, and 18 (31%) Anglo-American; fully half (49%) were low-income families]. The children received intensive small-group education at school, while the parents had individualized education provided in their homes.

**Findings:** Home visit challenges included (a) scheduling the visit (e.g. conflicting time demands, duration of visit); (b) maintaining contact with families (e.g. moves, phone disconnects); (c) locating the home (based on parent directions, visitor interpretations); (d) visitor safety (e.g. poorly maintained areas, unrestrained dogs); and (e) quality of home environment (e.g. environmental noise, interruptions) for conducting the intervention. The advantages of intervening in the home included (a) using actual home conditions for individualizing education to meet families' needs; (b) matching visitors with family in terms of ethnicity, language, and/or personal asthma experience; and (c) maintaining contact with families for the year-long duration of the study (i.e., personal contact increases family trust especially among families who are low-income or from an ethnic minority). Home visits did not add to the family expense of managing asthma.

**Discussion:** By addressing the family's specific information needs and incorporating strategies that addressed cultural (rural and ethnic) issues, family asthma management can be improved. Strategies to address the challenges were built into a larger study that started Fall 2003. These strategies include (a) using postcards and then telephone calls to alert families to the need to schedule a home visit, (b) reminding families of a scheduled visit 1-2 days in advance, (c) obtaining school district maps, (d) identifying 'less safe' neighborhoods and scheduling pairs of visitors to make those home visits, (e) providing cell phones for visitor use when making home visits, and (f) training visitors in "home etiquette" (e.g. being sensitive to the family's cultural practices).