The asthma education and management program involved 4 main components:

1. Educate asthmatic children and their families by individual trainings and an annual Asthma Day Camp
2. Physician linkage and creation of individualized Asthma Action Plans
3. Improve the organization and financing of childhood asthma management
4. Provide asthma education to school nurses
CHAMP Overview

- CHAMP
  - Referrals received from physicians, families, school nurses
  - RN or RT provided individual asthma education sessions
    - Discussed asthma characteristics
    - Medication administration
    - Triggers and avoidance of triggers
    - Children over 6 are zoned and given peak flow meters
    - Aerochambers are given and taught technique
    - Dust mite allergy mattress and pillowcase covers are given
    - Asthma Action Plan is written and reviewed
  - Follow-up by phone
  - Provide an Asthma Camp in Lowndes and Tift County
  - Provide School Nurse training on asthma management
Objective

• CHAMP’s main objective was to decrease ER and Hospitalization visits
  – By providing asthma education to 375 children
  – By providing asthma education to school nurses
  – By developing Asthma Action Plans
CHAMP was teamed with evaluators from Georgia Southern University to assist with this process

— Shared ideas with other grantees
— Found similarities with other grantees
— Developed a Logic Model
Logic Model

Long Term Outcome

• Decrease the hospitalization and ER visit rates in the targeted counties
  – Validated by medical records
Logic Model

- **Inputs**
  - Funding
  - Physicians
  - Schools
  - Staff
  - Partnerships

- **Activities**
  - Referrals process
  - Health Fairs
  - Asthma Camp
  - Individual education sessions
  - Enroll into CMS
  - Refer to specialist
  - Follow-up phone calls
  - Develop Asthma Action Plan
  - School Nurse Trainings
Logic Model

• Outputs
  – Educate 375 children ages 1-19 in targeted counties
  – Recruitment of children into CHAMP by health fairs or attending Asthma Camp
  – Provide educational books on asthma
  – Given Aerochambers for MDI use
  – Provide Allergy Mattress covers
  – School nurses receive education
  – Children will have an Asthma Action Plan written
  – Financial assistance—refer to CMS
Logic Model

• Short-Term Outcomes
  – Community knowledge of CHAMP
  – Awareness of asthma management by education
  – Increase number of children enrolled in CHAMP
  – Use of aerochamber, allergy covers
  – Reinforcement of medication use
  – Increase school nurse knowledge on asthma
• Intermediate Outcomes
  – Adherence with use of medication
  – Reduced asthma triggers in the home environment
  – Using Aerochamber with MDI and Allergy Covers
  – Nurses document asthma education provided in school clinics
Developing Performance Measures

- Follow-up Forms
  - Focused on behavioral changes
    - Is the child using medications as prescribed?
    - Are they following their asthma action plan?
    - Are they using their MDI with a spacer?
    - Are they using their allergy covers that were given?
    - Are they changing the air filters monthly?
    - Were any changes made to the home environment to help relieve triggers? If yes, what changes?
Developing Performance Measures

• Follow-up Survey
  – Has child been hospitalizations or seen in the ER since education
    • Request Medical records to verify
Developing Performance Measures

Once School Nurses were Trained on Asthma Management

• Developed school nurse surveys
  – A release of information was obtained from 103 children enrolled in CHAMP to access information from the school nurse
  – The surveys are completed monthly by the school nurse
  – developed to capture behavior changes seen within the school.

  ❖ How many times has the student visited the school clinic for an asthma-related incident?
  ❖ Is the student compliant with taking their medication?
  ❖ Does the student know how to take their medication correctly?
  ❖ Does the student carry a rescue inhaler?
  ❖ Is the student using their spacer with an MDI?
  ❖ How many times has the student been absent from school due to an asthma episode?
  ❖ As any education provided to the child in your school clinic, if yes, what was discussed?
Successes

• Good report with physicians in the targeted counties and referral system for program.
• CMS can provide families with financial assistance.
• Program provides spacer, nebulizer tubing, allergy covers, and PF meters.
• Collaboration with the community—hospitals, school nurses, colleges to assist with asthma camp.
Concerns

- Difficult at times to contact families for follow-up.
- Not responding to surveys provided at camp or by mail.
- Unable to arrange training for school nurses due to furloughs and very few teacher in-service days.
- Do not always get survey returned from the school nurse.
- Difficult at times to obtain release of information from a parent to verify a hospitalization after education.
Program Changes

- Follow-up phone calls changed from every 6 months to every 3 months
- Administrative assistants completed follow-up surveys by phone and would forward concerns to a nurse for family follow-up
- Asthma Action Plans were written to all children that attended Asthma Camp
- Camp was patterned after individual asthma education sessions
- Asthma Action Plans were faxed to the child’s Primary Physician
- Surveys were changed to capture behavior changes
Evaluation Results

During the past 3 years, the total number of children that have received asthma education by individual education sessions has been 439. The number of children receiving education by attending an asthma camp over the past 2 years has been 139.

CHAMP has educated 578 children.
Evaluation Results

59 Verified Hospitalizations in the 12 months prior to education
15 Hospitalizations 12 months after education
   (9 verified --- and 6 self report)

48 Verified ER Visits in the 12 months prior to education
18 ER Visits 12 months after education
   (11 Verified --- 7 self report)
Evaluation Results

- Asthma Camp Assessment and Follow-up
  - Showed increases in behavioral changes
    - Reducing triggers in the home
    - Adhering to their asthma action plan
    - Increase in knowledge of asthma management
    - Using spacer with MDI
Evaluation Success

- 100% of all children receiving education by individual asthma education sessions or by attending asthma camp have a written asthma action plan.

- 83% of school nurses in the target counties received asthma training
  - School nurse surveys are still being collected for the 3rd year of the grant.
System Changes

- School nurses within Lowndes County are requiring Asthma Action Plans to be completed by their physician and on file in their office each school year.

- CHAMP has provided the school nurses with a resource for asthma

- An Asthma coalition has been formed here in rural south Georgia

- Tift Regional Medical Center has started an Asthma Education Program

- Asthma Action Plans that are written are faxed the physician’s office.

- More frequent follow-up calls to assess for any concerns and reinforce asthma management