

## Charlotte-Mecklenburg Schools Asthma Education Program

EPA's IAQ Tools for Schools National  
Symposium - Asthma Management  
Session

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## Charlotte-Mecklenburg Schools

- 136,000 students (2010-11 school year)
- Large Urban-suburban school district
- 188 Schools (Pre-K-High School)
- 120 School Nurses (local health department/hospital system)

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## Charlotte-Mecklenburg Schools

- 11,295 students with asthma (8%)  
(2009, AEP data tracking system)
- 19 % High school students & 18.4% middle school students report being told by a doctor or nurse that they have asthma. (2009, YRBS data)
- CMS students **with** asthma miss an average of 9 school days per year. (2009, AEP data tracking system)
- Students without asthma miss an average of 6 school days/year.
  - 3 more days absent or 18 more classroom hours missed for students with asthma.

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## Charlotte-Mecklenburg Schools Asthma program highlights

- Emergency Room Treatment tracking: ED Asthma Reports
- Asthma Case Management
- Parent Asthma Classes

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## Emergency Room Admissions: Tracking and Follow up For Students with Asthma



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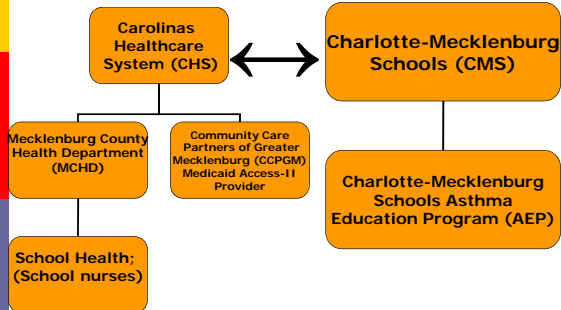
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## Relationship between School Health & School System



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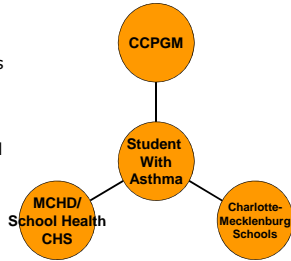
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## Collaboration is Key

- Community Care Partners of Greater Mecklenburg (CCPGM) Access II-Medicaid (Part of Carolinas Healthcare System)
- School Nurses: Mecklenburg County Health Department/School Health→Carolinas Healthcare System
- Charlotte-Mecklenburg Schools: enrollment-136,000 students, 11,295 students with asthma
- *Who are your partners?*




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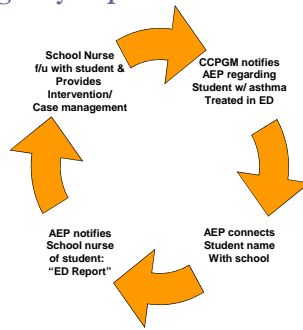
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## Tracking Students with Asthma who are treated in emergency department

- Began tracking ED visits for students with asthma December 2006
- 180 students treated in emergency room 2009-10
- 622 students with asthma since 2006
- Identifies students with high needs for school nurse case management / intervention.




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## Identification → Interventions



- Parent Contact
- School Nurse Asthma Case Management
- Asthma Education
  - Open Airways
  - Kickin' Asthma
  - One-on-One Education
- Referral to Parent Asthma Education Classes
- Referral to In-School Respiratory Care Program

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## School Nurse Asthma Case Management

Thank you!

*Maria Bonaiuto, RN, MSN, NCSN*  
□ *Director of School Health*  
□ *Mecklenburg County Health Department*

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## Asthma Case Management process

- Facilitates care along a continuum
- In the educational setting and the community
- Through effective resource collaboration /networking
- Can include the student, parents, teachers, support staff, school psychologist, physicians, other practitioners, agencies and the community

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## Students who need assistance

- Frequent absences
- **Hospitalizations**
- Linking with provider
- Linking with insurance
- Obtaining medication, tools, resources
- Medication management
- Education, guidance
- Environmental controls in school/at home

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### School Nurse CM Activities

- Select students, using established criteria
- Set goals with student & often family, school, provider (SMART goals)
- Document baselines (ACT test)
- Identify strengths, needs, stakeholders, and resources
- Implement strategies (provider, insurance, meds., orders, supplies, education)
- Monitor, evaluate, repeat
- Document outcomes

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### Case Management Outcomes *(Students with asthma)*

During 2009-10 school year:

- 444 (4%) of students who were ranked medium or high asthma need were case managed by school nurses
- 59% of students with asthma: **attendance** improved after case management
- 58% of students with asthma: **academics** improved after case management
- 67 % of students with asthma: **behavior** improved after case management
- 92% of students with asthma: **quality of life** improved after case management
- 97 % of students with asthma had **overall improvement** after case management

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### Students With Asthma Case Managed in 2009-2010

Area needing improvement	Students with a goal to improve	Total students improved	% of students who improved in the goal area
Attendance	288	171	59.4
Academics	222	128	57.7
Behavior	154	103	66.9
Health/ Compliance	421	402	95.5
Quality of school life	360	332	92.2
Total students with 1 or more improvements	444	431	97.07

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## Parent Asthma Education Classes



- Local Asthma Coalition
- Project funding from the Asthma Friendly Schools Initiative through the Centers for Disease Control and Prevention/DASH in cooperation with the American Lung Association
- Five-Year project: Began September 2006
- Funding complete; classes continue!

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## Community Needs Assessment

Parental/caregiver knowledge deficit related to caring for a child with asthma

Access to care issues

Children lacking asthma management tools in school: medication, Asthma Action Plan, peak flow meter and spacer

Limited communication between provider, family, and school

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## Parent Asthma Education Classes

### Goals:

- Increase asthma knowledge of parents/caregivers
- Enhance communication between healthcare provider, school, and family
- Assist schools to promote asthma friendly initiatives



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## Friendship Missionary Baptist Church & McClintock Middle School



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## Partnerships Sustain Parent Classes

- 2008-09 School year, Asthma Coalition Partnered with Charlotte-Mecklenburg Schools **Parent University**
- **Parent University**
  - community collaborative led by Charlotte-Mecklenburg Schools
  - helps parents become full partners in their children's education.
  - CMS partners with community agencies and organizations to offer **FREE** courses, family events and activities.
- The goal of Parent University is to increase parent involvement in the schools and empower parents to raise children who are successful in school, and in life.
- Workshops are held in schools, public libraries, YMCAs, houses of worship, businesses and other community locations.
- Topics: Parent Awareness, Helping your child in the 21<sup>st</sup> Century, Health and Wellness, and Personal Growth & Development
- *Identify YOUR partners!*

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## Supporting our students to be in class, on task, and ready to learn!



- Emergency Room Treatment tracking: ED Asthma Reports
- Asthma Case Management
- Parent Asthma Classes

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**Thank you!**

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