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Challenges and Successes in Diversity and Inclusion in Clinical Trials

Addressing Health Disparity in Childhood Asthma: From CBPR to D&I Research

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Disclosure

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Advisory Board Member for Astra Zeneca, Eli Lilly, GlaxoSmithKline, Moderna, OM Pharma, Propeller Health, Regeneron and Sanofi

Presentation Goals

- Discuss the steps taken in our approach to developing a statewide school-based asthma program.
- Indicate key features in forming partnerships and collaboration essential for program engagement.
- Describe our opportunities for taking the next steps in addressing health equity for asthma care.

***Who Does a Child Depend
on for
Medical Support?***

***Is This Medical Support
the Same
for All Children?***



What Were the Initial Steps in Developing Our Program?

- Form a set of goals.
- Identify a community asthma champion to work with.
- Create visibility, trust and community support.
- Provide resources to schools with personnel and structure.
- Engage school staff.
- Demonstrate improvements and build the partnership with time.

Ultimate Program Goals

- **Promote Standardization** of written materials.
- **Encourage Harmonization** of asthma management.
- **Enhance Communication** from schools to providers.
- **Stimulate Collaboration** among academic centers, schools, providers, and payers.

Donna Shocks, RN

Denver Public Schools Nurse Manager



Program Staff



Evolution of Our Colorado School Based Asthma Approach

2006 - Conducted needs assessment and provided an outreach program.

2008 - Evaluated “*Open Airways for Schools*” Asthma Education Program.

2009 – Developed *Step Up* asthma navigator program.

2012 – *Building Bridges Program* for school nurse care coordination.

2015 - *Step Up* expansion with technical assistance training component.

2018 – Combined *AsthmaCOMP* Program for implementation and dissemination to school districts in Denver Metropolitan Area.

2019 – Added features of social determinants of health needs, telemedicine, and introduced program to regions in Colorado outside of Denver.

2020 – NHLBI DECIPHeR implementation and dissemination research to test strategies for program expansion in rural and mid-sized urban Colorado cities.

2021 – Work with NHLBI DECIPHeR Alliance to increase program visibility.

What Are the Guiding Principles in Establishing Working Relationships?

- Create a dialogue and long-term relationship.
- Work from a platform of mutual respect.
- Go with a “what’s in it for them approach?”
- Bring resources to the table and share the workload.
- Review results and challenges on a regular basis.
- Continue to innovate for program improvement and reach.

Key Steps

- **Agree on importance of the work for the community**
 - Asthma is the most common chronic disease of childhood.
 - Asthma affects school performance and has lifetime implications.
 - Place emphasis on those most severely impacted.
- **Focus on health equity and reducing health disparities**
 - Select schools with high prevalence and free/reduced lunch.
 - Train staff including nurses, support staff and administrators.
 - Establish models of support and communication.
 - Address social determinants of health (SDoH) needs.
 - Apply telemedicine principles to extend reach.

Agree on Program Elements That Support Students, Families and Schools

- Identify students with asthma.
- Provide access to asthma plan and quick-relief inhalers.
- Ensure school staff are prepared to manage asthma.
- Reduce exposure to environmental triggers.
- Provide asthma self-management training.
- Coordinate care with family and providers to successfully manage asthma.

Anticipate Ongoing Challenges and Look for Opportunities To Improve Your Approach

- Expect variability in practice management.
- Address inconsistencies in work force knowledge and skills.
- Be aware of gaps in communication among health care providers.
- Expect low percent of adherence to the plan initially.
- Appreciate the limitations on school nurse time and competing priorities.
- Identify opportunities for program sustainment.

Program Accomplishments: Process Outcomes

- Increased availability of School Asthma Care Plans from 5% initially to 97%
- Increased number of RNs certified as asthma educators
- Improved school-based asthma management in 41 schools with reach of over 1,943 students with asthma
- Implementation of evidence-based program to reduce environmental triggers in all 207 DPS schools
- Asthma education and training for 2,450 school nurses, teachers, staff, families and community members

Program Accomplishments: Clinical Outcomes

- Fewer missed school days
- Improved asthma inhaler technique and self-care skills
- Reduced activity limitations due to asthma
- Improved rates of asthma control based on ACT score
- Reduced frequency of ED visits and hospitalizations



Reducing Asthma Attacks in Disadvantaged School Children with Asthma

NHLBI Disparities Elimination through Coordinated Interventions to Prevent and Control Heart and Lung Disease Risk (DECIPHeR) Alliance



DECIPHHeR: Purpose and NHLBI Expectations

PURPOSE: Develop and test implementation research strategies for optimally and sustainably delivering two or more proven-effective, evidence-based multi-level interventions to reduce or eliminate heart and/or lung disease disparities.

Expectations

- The implementation research strategies developed should promote/improve population health and reduce/eliminate disparities in heart and/or lung disease risk in specified high-burden communities.
- Strategies developed should facilitate sustainable uptake of proven-effective interventions into routine clinical practice and community-based settings and maximize the impact on population health & health disparities.
- Strategies should test implementation outcomes rather than efficacy/effectiveness as the primary outcomes of interest.

Where Are We Now?

Successes:

- Identified importance of community health workers/patient navigators as culturally accepted facilitators
- Enhanced school nurse program leadership
- Innovation center in Denver Public School District
- Collaboration with Colorado Department of Education Nurse Program and RMC Health professional training program

Next steps:

- NHLBI DECIPHeR clinical trial to test implementation strategies
- Solidify partnership of key collaborators
- Examine best ways to address social determinants of health

Thank You!!

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- Denver Public School District
- Colorado Department of Education Nurse Program
- RMC Health professional training program

DECIPHeR:

- Lisa Cicutto, PhD, RN, Amy Huebschmann as Co-MPIs
- ACCORDS and CTSI Dissemination and Implementation Staff
- Misha Brtnikova, PhD, Program Manager
- DECIPHeR Colorado Staff



Questions/Discussion