

OCHA Research Collaborative Task Force - Process & Proposal Highlights

Overview of the Research Collaborative Process:

- 1. In Summer 2011, Governor Kasich generously pledged \$2 million to Ohio's Children's Hospitals for collaborative research innvoations.
- 2. In Fall 2011, A group of world-renowed clinicians from Ohio's six children's hospitals independently came to an agreement on two timely and relevant research initiatives for the state to focus on:
 - Asthma Prevention and Treatment
 - Understanding, Prevention and Treatment of Neonatal Narcotic Abstinence Syndrome (NAS), commonly referred to as drug-addicted babies
- 3. The OCHA Research Collaborative, headed by John Barnard, MD, President of the Research Institute, Nationwide Children's Hospital, broke into two subcommittees to further refine research initiative on each topic. Subcommittee chairs included the following:

Asthma:

Gurjit (Neeru) K. Khurana Hershey, M.D., Ph.D.

Professor of Pediatrics, Kindervelt Endowed Chair in Asthma Research Director, Division of Asthma Research, Cincinnati Children's Hospital Medical Center Director, Physician Scientist Training Program, University of Cincinnati

Neonatal Narcotic Abstinence Syndrome (NAS):

Michele Walsh M.D., M. Sc Epi.

Professor of Pediatrics, Case Western Reserve University
William and Lois Briggs Endowed Chair in Neonatology
Chief, Division of Neonatology, Rainbow Babies & Children's Hospital

- 4. Proposals for research initiatives for both Asthma and NAS from all six children's hospitals were requested and subsequently reviewed by the two subcommittees in late 2011 through January 2012.
- 5. Each subcommittee reviewed and discussed all proposals, combining the best ideas from each into one research initiative with specific goals and aims for each topic area, Asthma and NAS.

RESULT: Creation of two specific focus areas of research maximizing the capacity of all six Ohio's Children's Hospitals to conduct research on Asthma and NAS and transform it into statewide action that best serves Ohio's children and families.

Specific Highlights of the Asthma Research Project:

- While asthma in children is not a new issue, this effort is the next-generation of asthma prevention and care
 for Ohioans, focusing on ensuring consistent data and statewide assessment and treatment of asthma to
 curb unnecessary health care costs. This research is highly innovative, harnessing the collective expertise
 and resources of the children's hospitals across the state of Ohio.
- Ohio's children's hospitals will build a comprehensive data warehouse which links clinical, demographic, and
 other health outcomes data with biological markers for children with asthma obtaining medical care at one of
 our member-institutions.
- Ohio's children's hospitals will compare and understand effectiveness of strategies currently utilized for the treatment of acute asthma at Ohio children's hospitals and will better define and anticipate treatment response based on the data infrastructure created.

Specific Highlights of the NAS Research Project:

- This groundbreaking research on NAS is relevant and timely in our state due to unfortunate, growing trend of opiate and other substance usage. This research aligns with other statewide efforts to curb opiate usage, develop statewide knowledge and end the cycle of drug misuse and abuse.
- Ohio's children's hospitals will conduct retrospective analyses at each hospital in 2011 and prospective evaluation for 2012 for types of drug exposures and co-exposures in babies in Ohio. Preliminary research suggests that in 2011 alone, 606 babies born with NAS and treated in Ohio's children's hospitals.
- Drugs included in this study include 13 common drugs of abuse including Amphetamines, Canabinoids, Cocaine, PCP, Opiates, Methadone, Tramadol, Oxycodone, Meperidine, Buprenorphine, Propoxyphene, Barbiturates and Benzodiazepines.
- Ohio's children's hospitals will document current treatment plans to better understand them and look to standardize treatment associated with the best outcomes, fewest side effects and shortest duration of withdrawal for Ohio's NAS babies.
- Ohio's children's hospitals will assess (for babies):
 - Demographic characteristics of babies born with NAS
 - Regional patterns in usage and outcomes of treatment
 - Differences in the drugs of abuse detected
 - Lengths of hospital stay
 - Recidivism for these babies
 - Incidence of multiple exposures
- Ohio's children's hospitals will assess (for mothers):
 - Demographic characteristics of using mothers
 - Regional patterns in usage
 - Degree to which management of the addicted mother during pregnancy impacts the severity of NAS and impacts on the baby
 - Estimated differences in outcomes of mothers based on the treatment options to ensure better outcomes at less cost for mothers and babies
- Ohio's children's hospitals will partner with the Ohio Department of Job & Family Services to capture Medicaid costs for both research efforts over the next two years, and document improvements in outcomes.