

# OCCHA Research Collaborative

ROI FOR PATIENTS, PROVIDERS AND TAXPAYERS



**Ohio is the 1<sup>st</sup> state** in the nation to develop a statewide infrastructure for research of this magnitude—  
**SAVING CHILDREN'S LIVES**

## PEDIATRIC ASTHMA



- **3,500 children:** First-ever statewide repository for asthma data in country. (*Ohio Pediatric Asthma Repository – OPAR*)
- **Decreased cost** with innovative tool to provide individualized risk and severity assessments at point of care.
- Now creating **personalized, research-based treatment options** for most at-risk children.

### Research Publications

Published (January 2015) in Pediatrics "Heterogeneity in asthma care in a state-wide collaborative: the Ohio Pediatric Asthma Repository," with three additional papers pending publication: "Systems-Level Care Practices and Patient-Level Risks Independently Contribute to Increased Hospital Length of Stay for Pediatric Asthma Exacerbation: the Ohio Pediatric Asthma Repository"; "Obesity and Asthma in Inpatient Setting: the Ohio Pediatric Asthma Repository"; and "Impact of Secondhand Smoke on Inpatient Asthma Practices: the Ohio Pediatric Asthma Repository."

### Why?

With between 40–70 percent of pediatric patients with asthma not responding well to standard therapy, this work provides a tremendous opportunity for improving health outcomes and decreasing costs by personalizing health care.

**TOTAL INVESTED (2013 & 2015):  
\$2 Million**

(allocated by Governor Kasich)

## NEONATAL ABSTINENCE SYNDROME\*



- **Largest research sample** of babies with NAS in the country – nearly **3,000** babies
- Saved **\$13 million** in costs.
- Protocols in use in **96%** of Ohio's Level 2 & 3 NICUs.
- Reduced NAS length-of-stay by 4.6 days - **\$4,600** per stay.
- **OCHA Protocol exported to 5 additional states:** Delaware, New Hampshire, Vermont, Massachusetts, Tennessee, and Michigan.

### Research Publications

Published first project Pediatrics in August 2014 "Hall, et al for the Ohio Children's Hospitals Research Consortium. A multi-center cohort study of Treatments and Hospital Outcomes for Neonatal Abstinence Syndrome." Pediatrics Vol. 134 pp. e527-e534; Presenting at the Pediatric Academic Society an abstract for second project "Results of dissemination of a Potentially Better Treatment Protocol in Ohio Children's Hospitals"; Third abstract project: "Impact of Polypharmacy and Tobacco exposure on the intensity of treatment"; and New protocol "Impact of morphine and methadone on the QT length in infants with NAS - a safety study."

### Why?

Ohio has one of the highest infant mortality rates in the country. Ohio has **5,100 NAS hospitalizations, 19,000 patient days and \$70 million in costs in one year.**

\*Otherwise known as babies born drug-dependent

**TOTAL INVESTED (2013):  
\$1 Million**

(allocated by Governor Kasich)

**TOTAL INVESTED (2015):  
\$1 Million**

(allocated by Governor Kasich)

**TOTAL INVESTED (2015):  
\$1 Million**

(allocated by Attorney General DeWine)



## PEDIATRIC PNEUMONIA



- Now developing **advanced molecular protocols** to diagnose and identify high-risk patients to improve outcomes.

### Why?

This is the **leading cause of death** in children under age 5.

## CHILD ABUSE DETECTION & PREVENTION



- Spreading protocol for better identifying sentinel injuries (injuries indicating potential abuse) in infants through the Timely Recognition of Abusive Injuries Collaborative (TRAIN) in Ohio's children's hospitals, 19 community hospitals and now pediatric throughout Ohio.

- TRAIN has increased identification of sentinel injuries in infants by 50% since 2015.

### Why?

**1 in 3** abused children in Ohio has received medical care for a possible abuse injury prior to diagnosed abuse.