Addressing Neonatal Abstinence Syndrome

Office of the National Coordinator for Health Information Technology Annual Meeting
November 29, 2018

Debra Waldron, MD, MPH, FAAP
Senior Vice President, American Academy of Pediatrics
TOOLS AND RESOURCES FOR HIT

• AAP approach
• Bright Futures
• CHILD Registry
**Neonatal Abstinence Syndrome**

- Drug withdrawal syndrome experienced by some infants exposed to opioids
  - irritability; feeding difficulties; temp instability
- Increasing prevalence
  - tripled 1.5 to 6/1000 (2001-2016)
  - W. Virginia 33/1000 (2013)
- Short term and Long term effects
  - neurodevelopmental

*cdc.gov*
Mission to attain optimal physical, mental, and social health and well-being for all infants, children, adolescents and young adults (whole child approach)

Principles:

– All children have, and all pediatricians, provide a medical home
– All systems of care maintain health equity
– Profession of pediatrics is sustained, maintained, and improved
AAP COMPETENCIES

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®
POLICY / CLINICAL GUIDANCE

- A Public Health Response to Opioid Use in Pregnancy (2017)
- Medication-Assisted Treatment of Adolescents With Opioid Use Disorders (2016)
- Families Affected by Parental Substance Use (2016)
- Neonatal Drug Withdrawal (2012, Reaffirmed 2016)
- Neonatal Abstinence Syndrome (under development)
EDUCATION

• Online Courses
  – Acute Pain Management: Changes and Challenges
  – Chronic Pain and the Opioid Crisis
  – Research-Based Clinical Strategies to Prevent and Address Adolescent Substance Use and Prescription Medication Misuse—Being Part of the Solution

• Providers' Clinical Support System—Opioid Therapies
  Recorded Webinars
  – Unraveling the Mystery of Acute and Chronic Pain in the Child & Adolescent (2015)
  – Co-Occurring Psychiatric Illness and Substance Use in Youth (2016)
  – Rational Pain Management in Children With Chronic Medical Conditions (2016)
  – Demystifying Buprenorphine Prescribing for Youth With Opioid Use Disorders (2017)

• EQIPP: Substance Use - Screening, Brief Intervention, Referral to Treatment
Advocacy

- Promote healthy children
- Support secure families
- Build strong communities
- Ensure US is a leading nation for children

www.aap.org/blueprint
ADDRESSING THE OPIOID EPIDEMIC

Joint Principles organizations representing medical professionals (AAP, AAFP, ACOG, ACP, AOA, APA)

- research on prevention and treatment
- public health approach (childhood stress)
- maternal-child health impact
- address stigma
- comprehensive pain management
• Provide training and support to early care and education teams
• **Resources** for home visitors and the home-based option of Head Start.
Neonatal Abstinence Syndrome (NAS)

What is neonatal abstinence syndrome (NAS)?
Neonatal abstinence syndrome (NAS) is a drug withdrawal syndrome that some infants experience after birth and that generally follows exposure to an opioid. Opioids are a broad class of drugs that can be licit (e.g., Vicodin) or illicit (e.g., heroin). The severity can vary based on a myriad of factors, including type of opioid, other exposures, and genetics. The syndrome is characterized by tremors, high-pitched cry, loose stools, vomiting, poor feeding, uncoordinated suck, sleep disturbance, seizures, and irritability. Mild clinical signs, such as irritability, may persist for several months. Long-term consequences such as learning difficulties may also occur; however, the severity of such consequences remains an area of debate in the medical literature.

How common is it?
The Substance Abuse Mental Health Services Administration reported that in 2016, more than 20,000 pregnant women reported using heroin or missing pain relievers in the past month. A May 2015 study in the New England Journal of Medicine reported that from 2004 through 2013, the rate of neonatal intensive care unit admissions for NAS

What adaptations may be needed?
Medications
Medications are sometimes used to treat withdrawal symptoms during the acute phase, after birth, but are seldom continued by the time the infant is in out-of-home care.

Dietary Considerations
No dietary adaptations are usually needed; however, during the acute phase of NAS, infants may have increased suck but poor coordination of swallow and may require high-calorie feedings. Breastfeeding is allowed if the mother is in treatment without relapse.

Physical Environment and Other Considerations
Avoid overstimulation. A quiet, soothing atmosphere might be beneficial.

What should be considered an emergency?
No emergencies are associated with infants who have had NAS, unless they are not identified during the birth hospitalization and withdrawal occurs at home.

What issues of training or referral are involved?
IMPROVING OUTCOMES RELATED TO OPIOID MISUSE: STRATEGIES ADDRESSING CLINICAL CARE FOR WOMEN AND INFANTS

Year 1 Activities

- Partnership building
- Environmental scan to assess current practices
- Promotion of available education/training activities
- Dissemination of evidence-based public health science related to the prevention, intervention, and treatment
Bright Futures Guidelines, 4th Edition

- Healthy Development
- Family Support
- Mental Health and Emotional Well-Being
- Nutritional Health
- Physical Activity
- Healthy Weight
- Promoting Lifelong Health for Families and Communities

- Oral Health
- Healthy Sexuality
- Safety and Injury Prevention
- Promoting Healthy and Safe Use of Social Media
- Children and Youth with Special Health Care Needs
Principles, strategies and tools

- theory-based, evidence-driven, and systems-oriented, improve the health and well-being of all children through
- culturally appropriate interventions
- current and emerging health promotion needs at the family, clinical practice, community, health system and policy levels.
Components of a Bright Futures Visit

- History
- Surveillance
- Review of Systems
- Observation of Interaction
- Physical examination
- Screening
- Immunizations
- Anticipatory guidance

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Visit Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prenatal/ Newborn</td>
<td>15 Months</td>
</tr>
<tr>
<td>3-5 Days</td>
<td>18 Months</td>
</tr>
<tr>
<td>1 Month</td>
<td>2 Years</td>
</tr>
<tr>
<td>2 Months</td>
<td>2 ½ Years</td>
</tr>
<tr>
<td>4 Months</td>
<td>3 Years</td>
</tr>
<tr>
<td>6 Months</td>
<td>4 Years</td>
</tr>
<tr>
<td>9 Months</td>
<td>5 Years</td>
</tr>
<tr>
<td>12 Months</td>
<td>Annually until 21 years of age</td>
</tr>
</tbody>
</table>
The Periodicity Schedule tells you what to do in well-child visits, while the *Bright Futures Guidelines* tell you how to do it—and how to do it well.
**Bright Futures Tool and Resource Kit, 2nd Edition**

### Core Forms
- Previsit Questionnaire
- Visit Documentation Form
- Bright Futures Parent-Patient Handouts

### Supporting Materials
- Screening and Assessment Tools
  - Medical Screening Reference Tables
  - Commonly Used Screening Instruments and Tools
- Additional forms that accompany the Visit Documentation Form
  - Initial History Questionnaire
  - Medication Record
  - Problem List
  - Problem Visit
- Supplementary AAP Education Handouts

---

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®
Core Tools: Integrated Format

**EXAMPLE Tools**

- **Previsit Questionnaire**
  - Surveillance tool allows healthcare professional to gather pertinent information without using valuable time asking questions

- **Documentation Form**
  - To document all pertinent information and fulfill quality measures

- **Parent/Patient Educational Handout**
  - Provides parental education for all of the Bright Future Priorities at each visit
Office-Based Systems Components

• Preventive services prompting system

• System
  ▪ immunizations and well child visits
  ▪ track referrals
  ▪ identify children exposed to opioids

• Link families to community resources

• Strength-based approach/shared decision-making strategy
Bright Futures Previsit Questionnaire

Examples of how patient and family are doing...

- Parental/youth concerns and questions for this visit
- Surveillance of patient/family strengths
- Surveillance of major changes in family
- Medical risk assessment (unique for each age/visit) such as:
  - TB, Lead, Anemia, STIs, Cholesterol
  - Vision and Hearing
- Oral health risk assessment
  - Dental home/fluoride H₂O

- Developmental surveillance for young children
- Strengths/developmental surveillance for school aged children & adolescents
- Expanded anticipatory guidance questions such as:
  - Social Determinants of Health
  - Caring for infant/child/adolescent
  - Patient’s emotional well-being
  - Safety

This surveillance tool also alerts the patient/family that they will be universally screened for topics based on their age/stage (eg, child development, autism, depression, etc.).
Social Determinants of Health questions

Responses in the right-hand column highlight the “let’s talk about this” issues—the health topics and concerns that require focused discussion.
# EHR: Social History Screening

## Social/Environmental (Questions to ask family during visit)

<table>
<thead>
<tr>
<th>* Are you having problems receiving WIC food stamp, daycare vouchers, medical card, or SSI?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No ☐ <em>(</em>)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Housing problems (overcrowding, roaches, rodents, utilities, mold, lead)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No ☐ <em>(</em>)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Threatened with eviction or losing your home?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No ☐ <em>(</em>)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Over the past 2 weeks, have you felt down, depressed or hopeless?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No ☐ <em>(</em>)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Over the past 2 weeks, have you felt little interest or pleasure in doing things?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No ☐ <em>(</em>)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Do you feel that you and/or your children are unsafe in your relationships?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No ☐ <em>(</em>)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Would you like to speak with a social worker or legal advocate in the clinic about these issues?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No ☐ <em>(</em>)</td>
</tr>
</tbody>
</table>

**Benefits**

**Housing**

**Depression**

**Domestic Violence**

**All others**
CHILD Registry

Child Health Improvement through Longitudinal Data
ASPIRATION FOR THE CHILD REGISTRY

Collect, store, & analyze data for US children

• Health
• Disease (acute and chronic)
• Wellness
• Behavior
• Development
CHILD REGISTRY

• Facilitate data-driven improvements in child health care, outcomes, and well-being
  • Inform evidence based guideline development and implementation
  • Research and benchmarking
  • Demonstrate quality of care
  • Support care coordination

• HIPAA compliant data collection from EHRs and other systems

• Exploring inclusion of patient reported outcomes to complete information on the whole child

Ultimate goal
Positively influence trajectory of children to become healthy adults