Making a Difference: Identifying High Risk Infants and Improving Health Outcomes in WV

WV Birth Score - Developmental Risk and Newborn Hearing Screen Program
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Presentation Overview
- How did the Birth Score Program develop?
- Birth Score Program Objectives
- Revisions to Birth Score form
- Role of the Birthing hospitals
- Birth Score Office protocols
  - High Birth Score
  - Newborn Hearing Screen
  - Birth to Three
  - Primary Care MD Notification
- Review RFTS reporting protocols
- How is the Birth Score data used?
- How can we improve?

Program History
- Early 1980s
  - Federal SPRANS grant: David Myerberg, MD
  - Goals: Reduce PNMR (WV one of the highest in US)
  - Birth Score: Developed early 1970s in England by Dr. Robert Carpenter
  - Piloted in WV early 1980s... the birth score then identified those infants with a “high score.”
  - Focused on getting high score infants into care
  - 1989: Birth Score adopted by OMCFH for statewide implementation
  - 1990: Birth Score used as infant entry to RFTS care coordination
  - 1991: Birth Score added NICU referrals to RFTS

Program History cont.
- 1995: Developmental Risk Screen was added to Birth Score and identified infants were referred to BTT.
- 1998: House Bill authorizing Birth Score and Universal Newborn Hearing Screening for all infants born in WV was passed.
- 2000: Newborn Hearing Screening added to Birth Score. At the present time we make hearing screen referrals to RFTS.

West Virginia statistics
- On average there are 22,000 babies born in WV per year. We score EVERY baby born in WV. For those out of state residents giving birth in WV, we do share the birth score with their care provider.
  - Approximately 18% are high score.
  - Approximately 54% of WV births are Medicaid.
  - In 2008, among all WV Medicaid birth scored infants 44% of the mother’s reported smoking.

Birth Score Program Objectives
- The primary objective of the Birth Score Program is to coordinate an infant risk screening system that:
  - Identifies newborns who are at greatest risk for poor health outcomes and possibly preventable death between one month and one year of age; and
  - Link these infants with primary pediatric services and case management for close follow-up during the first year of life.
Birth Score System

- A newborn’s risk status is determined by using a weighted seven-factor Birth Score system and an evaluation of the baby’s risk for developmental delay.

- Babies are scored on:
  - Baby’s Birth Weight (grams)
  - Mother’s Age
  - Baby’s Sex
  - Feeding Intention
  - Previous Pregnanies
  - Mom’s Education
  - Mother’s use of nicotine during pregnancy

Additional Components to the Risk Screening Form

- Gestational Age
- Was infant transferred to NICU?
- Developmental Risk (Automatic high score)
  - Birth Weight 1500 gms or less
  - 5 Minute APGAR 3 or less
  - Congenital Abnormalities
- Newborn Hearing
  - Type of Test
  - Test Results

Questions for Mother

- Substance/Drug use during pregnancy
  - #1 drug reported use is marijuana

- Oral Health
  - Bleeding gums
  - Loose teeth
  - Regular dental care (cleanings)
  - Data from 08/2007-08/2008 (21,172 women) revealed that there appears to be little association between self-reported periodontal health and premature birth.

Coming Soon…

- Revisions to Questions for Mother
  - Removing Oral Health questions
  - Adding
    - Diabetes
      - Type I, Type II, Gestational
    - Body Mass Index
      - Height (Self-report)
      - Weight (at delivery)
  - Single-item question to measure self-perception of overall health
  - Single-item question to measure self-perception of stress

Birthing Hospitals

- What is the hospital’s role?
  - Complete all items on the BS form
  - Explain the baby’s score, Developmental Risk Screen and Newborn Hearing Screen results to the baby’s parent/guardian and obtain parent/guardian signature
  - Distribute appropriate brochures
  - At the time of baby’s discharge, forward the Birth Score Form to the Birth Score Office
Opportunity

- Jeri Miller’s role
- Relationships take time
- Good relationship = High compliance
- Consider scheduling a visit to the hospitals in your region- golden opportunity 😊

Birth Score Office Protocols

- When a score card arrives in the BSO
  - Coded
  - Entered into BSO database
  - Referral is computer generated
    - High Score
    - Hearing Screen
    - Developmental
    - Outreach (private insurance, self-pay, other)
    - NICU
  - Make referrals to appropriate agency

Birth Score Office Protocol cont.

- Typically, the BSO receives the score card, enters the data, generates and makes the referral to the appropriate agency (BTT, RFTS, Outreach) within 24-48 hours.

- On all referred RFTS infants, a High Risk Infant Worksheet should be submitted to the BSO to complete the file.

RFTS Reporting

- After the RFTS lead agency receives the referral a DCC is assigned to the infant.
- The DCC has 10 business days to make first contact with the client.

- Ideally, within 60-90 days the High Risk Infant Worksheet should be completed and returned to the BSO.

- Without the information on the High Risk Infant Worksheet the outcome data is limited…we can only report # of referrals…cannot report outcome 😊

In a perfect world…

- We would be able to obtain follow-up data on every RFTS infant referred to ensure that they have a medical home and are offered services.

- In 2008 the Birth Score Office made 3225 RFTS referrals.

- Overall we have a good compliance rate (77%) for High Risk Infant Worksheets returned.

- However, of the 3225 referrals made to RFTS, 944 (30%) of the High Infant Referral Worksheets were returned with unknown visits.
  - 761 (80%) were lost to follow-up
  - 131 (14%) refused

Improving High-Risk Infant Outcomes
Where can we do better?

- Increase enrollment of high score infants into RFTS care coordination.
  - Preliminary analysis from the RFTS EDS in 2008 shows that 23% of the high score infant referrals received services.

- Increase follow-up data to improve outcome data.
  - High Risk Infant Worksheet
  - Regardless of enrollment into RFTS the High Risk Infant Worksheet should be completed and sent to the BSO.

- Ultimately, more outcome data will improve:
  - Compliance
  - Service delivery
  - Visibility for RFTS

Making a Difference

- Data shows that Mom’s who enroll in RFTS:
  - Tend to have babies with healthier birth weights
  - Take better care of themselves
  - Have more confidence to care for their babies

- Overtime adequacy of prenatal care is increasing:
  - 1989: 72% adequate prenatal care
  - Currently, approximately 82% of mom’s receive adequate prenatal care and they are receiving care earlier.

- You have the perfect opportunity to make a difference!
  - You can bond with the mom’s
  - You are in their environment
  - You are qualified, respected professionals
  - You have the right tools

- You have the power to make a significant difference for high risk babies health outcomes born in WV.

Questions, Comments?

Thank you!

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