

# HYPOGLYCEMIA TRACKING LOG



SHERRY LEBLANC NNP

UNC CHAPEL HILL

OCTOBER 2019



# Neonatal Hypoglycemia Tracking Log



Your infant will be having several blood sugar levels because he or she is:

- Late Preterm Infant: less than 37 wks
- Small for gestational age
- Large for gestation age
- Infant of a Diabetic Mothers (IDM)
- Has signs or symptoms of low sugars

Pt Sticker

Date of birth \_\_\_\_\_ Time of birth \_\_\_\_\_

These blood tests are performed **before your infant feeds**. Please let your nurse know when your baby gets hungry so that she can perform the test.

Time	Blood Glucose Result	Time	Feeding type	Time Gel Given	Comments

Time	Blood Glucose Result	Time	Feeding type	Time Gel Given	Comments

When infant is discharged place this card in the Hypoglycemia Folder in the Nursery

# ACCESSING TRACKING TOOL

- [www.pqcnc.com](http://www.pqcnc.com)
- Under NHPC Initiative

## Resources

- PQCNC NHPC Learning Session 2
- PQCNC 2019 Kickoff Presentations
- PQCNC NHPC Data Resources
- PQCNC NHPC Resources
- PQCNC NHPC Webinars
- Register Your Team!

More Resources


## PQCNC NHPC Resources

[Tracking tool to support Hypoglycemia protocol implementation](#) - PQCNC was proud to partner with Catherine Bennett CNS, from Advocate Lutheran General Hospital in Illinois, to bring North Carolina teams this supportive tool to measure compliance of how well your unit hypoglycemia at-risk algorithm is being followed. Simple instructions to optimize use of the tool are as follows:

# ISSUES

- PARENTS FORGETTING TO CALL FOR BG CHECK PRIOR TO FEEDING
- EPIC DIFFICULTIES
  - DIFFICULT TO DIFFERENTIATE PRE/POST PRANDIAL GLUCOSES
  - EVALUATE TYPE AND QUALITY OF FEEDING IN RELATION TO GLUCOSES
- POOR DOCUMENTATION OF EDUCATION ON HYPOGLYCEMIA
  - NO FLOWSHEET LINE OR CARE PLAN TO DOCUMENT ON HYPOGLYCEMIA

# EPIC VIEW

Results Review Last Refresh: 10/3/2019 1008 Time Mark Back Forward View Hide Tree Ref Range Load All More  ?

Search:   Hide data prior to: 9/30/2019

	2	3	4	5	6	7	8
	9/30/2019 1802	9/30/2019 1534	9/30/2019 1434	9/30/2019 1313	9/30/2019 1151	9/30/2019 0912	9/30/2019 0750
<b>DIABETES</b>							
Glucose, POC	61	51	52	40	41	47	33

ALL TOPICS

- Results
  - LABORATORY RESULTS
    - BLOOD
      - CHEMISTRY
        - CHEM
        - ENDOCRINE

	Admission (Current) from 9/30/2019 in 5 WH NURSERY UNCW				Last Filed
	9/30/19				
	0920	1000	1030	1100	
<b>Feeding Information</b>					
Breastfeeding Status	Yes			Yes	Yes
Feeding Type	Breast			Breast	Bottle,Breast
Reasons for not Breastfeeding					
Feeding Readiness Assessment					
Non-Nutritive Suck					
Nipple Type					SlowFlow nipp...
Specialty Bottle					

# REVIEW & REVISIONS

- DISCUSSED AT PQIT MEETINGS
- PRESENTED FOR FEEDBACK AT DIVISION & CLINICAL PRACTICE COUNCILS IN MATERNITY CARE CENTER (NEWBORN & POST-PARTUM) AND NCCC
- CREATED TWO LOGS
  - 1 WITHOUT GEL TO IMPLEMENT RIGHT AWAY
  - 2<sup>ND</sup> LOG THAT INCLUDED COLUMN FOR GEL

# OBSTACLES

- TRACKING LOG WAS DEEMED PATIENT EDUCATION AND THEREFORE WAS REQUIRED TO BE APPROVED BY PATIENT EDUCATION COMMITTEE
  - BOTH WOMEN'S & CHILDREN'S
  - RECEIVED RUSH APPROVAL (~2 WEEKS)
- HAD ALREADY PROVIDED EDUCATION
- REQUIRED RE-WORDING AND EDITS
- WANTED HYPOGLYCEMIA, ITS SYMPTOMS, TREATMENT ETC. EXPLAINED IN TRACKING LOG
  - HAD SEPARATE EDUCATION DOCUMENT FOR THIS (STILL IN EDUCATION COMMITTEE)

# HYPOGLYCEMIA TRACKING LOG AT UNC-CH

- ALTERATIONS

- ADDED INITIAL APGAR SCORE <6 & MATERNAL B-BLOCKER USE
- REVISED TO INCLUDE INFANTS ON PROTOCOL BY PROVIDER ORDER RATHER THAN DUE TO SYMPTOMS
- INCLUDED FEEDING VOLUME AND SUGGESTIONS FOR TYPE
- CHANGED TO 1 PAGE DESIGN FOR EASIER PRINTING

- Had an initial Apgar score < 6
- Infant of a mother on beta-blockers (medications for high blood pressure; for example labetalol)
- By provider order due to \_\_\_\_\_

<b>Feeding Type &amp; Volume</b> (breast, colostrum, donor milk, formula)



## Neonatal Hypoglycemia Tracking Log



## Neonatal Hypoglycemia Tracking Log



Your infant will have several blood sugar levels checked because he or she is:

- Less than 37 weeks
- Small for gestational age
- Large for gestational age
- Infant of a diabetic mother (IDM)
- Had an initial Apgar score < 6
- Infant of a mother on beta-blockers  
(medications for high blood pressure; for example labetalol)
- By provider order due to \_\_\_\_\_

Patient Sticker

Date of Birth  Time of Birth

These blood tests are performed **before your infant feeds**. Please let your nurse know when your baby gets hungry so they can perform the test.

Time	Blood Glucose Result	Time Gel Given	Feeding Time	Feeding Type & Volume <small>(breast, colostrum, donor milk, formula)</small>	Comments

Time	Blood Glucose Result	Time Gel Given	Feeding Time	Feeding Type & Volume <small>(breast, colostrum, donor milk, formula)</small>	Comments

***This log should go with infant if transferred to NCCC.***

***When infant has completed the protocol, return this card to Newborn Nursery (Tube Station #261) & place in the Hypoglycemia Box.***

# IMPLEMENTATION

- EDUCATED NURSING STAFF IN NEWBORN, POST-PARTUM, NCCC
- DISSEMINATED TO ALL UNITS (L&D, NBN, POST-PARTUM, NCCC, ANTEPARTUM)
  - STAFF MEETINGS
  - NEWSLETTERS
  - EMAIL
- GO LIVE MAY 20<sup>TH</sup> 2019
- SUBMITTED 1<sup>ST</sup> VERSION FOR TRANSLATION

# SPANISH VERSION



## Hipoglucemia neonatal Registro de seguimiento

Neonatal Hypoglycemia Tracking Log



Se controlarán los niveles de azúcar a su bebé porque:

- Es un bebé prematuro tardío: menos de 37 semanas
- Es pequeño para su edad gestacional
- Es grande para su edad gestacional
- Es un bebé de madre diabética (IDM)
- Tuvo un puntaje de Apgar inicial bajo
- Es un bebé de madre que toma betabloqueantes
- A petición del proveedor debido a \_\_\_\_\_

Patient Sticker

Fecha de nac.  Hora de nac.

Estos análisis de sangre se realizan antes de que el bebé se alimente. Informe a su enfermero/a cuándo el bebé tenga hambre para que le realice la prueba.

Hora	Resultado de glucosa en sangre	Hora de alimentación	Volumen y tipo de alimentación (pecho, calostro, DBM, fórmula)	Comentarios

Translated by UNC HealthCare Interpreter Services, 07/24/19



## Hipoglucemia neonatal Registro de seguimiento

Neonatal Hypoglycemia Tracking Log



Hora	Resultado de glucosa en sangre	Hora de alimentación	Volumen y tipo de alimentación (pecho, calostro, DBM, formula)	Comentarios

***This log should accompany infant if transferred to NCCC.***

***When infant has completed the protocol, return this card to Newborn Nursery (Tube Station #261) & place in the Hypoglycemia Box.***

- Translated portions that family needed
- Left nursing instruction in English
- Long wait period
  - Now using gel and waiting on log w/ gel to be translated

# NUTS & BOLTS

- DUAL FILE FOLDER IN NEWBORN NURSERY WITH BLANK & COMPLETED LOGS
- NEWBORN NURSE BRINGS TRACKING LOG WITH HER TO INITIAL NBN ASSESSMENT
- FILLS IT OUT, ORIENTS PARENTS & TAPES TO BASSINET
- FILLED OUT BY RN OR NA WHO DOES BG OR ASSISTS W/ FEEDING
- ONCE INFANT PASSES HYPOGLYCEMIA PROTOCOL THE LOG IS PLACED IN COMPLETED FILE IN NBN
- EACH MONTH COLLECTED AND STORED IN LOCKED FILE CABINET

# EPIC DOCUMENTATION

- CREATED EPIC DOTPHRASE .NBNHYPOGLYCEMIA

INFANT PLACED ON HYPOGLYCEMIA PROTOCOL DUE TO {NBNINDICATIONHYPOGLYCEMIAPROTOCOL:59995}. TRACKING TOOL PROVIDED AND EXPLAINED TO PARENTS. EDUCATION PROVIDED TO PARENTS:

1. IMPORTANCE OF SKIN TO SKIN
2. FREQUENT FEEDINGS
3. IMPORTANCE OF CALLING RN FOR GLUCOSE MONITORING PRIOR TO FEEDING

PARENTS VERBALIZED UNDERSTANDING OF EDUCATION PROVIDED.

# NICU INVOLVEMENT

- TRACKING LOG SERVES AS A RESOURCE FOR NICU PROVIDERS DETERMINING IF NICU ADMISSION IS APPROPRIATE
- ASKED THAT LOG GO WITH INFANT WHEN TRANSFERRED TO NICU, THEN BE RETURNED TO NBN
- ALLOWS US TO TRACK USE OF IV FLUIDS



Your infant will have several blood sugar levels checked because he or she is:

- Late preterm infant: less than 37 weeks
- Small for gestational age
- Large for gestational age
- Infant of a diabetic mother (IDM)
- Had a low initial Apgar score
- Infant of a mother on beta-blockers
- Has signs or symptoms of low blood sugar

Patient Sticker

Example

Date of Birth  Time of Birth

These blood tests are performed **before your infant feeds**. Please let your nurse know when your baby gets hungry so they can perform the test.

Time	Blood Glucose Result	Feeding Time	Feeding Type & Volume (breast, colostrum, DBM, formula)	Comments
10:33	17	10:35	Breast + 10 mL DBM	DBM w/ SNS
11:30	23	11:32	Breast + 15 mL DBM	DBM w/ SNS transferred to NCCU
11:55	29	just fed		NCCU Admission @ 11:55 D10 bolus + D10 @ 17.5/°
12:30	41	6 PO Chug		↑ D10 15 mL/°
13:30	53	13:32	DBM 15 mL bottle	⊖ Δ D10 (no change)
15:30	67	15:35	Breast + 10 mL DBM	↓ D10 12.5/°
17:45	62	17:50	Breast	↓ D10 10/°

# STRUGGLES

- LOG IS NOT COMPLETED
- OR NOT IN ROOM WITH PARENTS/BABY
- ~80% OF LOGS ARE COMPLETED
- 50% OF BABIES ADMITTED TO NICU HAVE LOGS
  - UNCLEAR IF THEY GET LOST IN NICU OR NEVER GET SENT WITH BABY

Date of Birth  Time of Birth

These blood tests are performed before your infant feeds. Please let your nurse know when your baby gets hungry so they can perform the test.

	Time	Blood Glucose Result	Time Gel Given	Feeding Time	Feeding Type & Volume (breast, colostrum, donor milk, formula)	Comments
5m	1252	50			Breast / Skin to skin	
1h	1510	35	1530		Breast + 6ml colostrum	
post	1640	71			Skin to skin / Breast feed	
pre	1840	76			skin to skin / Breast	
pre	2114	58			skin to skin / Breast	
pre	2305	62			skin to skin / Breast	

# BENEFITS

- PROVIDES CONTINUITY BETWEEN SHIFTS AND PROVIDER CHANGES
- ALLOWS NICU TO ASSESS GLUCOSE TRENDS & RESPONSIVENESS TO FEEDING/GEL
- ASSISTED WITH DETERMINING APPROXIMATE DOSES OF GEL TO LOAD IN PYXIS
- DETERMINED TIME FROM LOW BG TO GEL DOSING IN 1<sup>ST</sup> FEW WEEKS OF GEL
- HELPED TO DETERMINE FEEDING PATTERNS AROUND GEL
- ADDS ADDITIONAL INFO IF CONCERNS OR ISSUES RISE ON SPECIFIC PATIENT

pre	0120	60		0130	Breast, sim (12ml)	
pre	0319	62		0320	Breast, <del>600 (200, 200)</del>	
				1520	Similac bottle (12 ml) feed education provided to not <del>eat</del> for 2 hrs	
0730	0741	39	0815	0820	gel & 12ml similac	
	0916	59				spitting up
	1110	49		1155	Breast & lactation	& interested & smitten



# BENEFITS



# FUTURE DIRECTIONS

- DISCUSSING HAVING LOG SCANNED INTO MEDIA OF EPIC AS OFFICIAL PART OF EMR
  - MAY MEET REQUIREMENTS FOR REASSESSMENT OF PRN MED DOCUMENTATION
- CONSIDERING NURSING STAFF INITIALING
  - WOULD ALLOW FOR CLARIFICATION OR EDUCATION IF ISSUE

# QUESTIONS

- [SHERRY.LEBLANC@UNCHEALTH.UNC.EDU](mailto:SHERRY.LEBLANC@UNCHEALTH.UNC.EDU)





THANK YOU  
UNC-CH PQIT



**NBN/POST-PARTUM**

- JAMIE HAUSHALTER
- ALISON SWEENEY
- SARA LAUER
- ASHLEY WALLACE
- KELLI BENSON
- CARL SEASHORE
- ASHLEY WALLACE

**NCCC**

- ASHLEY ROY
- JENNIFER CASWELL
- ANNA LYAIFER
- KAREN WOOD
- AMY BROWN
- MARTY MCCAFFREY

**L&D/ANTEPARTUM**

- MARINA COSTANZO
- BETSY DRIGGERS
- AMANDA PETRY
- KRISTIN RESNIK
- BRETNEY WYATT

**LACTATION**

- DIANE ASBILL
- ROBYN LEWIS
- MICHELLE DAVIS
- AMANDA PETRY

**IT/EPIC**

- NARESH GUPTA