Medical Chronology/Summary

Confidential and privileged information

Usage guideline/Instructions

***Verbatim summary:** All the medical details have been included "word by word' or "as it is" from the provided medical records to avoid alteration of the meaning and to maintain the validity of the medical records. The sentence available in the medical record will be taken as it is without any changes to the tense.

***Case synopsis/Flow of events:** For ease of reference and to know the glimpse of the case, we have provided a brief summary including the significant case details.

***Injury report:** Injury report outlining the significant medical events/injuries is provided which will give a general picture of the case.

***Comments:** We have included comments for any noteworthy communications, contradictory information, discrepancies, misinterpretation, missing records, clarifications, etc for your notification and understanding. The comments will appear in red italics as follows: **"**Reviewer's Comments*"**

Indecipherable notes/date:** Illegible and missing dates are presented as "00/00/0000" (mm/dd/yyyy format). Illegible handwritten notes are left as a blank space "_____" with a note as ***"Illegible Notes" in heading reference.

***Patient's History:** Pre-existing history of the patient have been included in the history section

***Snapshot inclusion:** If the provider name is not decipherable, then the snapshot of the signature is included. Snapshots of significant examinations and pictorial representation have been included for reference.

***De-Duplication:** Duplicate records and repetitive details have been excluded.

General Instructions:

- *The medical summary focuses on birth trauma sustained on **MM/DD/YYYY**, related injuries, subsequent complications and their management in detail.*
- *Pediatric daily progress notes from MM/DD/YYYY to 03/15/YYYY are summarized in detail to show the progression of the patient*
- *Mother records are summarized and highlighted in different color for ease reference*

Flow of Events

Multiple Providers

10/06/YYYY-02/05/YYYY: *Multiple pre-natal visits, noted with Varicella Zoster IgG positive on 07/23/YYYY, on prenatal vitamins and Valtrex-Discussed labor precautions-Not interested in induction of labor*

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XXXX Medical Center

MM/DD/YYYY-02/26/YYYY: *G2 P1001 mother was admitted for post-dates pregnancy, induction of labor done-Had a prolonged second stage of labor with > 2 hours of active pushing and descent from 0 station to +1 station. A trial of vacuum-assisted vaginal delivery was attempted but there was minimal descent with gentle traction. There were no pop-offs and vacuum assistance was abandoned due to minimal descent with approximately 8 pulls-Planned for cesarean section for failed induction, underwent primary low transverse cesarean section-Delivered viable male neonate at 2313 hrs, 3840g, APGA Rs 1 and 3 at 1 and 5 minutes respectively-Baby was transferred to Eastern Idaho Regional Medical Center for NICU care*

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Eastern ABC Regional Medical Center

02/26/YYYY-03/15/YYYY: *Baby had neonatal depression at birth, assessed with hypoxic ischemic encephalopathy, subgaleal hemorrhage-Cranial ultrasound dated 02/26/YYYY was normal-MRI dated 03/02/YYYY showed acute ischemic injury of right middle cerebral artery area, foci of ischemic injury present with in right deep nuclei and internal capsule. Ischemic injury was seen within the descending cortical spinal tract. Some subdural blood products along right tentorium and right occipital and cerebellar lobe and right lateral ventricle along the superior margin of the choroid plexus; Baby was placed on nil per oral on admission, trophic feeds begun and advanced and full enteral feeds via nasogastric tube was changed on DOL #12; Respiratory failure was managed with mechanical ventilation, extubated on 03/03 and placed on HFNC and room air, comfortable with room air on DOL #13; Echo on 02/26/YYYY showed elevated PAP (peri-systemic), small PDA, L->R PFO, adequate function, normal structure, arch poorly visualized and started on Dopamine & Milrinone, repeat echo on DOL #17 was normal with PFO; sepsis newborn suspected, status post Amp-Ceftaz x 7 days; passed car seat test on 03/15/YYYY; undergone circumcision; discharged to home with parents in stable condition on 03/15/YYYY.*

Patient History-Mother

Past Medical History: None

Surgical History: None

Family History: Negative

Social History: Never smoker

Allergy: No known allergies

Detailed Summary

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
MM/DD/YYYY	Facility/Provider Name	**History and physical examination report:** **Chief complaint:** Post-dates pregnancy. **History of present illness:** The patient is a 34-year-old G2 P1 001 with an estimated date of confinement of February 18, YYYY by last menstrual period confirmed with a first trimester ultrasound. Patient reports good fetal movement and irregular contractions but denies any vaginal bleeding or leaking of fluid. Patient's pregnancy has been uncomplicated and she is group beta strep negative. **Vitals:** Temp 36.7, HR 83, BP 127/71. **Physical examination:** Abdomen: Gravid, soft, non-tender. Genitourinary: Normal-appearing external genitalia; SVE (Speculum Vaginal Examination) 4/50/-3, mid, soft. Fetal heart tones: Baseline 145 bpm, moderate variability; category 1, reactive, no decelerations Tocometer: Irregular contractions **Assessment/plan:** 1. Post-dates pregnancy: Admit to labor and delivery for induction of labor with Prepidil gel. Will follow-up routine labs. Anticipate vaginal delivery. 2. Pregnant: GBS negative.	1676–1677
MM/DD/YYYY	Facility/Provider Name	**Obstetric progress notes:** **Subjective:** The patient has had a prolonged second stage of labor with > 2 hours of active pushing and descent from 0 station to +1 station. A trial of vacuum-assisted vaginal delivery was attempted but there was minimal descent with gentle traction. There were no pop-offs and vacuum assistance was abandoned due to minimal descent with approximately 8 pulls. **Vitals:** Temp 38.4, min 36.4, max 38.4, HR 106 (Monitored), 107 (Peripheral), RR 15, BP 153/82, Spo2 98%. **FHT (Fetal Heart Tone):** Baseline 180 bpm, category 2, variable decelerations, moderate variability **Toco:** Every 2-4 minutes. **Assessment/plan** 1. Post-dates pregnancy: Prolonged second stage of labor, arrest of descent: Plan for primary cesarean section. Ancef 2 gm IV x 1, Octor, Azithromycin	1658–1659

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		500 mg IV x 1. Ordered: Surgical procedure booking SJMC, MM/DD/YYYY at 2203 hrs. XXXX, M.D., primary cesarean section on MM/DD/YYYY at 2204 hrs, Choice, inpatient, urgent, post-dates pregnancy, Ob, high priority, new. 2. Intrapartum intra-amniotic infection: Ampicillin 2000 mg IV every 6 hours x at least 24 hours post-partum, Gentamicin 1.5 mg/kg IV every 8 hours x at least 24 hours, Clindamycin 900 mg IV x 1. ***Reviewer's Comment:** Labor and delivery flow sheets are not available for review to know the progression of labor.*	
02/26/YYYY	Facility/Provider Name	**Operative report:** **Indication for surgery:** 1. Arrest of descent 2. Presumed intrapartum intra-amniotic infection 3. Non-reassuring fetal heart tones **Pre-operative diagnosis:** 1. Singleton intrauterine pregnancy at 41 weeks 0 days gestation 2. Arrest of descent 3. Presumed intrapartum intra-amniotic infection 4. Non-reassuring fetal heart tones, persistent category 2 fetal heart tones **Post-operative diagnosis:** 1. Singleton intrauterine pregnancy at 41 weeks 0 days gestation 2. Arrest of descent 3. Presumed intrapartum intra-amniotic infection 4. Non-reassuring fetal heart tones, persistent category 2 fetal heart tones 5. Placental abruption **Operation:** Primary low transverse cesarean section **Anesthesia:** Epidural. Wright, Shawn Brice CRNA (Anesthesia Provider). **Estimated blood loss:** 800.0 ml. **Urine output:** 90.0 ml. **Findings:** 1. Viable male neonate at 2313 hrs, 3840g, APGARs 1 and 3 at 1 and 5 minutes respectively 2. Intact placenta with large adherent clot, spontaneously expelled 3. Normal appearing uterus, ovaries and tubes bilaterally **Specimens:**	1677–1679

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Pathology tissue request (Placenta, AP specimen) Pathology tissue request (Paratubal cyst, AP Specimen) **Complications:** None. **Technique:** The patient was taken to the operating room where a time out was performed to confirm correct patient and correct procedure. Patient's epidural was re-bolused. Fetal heart tones were obtained and noted to be reassuring. A Foley catheter was placed using aseptic technique. The patient was then prepped and draped in the usual sterile fashion. Anesthesia was tested and noted to be adequate. A Pfannenstiel incision was made using a surgical scalpel and sharp dissection was carried out over subsequent layers of tissue including the fascia. The fascia was incised on either side of midline and extended bilaterally using blunt and sharp dissection using curved Mayo scissors. Coker clamps are applied to the superior edge of the fascia, tented up, and the underlying rectus muscles were dissected off bluntly and sharply using curved Mayo scissors. The Coker clamps were then placed on the inferior edge of the fascia, tented up, and the underlying rectus and pyramidalis muscles were dissected off bluntly and sharply using curved Mayo scissors. The rectus muscles were divided at midline and the peritoneum was entered bluntly at its superior margin taking care to avoid the bladder. The peritoneal opening was extended bilaterally using blunt dissection. A bladder blade was placed and the patient's lower uterine segment was identified. The uterovesico-peritoneum was identified and a bladder flap was created using Metzenbaum scissors. The bladder flap was replaced and a low transverse incision was made in the patient's lower uterine segment. The amniotic sac was entered and the fluid was noted to be bloody. The hysterotomy was extended bilaterally using caudad-cephalad traction. The fetal head was elevated through the hysterotomy with the assistance of fundal pressure. There was no nuchal cord. Upon delivery, the umbilical cord was doubly clamped and cut and the neonate was passed off to the awaiting pediatrician for further resuscitation. Cord blood was obtained for analysis. There was inadequate amount of blood in the umbilical cord for cord blood gases. The placenta was spontaneously expelled and there was noted to be a large amount of clot behind the placenta. The uterus was then exteriorized and cleared of all remaining products of conception. The hysterotomy was closed using 0 Vicryl in running locked fashion. A second imbricating layer using 0 Monocryl was applied. Good hemostasis was noted. The uterus was replaced into the abdomen. The peri-colic gutters were cleared of all clots and remaining debris. Surgicel was placed between the uterus and the bladder where there was a small amount of oozing noted. Following this there was excellent hemostasis. The rectus muscles were re-approximated using 3-0 plain gut in interrupted fashion. The fascia was then closed using 1 PDS in running non-locked fashion using a single length of suture. The subcutaneous tissue was copiously irrigated with warm normal saline and small bleeding vessels were	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		cauterized using Bovie electro cautery. The skin was re-approximated using 4-0 Monocryl in running sub cuticular stitch. At the end of the procedure all sponge needle and instrument counts are correct x 2. The patient was transferred to recovery in stable condition.	
02/26/YYYY	Facility/Provider Name	**Pregnancy summary document:** **Pregnancy summary:** G2 P1 (1,0,0,1) Gestation: Singleton EDD/EGA method: LMP EGA: Delivered Gestation info at delivery: Baby A-41-weeks **Problems:** Failed induction of labor Pregnancy **Gestation age:** EDD: 02/18/YYYY EGA: 41 weeks Method date: 05/14/YYYY **Pre-natal exam and notes:** MM/DD/YYYY: EGA: 41 weeks, 0 days Cervical dilation: 10 Effacement: 100% Station: -1 BP 153/92 Weight: 180 lbs Baby A-FHR-175 bpm **Labs:** ABO/Rh type: (U) A Positive. **Pregnancy history:** G2 P1 (1,0,0,1) Outcome date: 2015 Neonate outcome: Live birth Outcome of result: Vaginal **Infection history:** Patient/partner has history of genital herpes. **Prenatal visit diagnosis:** Post-term pregnancy Prolonged second stage (of labor)	1696–1710

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Post-term pregnancy Abnormality in fetal heart rate and rhythm complicating labor and delivery Single live birth 40 weeks gestation of pregnancy Chorioamnionitis, third trimester, not applicable or unspecified Premature separation of placenta, unspecified, third trimester Primary inadequate contractions Premature separation of placenta, unspecified, unspecified trimester Chorioamnionitis, third trimester, fetus 1 Secondary uterine inertia Post-term pregnancy History of uterine scar from previous surgery **Delivery summary:** **Baby A:** **Membrane status information:** Rupture of membrane date/time: MM/DD/YYYY at 12:57:00 Rupture of membrane type: Artificial rupture of membranes Amniotic fluid color/description: Clear **Labor information:** Labor onset date/time: MM/DD/YYYY at 12:57:00 Length of labor 1st stage hrs calculated: 4.57 hrs Length of labor 1st stage: 274 minutes 2nd stage onset date/time: MM/DD/19 17:31:00 Length of labor 2nd stage hrs calculated: 5.7 hrs Length of labor 2nd stage: 342 minutes Length of labor 3rd stage: 1 minutes Labor onset methods: Elective induction Induction methods: Artificial rupture of membranes, Prepidil Precipitous labor: No Prolonged labor: No **Fetal monitoring:** FHR monitoring method: Doppler ultrasound **Delivery information:** Delivery type: Cesarean section, low transverse Date/time of birth: MM/DD/YYYY at 23:13:00 Placenta delivery date/time: MM/DD/YYYY at 23:14:00 Placenta delivery method: Manual extraction Reason for cesarean section: Lack of descent of fetal head, mal presentation, non-reassuring fetal status Cord blood sent to lab: No Anesthetist: Shawn Brice Wright, CRNA Maternal delivery complications: Failed induction Delivery physician: XXXX, M.D. Attending physician: XXXX, M.D.	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Neonatal information: Risk factors: Cesarean section, fetal intolerance to labor, fetal malposition Neonate complications: Respiratory distress needing CPAP, respiratory distress needing intubation, respiratory distress needing oxygen, respiratory distress needing PPV Umbilical cord description: 3 vessel cord **Infant data:** Gender: Male Neonate outcome: Live birth Birth weight: 3.84 kg APGAR score 1 minute: 1 APGAR score 5 minute: 3 Pediatrician: XXXX, M.D.	
02/26/YYYY	Facility/Provider Name	**Pediatric admission note:** 3.84kg, 41 0/7 weeks, appropriate for gestational age baby boy born to a G2, P1 never married mother, EDC 03/25/YYYY (dates). Labor began on MM/DD/YYYY. Rupture of membranes occurred on MM/DD/YYYY. Infant born by emergency cesarean delivery at 2313 hrs on MM/DD/YYYY for a viable baby boy. APGARs 1/3/, born at St. John's Medical Center. Transported from St. John's Medical Center. Maternal complications: Post-dates > 40 weeks, prolonged second stage > 2 hours. Maternal medications: Antibiotics, Epidural, General anesthesia. Screen: Chlamydia unknown, Cytomegalovirus unknown, E. Coli unknown, Gonorrhea Group B strep unknown, Hepatitis B unknown, Herpes Genitalis unknown, HIV infection Unknown, Mycoplasma unknown, Rubella immune unknown, Rubella non-immune unknown, Syphilis unknown, Toxoplasmosis unknown. Perinatal comment: Induction for post-dates. No significant prenatal history. Mother ruptured for 10 hours and spiked fever of 101 towards end of laboring. Antibiotics given. Pushed for 5 hours with vacuum extraction attempts x 6 and then delivered via cesarean section. History of HSV, given Valtrex. Other maternal labs unknown at this time. **Procedures summary:** Active time out performed by Robert Cheatham on 02/26/YYYY at 0735, verified by Tami Parke, Verify method: Armband checked. Placement of UAC performed by Robert Cheatham on 02/26/YYYY at 0750. Urine Indwelling catheterization performed by Richelle Stoddard, on 02/26/YYYY at 0910. Verified By Alexis Siddoway, PIV insertion performed by Richelle Stoddard on 02/26/YYYY at 1430. Placement of PICC performed by Richelle Stoddard on 02/26/YYYY at 16:25. Verified By Alexis Siddoway. **Diagnosis summary:**	1237–1239

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		37 or more completed weeks of gestation-Onset 02/26/YYYY. **Physical examination:** Head: Swelling and fluid cross suture line, boggy Eyes: Normally placed, open spontaneously Nose: Within normal limit (Nares are pink, symmetric, placed vertically midline) Oropharynx: Orally intubated Chest: Lungs course bilaterally, symmetrical breath sounds Abdomen: Soft, flat, non-tender without masses, bowel sounds absent Genitalia: Within normal limit (Normal appearing genitalia), Foley at 8cm Anus: Within normal limit (Present and patent) Extremities: FROM (Full Range of Motion), pale, capillary refill 4 seconds Skin: Pale, good perfusion, no rash Rack/spine: Within normal limit (No deformities appreciated) Tone/activity: Intubated Suck/swallow: Orally intubated Reflexes: Deferred **Cardio-respiratory events:** No significant events. **Respiratory:** Invasive ventilation 33%. **Fluid/nutrition:** Wt on 02/26/YYYY at 0622 was 3,840 gms, up 0 gms since MM/DD/YYYY at 2313 birth weight 3840 gms. **Output urine:** 16ml (4.103 ml/kg), stool 0 ml, emesis 0 ml, other drainage Tubes total: 0ml Chest tubes: 0ml Nil per oral as of 02/26/YYYY at 0900 hrs IV: 68.39ml, IV Protein: 0.213g/kg, Blood products: 113.13ml Total fluid for time period: 181.52ml, 46.5ml/kg, 6.6calories/kg Tylenol Phenobarbital **Medication summary:** Morphine Versed Sodium Chloride 3% Tylenol Ampicillin Gentamicin Phenobarbital Tranexemic Acid Drip	
02/26/YYYY	Facility/Provider Name	**Nursing notes:** MM/DD/19, 1900 hrs, I received report on the patient and patient is complete and pushing. Has been since 1730. Dr. XXXX at bedside pushing	1657

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		with patient. Continued to push with minimal progress. Dr. XXXX applied a Kiwi through two contractions with 2-3 pulls per contraction with no pop offs. Fetal heart rate dropped with several contractions and at 2156, the decision was made to go to cesarean section. Patient was taken back to OR and c section incision was made a 2307. Baby was born at 2313. At birth the baby did not have any spontaneous respirations and had a heart rate of 60. Dr. XXXX began PPV immediately after receiving baby, starting at 100% oxygen, then, after about 30 seconds, reduced to 40% as baby's heart rate was over 100 with the PPV. We took the baby in the warmer back to the nursery, continuing PPV during the transfer to nursery. In the nursery we continued PPV and then transitioned to CPAP. RT was called to assist. At 2336, a point of care blood glucose of 70mg/dl was obtained. At 2320 we called EIRMC to arrange for transport of baby. Please see Dr. XXXX H and P on baby for detailed info on resuscitation. After surgery, patient was recovered in OR then back in 301. S. Wright, CRNA and a PACU RN recovered patient in her room while the OB staff worked on baby. I assumed care of patient and continued with routine postpartum assessments. Patient received all of her scheduled antibiotics and IV Ketorolac which helped a lot with pain. At 0440 hrs, we got patient up to bedside, performed peri-care, changed the patient's linens and gown, then got patient back in bed. Patient rested comfortably for the rest of the shift. Urine output adequate. Pain well controlled with scheduled ketorolac. Fundus firm, midline, at U, bleeding scant.	
02/26/YYYY	Facility/Provider Name	**Pediatric echocardiogram:** **Reason for exam:** Decreased output. **Conclusions:** 1. PFO (Patent Foramen Ovale) with left-to-right shunt. 2. Normal left ventricular systolic function. 3. Small PDA with predominately right-to-left shunt. Descending aorta not well visualized in that area and cannot rule out juxtaductal narrowing of the aorta. 4. Evidence of systemic right ventricular pressure.	444–447
02/26/YYYY	Facility/Provider Name	**Procedure report:** **Procedure performed:** Placement of percutaneous venous catheter. **Indication:** Need for central access to delivery vasopressors, high concentration parenteral nutrition and frequent blood/blood gas sampling.	1460
02/26/YYYY	Facility/Provider Name	**Procedure report:** **Indication:** Need for continuous blood pressure monitoring and frequent blood/blood gas sampling. The patient was placed in a supine position. Hand hygiene and full barriers were utilized. The area of the umbilicus was prepped then sterilely draped.	1459

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		The umbilical cord was tied with an umbilical cord tape and the cord was cut off near the level of the skin line. The cord structures were easily identified and one of the umbilical arteries was dilated using Ins Forceps. A 3.5Fr, single lumen, umbilical artery catheter was easily advanced into the artery. The catheter was positioned at a level previously determined to be appropriate. Free infusion of fluid and withdrawal of blood was confirmed. The position of the catheter was confirmed with an X-ray and the position readjusted to place the catheter at the level of 1cm above the diaphragm. The catheter was then secured and connected to a constant infusion device and an arterial pressure transducer. There were no significant blood loss during the procedure. The procedure was discussed with father, who seemed to understand the need for the procedure as well as the risks and benefits. **Procedure:** Placement of umbilical arterial catheter.	
02/26/YYYY	Facility/Provider Name	**Ultrasound encephalogram:** **Clinical information:** Pre-maturity. **Findings:** Neonatal brain ultrasound performed via patent anterior fontanelle. No congenital abnormality is identified. The ventricles are normal in size and configuration. No germinal matrix hemorrhage is identified. The echo texture of the brain parenchyma appears normal. **Impression:** Normal neonatal brain ultrasound.	1625
02/26/YYYY	Facility/Provider Name	**X-ray of abdomen/chest:** **History:** 1-day-old infant male with hypoxia ischemic encephalopathy, now status post line placement. **Findings:** AP portable view of the chest and abdomen is interpreted without available comparison scan. Lung volumes are normal and there are diffuse coarsened pulmonary markings that could be from an infectious or inflammatory process, although fluid volume overload or developing IRDS cannot be excluded. Cardiothymic contours are within normal limits. The pulmonary vasculature cannot be assessed given the streaky pulmonary abnormality. Endotracheal tube is deviated towards the right for unknown reasons in this radiograph that is not significantly rotated, and attention to the endotracheal tube position is warranted on future exams. The pH probe is in the expected location esophagus and proximal stomach. The umbilical arterial vascular catheter terminates at the level of TB-9, The umbilical venous catheter traverses the portal sinus and terminates in the right portal vein, and should therefore be repositioned. **Impression:** 1. The umbilical venous catheter needs to be repositioned, as described above. 2. Rightward deviation of the endotracheal tube 4 uncertain reasons.	1627

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Attention to this on future radiographs is warranted. 3. Streaky symmetrical airspace disease in both lungs, as described above.	
02/26/YYYY	Facility/Provider Name	**X-ray of chest:** **Indication:** PICC line placement. There is a right peripherally inserted central venous catheter with the cephalic approach with tip within the thyrocervical trunk. Endotracheal tuba is present with its tip 4.6 mm above the carina. Umbilical venous catheter is present. There also is a nasogastric tube. Cardiothymic silhouette is within normal limits. There is diffuse ground glass opacities which are stable. **Impression:** 1. Right peripherally inserted central venous catheter with tip in the thyrocervical trunk. 2. Stable tubes and catheters. 3. Diffuse ground glass opacities, stable.	1628
02/26/YYYY	Facility/Provider Name	**X-ray of chest:** **Indication:** Line placement. AP view the chest performed. There is been interval placement right IJ central venous catheter tip in the superior vena cava without complications. Right PICC line is been pulled back slightly when compared to the prior examination. Endotracheal tube, orogastric tube, and umbilical venous catheters are stable.	1632
02/27/YYYY	Facility/Provider Name	**X-ray of chest:** **Indication:** Hypoxic ischemic encephalopathy. **Findings and impression:** 1. Mild peri-hilar granular opacities bilaterally, unchanged, 2. Normal cardiothymic silhouette. 3. Support devices are unchanged in position. 4. Very little bowel gas in the abdomen limits evaluation for intra-abdominal pathology.	1631
02/27/YYYY	Facility/Provider Name	**Discharge summary:** **Subjective:** Within normal limits lochia. Pain well controlled with current medications. Positive ambulation. Positive flatus. Tolerating regular diet. **Vitals:** Temp 36.9, min 36.4, max 36.9, HR 112 bpm, RR 16, BP 109/61, Spo2 94%.	1654–1655, 1642–1646

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Physical examination: General: Alert and oriented, well nourished, no acute distress. HENT: Normocephalic, clear tympanic membranes, normal hearing, moist oral mucosa, no scleral icterus, no sinus tenderness Wound: Clean/dry/intact without erythema **Assessment/plan:** 1. Status post primary low transverse cesarean section. Patient's baby is in the NICU unit in Idaho Falls therefore will discharge today. She has met proper parameters for discharge status post cesarean delivery. She will follow-up in 1 week in our office and understands her postoperative restrictions. We will give prescriptions for Ibuprofen and Percocet. 2. Arrest of descent, delivered, current hospitalization 3. Acute chorioamnionitis Patient's fevers have completely resolved on 24 hours of IV antibiotics. No further antibiotics are indicated. 4. Post-dates pregnancy 5. Placental abruption ***Hospitalization related records:** Anesthesia records, PACU records, discharge instructions, patient education, flow sheets, orders, MAR* ***PDF Ref**: 1664–1667, 1647–1656, 1686–1687, 1679–1680, 1691.*	
02/28/YYYY	Facility/Provider Name	**Lactation consultation note:** Mom getting increased amounts of colostrum for baby, no questions had breast pump for home.	1107
02/28/YYYY	Facility/Provider Name	**X-ray of chest:** **Indication:** Hypoxic ischemic encephalopathy. **Findings and impression:** 1. Mild bilateral peri-hilar granular opacities, likely secondary to surfactant deficiency disease. 2. Normal cardiothymic silhouette. 3. Support devices are unchanged in position. 4. Visualized upper abdomen is unremarkable.	1630
02/28/YYYY	Facility/Provider Name	**Labs:** **Meconium panel:** Barbiturates: Positive.	501
03/01/YYYY	Facility/Provider Name	**Pediatric echocardiogram:** **Reason for exam:** Follow-up ventricular function, PPHN, ARCH **Conclusions:** 1. Tricuspid valve: Moderate regurgitation. 2. Normal ventricular function.	440–443

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		3. PFO with left-to-right shunt. 4. PDA with bi -directional shunt. 5. Moderate TR with peak gradient 77 mm of hg-Elevated RV pressure. 6. Widely patent aortic arch.	
03/01/YYYY	Facility/Provider Name	**X-ray of chest/abdomen:** **Clinical information:** Prematurity. **Impression:** Single view of the chest, abdomen, and pelvis provided 600 hours. Tubes and lines are stable. Cardiothymic silhouette is unremarkable. Mild streaky opacities persist throughout the peri-hilar regions. The bowel gas pattern is unremarkable.	1629
03/02/YYYY	Facility/Provider Name	**Neurology initial consultation report:** **Referring physician:** XXXX, M.D. **History of present illness:** The patient is a now 5-days-old ex-41 weeker, born weighing 38 to 40 g in Jackson Hole, Wyoming. There was a little difficulty coming out, so vacuum extraction was used. However, reportedly it was only once and did not seem to be difficult. Upon delivery, however, he was floppy and poorly responsive. APGARs were 1 at 1minute and 3 at 5 minutes. Initial pH apparently was about 6.9. He had an apparent subgaleal hemorrhage. The patient was transferred over to the EIRMC NICU. There, he was placed on a cooling protocol for 72 hours. Within the 1st day they notice some clinical as well as electrographic changes on aEEG. He was started on phenobarbital. He seemed to do well until he was again warmed yesterday and then he started having more seizures. He got extra doses of Phenobarbital, but has continued to have seizures despite a recent level of 43. Because of this, he was just now loaded with Keppra 50 mg/kg and started on daily doses of Keppra as well as daily doses that he is on phenobarbital. By history, the subgaleal hemorrhage initially increased, but then stop with aggressive correction of coagulopathy in addition to Tranexemic. He did need to received PRBCs. Initial neonatal head ultrasound was normal apparently. **Medications:** Currently include both Phenobarbital and Keppra along with as needed Morphine as well as multiple antibiotics and as needed Midazolam. He did receive also a dose of Ativan earlier. **Physical examination:** On examination, currently, he is still much sedated. He does have some bogginess felt around the scalp. However, anterior fontanelle can be felt and is soft and flat. Face appears to be symmetric, but he is much sedated and does not spontaneously move. Diffusely hypotonic throughout as expected. Deep tendon reflexes are decreased in all 4 extremities as well. Exam is very limited due to station overall as well as probably the underlying injury. **Assessment/plan:** Since he has evidence of having had hypoxic ischemic	421–422

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		injury and a more significant subgaleal hemorrhage, he also does have evidence of asymmetric injury with the seizures happening typically seen in the left hand as well as some lip-smacking type behavior. On aEEG, we see that he has had multiple seizures, all arising from the right hemisphere. We also noticed that his background is asymmetric and decreased in the right, more so than on the left. He will continue both phenobarbital and Keppra for now. If there are no further seizures and hopefully before discharge we can eventually take him off the phenobarbital and see how he does on just Keppra. I anticipate that he will need to be least on Keppra for at least the first 3 months. We will follow him as an outpatient. We will check an MRI today and I will follow up with this as well as, see if we did have a more focal injury such as a cerebrovascular event. Thank you for the kind referral. I will be happy to follow along with you with this patient. I did meet with parents and paternal grandfather arid we did go over what we feel has happened as well as discussed the changes that we see on the aEEG and discussed prognosis as well as follow-up for the seizures. We will meet again with them tomorrow.	
03/02/YYYY	Facility/Provider Name	**Daily progress notes:** Continues to make appreciable improvement, only setback has been the development of breakthrough seizure activity. Feedings have been tolerated. Vent settings are essentially unchanged. Off Dopamine and Milrinone. **Day of life:** #5. Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. **Physical examination:** Bed type: Open crib General: The infant is supine in isolette in no acute distress. Head/neck: Anterior fontanel open and flat, ears continue to protrude from scalp due to displacement by hematoma, ETT taped securely. OGT present. Significant posterior scalp and posterior temple scalp bogginess and enlargement. Chest: Chest symmetrical, minimally coarse bilateral breath sounds, good air exchange, no increased work of breathing, regular spontaneous respiratory effort noted. Heart: Regular, rate and rhythm without murmur or gallop. Diminished pulses. CRT 2-3 secs Abdomen: Absent bowel sounds, soft and non-distended. UAC catheter secure.	1595–1601

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Genitalia: Normal genitalia, patent anus, no abnormalities noted. Extremities Thready peripheral pulses, cool to the touch Neurologic: Sedated. Occasional purposeful movement. Occasional brisk but faint clonic movements. No clinical seizure activity. No posturing. Symmetric tone (hypotonic). No ankle clonus. Weakly withdraws to pain. Skin: Cool to the touch, no lesions noted. Right IJ clean/dry/intact. **Ventilatory:** Duration: 6-days. Type: PS Fio2: 0.3 PEEP: 5 PS: 10 **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Acidosis onset < = 28 days, start date 02/26/YYYY History: Made NPO upon admission Acidosis improving Moderate anasarca Hyponatremia requiring 3% NACL for correction Assessment: Newborn male with history of perinatal depression Metabolic acidosis, resolved Anasarca/fluid overload Hyponatremia, resolved Plan: Continue TF 100/kg, continue TPN Trend lytes closely Monitor weight gain/fluid overload. Schedule Lasix. Trend urine output closely Advanced trophic feeds to 20ml/kg/day Discontinue UAC **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male Plan: Developmentally appropriate cares **Metabolic:** Acidosis onset < = 28 days of age, start date MM/DD/YYYY	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Hypothermia-Newborn, start date 02/26/YYYY Comment: Active cooling History: Newborn with profound metabolic acidosis from perinatal depression. Metabolic acidosis, improving. Assessment: Metabolic acidosis, now resolved Re-warmed overhead warmer Plan: Monitor temps closely **Respiratory:** Respiratory failure onset < = 28 days age, start date 02/26/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Assessment: Acute respiratory failure from perinatal birth depression Plan: Wean as able towards extubation. Hopefully lateral today. Blood gas every 4 hrs VAP precautions **Cardiovascular:** Bradycardia-Neonatal, start date 02/26/YYYY Comment: Secondary to cooling. History: Perinatal birth depression with evidence of myocardial injury by Troponin levels. Presently normocardiac/bradycardic and normotensive Day of life #0-Presnet: Dopamine, Milrinone Day of life #1: Echo: Elevated PAP (peri-systemic), adequate function, normal structure, arch poorly visualized. Milrinone decreased (0.25), Dopamine titrated Day of life #4: Milrinone off Assessment: Normotensive on low dose vasopressor support Plan: Trend BP; continue to titrate Dopamine, wean to off as able Echo to re-eval function and pressures **Infectious disease:** Infection screen < = 28 days, start date 02/26/YYYY History: At risk for bacterial process given HIE insult and ongoing cooling	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Assessment: At risk for infectious process Plan: Continue Ampicillin and Ceftazidime x 5 days Trend culture until final Monitor closely for infectious process (Bacterial, Fungal, Viral) **Hematology:** Bruising-newborn, start date 02/26/YYYY Comment: Scalp. Coagulopathy-newborn, start date 02/26/YYYY History: Newborn male with concerns for unstable/expanding subgaleal hematoma in the face of a metabolic acidosis and hypothermia Hemostasis obtained through combination of blood products, acidosis correction and Tranexemic acid Assessment: Subgaleal hematoma, appears stabilized Mild coagulopathy appears corrected; continued to trend Plan: Trend coags and correct Trend HCT and transfuse as needed Follow platelet count **Neurology:** Depression at birth, start date MM/DD/YYYY Electroencephalogram, abnormal, start date 02/26/YYYY Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized. History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE Assessment: Severe HIE At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Check Phenobarbital level in morning, target levels approaching 40-50 Add Keppra given ongoing seizure activity	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Trend aEEG Consults Ped neuro Continue as needed anxiolytics Continue as needed and scheduled analgesics **IVH:** At risk for intraventricular hemorrhage, start date 02/26/YYYY History: Perinatal depression. History of vacuum application (x6 pulls). No pop-offs. Significant/severe scalp edema/bogginess consistent with subgaleal hematoma. Assessment: Subgaleal hematoma At risk for IVH/intracranial hemorrhage: Plan: Repeat cranial ultrasound as needed Continue to trend OFC closely to gauge ongoing process and target efforts at correction **Developmental delay:** At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Sedated, intubated at present, unable to assess neuro status appropriately. Plan: Qualifies for infant toddler (WY equivalent) Developmentally appropriate cares **Endocrine:** History: Difficult delivery with perinatal depression warranting TH Assessment: At risk for endocrinopathy Plan: Send NBS Monitor for endocrinopathy, spec hypothyroidism Continue HCTZ to assist with improved vasomotor tone **Patient contract:** Parents updated frequently. Encouraged by recent trends.	
03/02/YYYY	Facility/Provider Name	**MRI of brain without contrast:** **Indication:** Seizure activity, infant born at 41 weeks gestation, vacuum	1623–1624

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		assisted delivery. **Findings:** The brain is morphologically normal. No cortical malformation or heterotopia. The myelination pattern appears appropriate for the gestational age. Midline structures appear normally formed. Normal appearance of the pituitary gland. Normal position of the cerebellar tonsils. Normal vascular flow voids are demonstrated. Flow voids within the dural venous sinuses and cortical veins are unremarkable. There are regions acute ischemic injury within the right cerebral hemisphere within the right middle cerebral artery territory. This is most pronounced within the right frontal parietal region, right insula, and right lateral occipital region. Foci of ischemic injury are present within the right deep nuclei and internal capsule. Focus of diffusion signal hyper intensity is present within the splenium of the corpus callosum. Ischemic injury is seen within the descending cortical spinal tract. These areas of ischemia injury demonstrate intrinsic T1 shortening on T1 weighted imaging seen within the basal ganglia axial image 9. Associated T2/FLAIR signal hyper intensity within these regions. No ischemic injury is otherwise suggested within the left cerebral hemisphere or posterior fossa. Extra-axial blood products are seen layering along the posterior aspect of the right occipital lobe, right aspect of the tentorium and right cerebellar hemisphere. These have the appearance of subdural blood products. Blood products are also seen within the right aspect of the quadrigeminal plate cistern. These demonstrate intrinsic T1 shortening and susceptibility artifact. Some susceptibility is also seen within the right lateral ventricle along the superior margin of the choroid plexus. Large subgaleal hematoma is demonstrated. The calvarium appears intact. Skull base and mastoid air cells appear normal. Cranial facial structures are unremarkable. Imaged portion of the cervical cord and cervical spine is unremarkable. Endotracheal tube is present. **Impression:** 1. Imaging findings of ischemic parenchymal injury predominantly within the right middle cerebral artery territory involving the right frontal parietal region, insula, lateral occipital lobe, deep nuclei, and internal capsule. 2. Diffusion signal is also seen within the splenium of the corpus callosum. This finding is nonspecific and may be related to ischemic injury or be the sequela of seizure activity. 3. Extra-axial blood products layering dependently along the right posterior cerebral hemisphere, right aspect of the falx and tentorium, and right cerebellum. These may represent small subdural collections related to birth trauma. 4. Susceptibility within the right lateral ventricle which appears along the superior margin of the choroid plexus. This may represent a small amount of intraventricular blood products. No abnormality is seen at the right caudothalamic groove/germinal matrix.	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		5. Subgaleal hematoma. These findings were conveyed to Dr. XXXX at the time of dictation	
03/03/YYYY	Facility/Provider Name	**Neurology follow-up note:** Events from yesterday were discussed with staff and appropriate interventions were done. These were reviewed today. He did have ongoing seizures yesterday afternoon and last night. He initially got a new bolus of Keppra at 20 mg/kg and then when continued to have seizure as of 9:15 p.m. yesterday, he received Trileptal. He was started on Trileptal 10 mg/kg per dose twice daily. He may have had a small event at least electrographically this morning around 9:00 a. in. This is right before receiving his medications apparently, on the EEG, there is no evidence of any further seizures since then. Last night, we reviewed his MRI. This showed a right posterior middle cerebral artery stroke. There are some other nonspecific changes noted. The location of the stroke certainly corresponds with right hemisphere frequent seizures that we have been seeing. When stable, I suggest we do coagulopathy studies given the fact that he had a subgaleal hemorrhage, as well as a focal CVA. Subgaleal hemorrhages can be seen certainly with vacuum extractions, but are not common. Another problem that may predispose them could be a coagulopathy. The same is true for the stroke at this age. Such studies can be done some time prior to discharge. I would go ahead and increase his Keppra to 15 mg/kg per dose 3 times a day. He can continue the 10 mg/kg per dose twice daily of the Trileptal for now, as well as the daily Phenobarbital. If he goes for another couple days with no seizures, then I would like to see if we can get him off the phenobarbital. At a later time, perhaps even before discharge, we could try to see about weaning off the Trileptal. For that reason, I would like to have him on a higher dose of Keppra because I intend to keep him on this for at least a few months following discharge. I would also like to see a baseline EEG prior to discharge.	1474–1475
03/03/YYYY	Facility/Provider Name	**Daily progress notes:** Did well. More stability with cares. MRI done which revealed strokes. **Day of life:** #6. **Physical examination:** Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Head/neck: Anterior fontanel open and flat, ears continue to protrude from scalp due to displacement by hematoma, ETT taped securely. OGT present. Significant posterior scalp and posterior temple scalp bogginess and enlargement.	1589–1594

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Chest: Chest symmetrical, minimally coarse bilateral breath sounds, good air exchange, no increased work of breathing, regular spontaneous respiratory effort noted. Heart: Diminished pulses. CRT 2-3 secs Abdomen: Absent bowel sounds, soft and non-distended. UAC catheter secure. Genitalia: Normal genitalia, patent anus, no abnormalities noted. Extremities Thready peripheral pulses, cool to the touch Neurologic: Sedated. Occasional purposeful movement. Occasional brisk but faint clonic movements. No clinical seizure activity. No posturing. Symmetric tone (hypotonic). No ankle clonus. Weakly withdraws to pain. Skin: Cool to the touch, no lesions noted. Right IJ clean/dry/intact. **Ventilatory:** Duration: 7-days. Type: PS Fio2: 0.25 PEEP: 5 PS: 10 **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Acidosis onset < = 28 days, start date 02/26/YYYY History: Made NPO upon admission Acidosis improving Moderate anasarca Hyponatremia requiring 3% NACL for correction Assessment: Newborn male with history of perinatal depression Metabolic acidosis, resolved Anasarca/fluid overload Hyponatremia, resolved Plan: Continue TF 120/kg, continue TPN Trend lytes closely Monitor weight gain/fluid overload. Discontinue Lasix. Trend urine output closely Advanced trophic feeds to 20ml/kg/day **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Assessment: Term AGA singleton male Plan: Developmentally appropriate cares **Metabolic:** Acidosis onset < = 28 days of age, start date MM/DD/YYYY Hypothermia-Newborn, start date 02/26/YYYY Comment: Active cooling History: Newborn with profound metabolic acidosis from perinatal depression. Metabolic acidosis, improving. Assessment: Metabolic acidosis, now resolved Re-warmed overhead warmer Plan: Monitor temps closely **Respiratory:** Respiratory failure onset < = 28 days age, start date 02/26/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Day of life 0-6: Mechanical ventilation (SIMV and Spontaneous) Assessment: Acute respiratory failure from perinatal birth depression Plan: Trial of extubation today Wean to BCPAP Blood gas as needed **Cardiovascular:** Bradycardia-Neonatal, start date 02/26/YYYY Comment: Secondary to cooling. History: Perinatal birth depression with evidence of myocardial injury by Troponin levels. Presently normocardiac/bradycardic and normotensive Day of life #0-Presnet: Dopamine, Milrinone Day of life #1: Echo: Elevated PAP (peri-systemic), adequate function, normal structure, arch poorly visualized. Milrinone decreased (0.25), Dopamine titrated Day of life #4: Milrinone off. Repeat Echo continue to show peri-systemic RV pressure but PDA closed. Assessment: Normotensive on low dose vasopressor support	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Plan: Trend BP; continue to titrate Dopamine, wean to off as able Echo to re-eval function and pressures as needed **Infectious disease:** Infection screen < = 28 days, start date 02/26/YYYY History: At risk for bacterial process given HIE insult and ongoing cooling Assessment: At risk for infectious process Plan: Continue Ampicillin and Ceftazidime x 7 days Trend culture until final **Hematology:** Bruising-newborn, start date 02/26/YYYY Comment: Scalp. Coagulopathy-newborn, start date 02/26/YYYY History: Newborn male with concerns for unstable/expanding subgaleal hematoma in the face of a metabolic acidosis and hypothermia Hemostasis obtained through combination of blood products, acidosis correction and Tranexemic acid Assessment: Subgaleal hematoma, appears stabilized Mild coagulopathy appears corrected; continued to trend Plan: Trend coags and correct Trend HCT and transfuse as needed Follow platelet count Thrombophilia work-up (will obtain prior to pulling IJ) **Neurology:** Depression at birth, start date MM/DD/YYYY Electroencephalogram, abnormal, start date 02/26/YYYY Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized. History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		02/26: Seizure activity noted (rhythmic fist clenching, tongue thrusting along with aEEG evidence). Phenobarbital load and maintenance begun with abatement. 03/01: Following warming, seizure activity noted (same as before). Phenobarbital mini-bolus given (level was checked and found to be 39). Keppra load given and maintenance begun (along with prn Ativan). Seizures resolved. 03/02: New seizures developed. Trileptal added. Seizures resolved. 03/02: MRI: Ischemic parenchymal injury involving right MCA territory (Right frontoparietal region, insula, lateral occipital, deep nuclei & internal capsule). Some subdural hematomas noted on falx and cerebellum. Subgaleal hematoma also noted. Assessment: Severe HIE Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Check Phenobarbital level in morning on 03/05, target levels approaching 40-50 Continue Keppra and Trileptal Trend aEEG. Await formal EEG prior to discharge (To get better baseline) Goal is once seizures controlled to remove Phenobarbital first, wait 2-3 days then remove Trileptal with ultimate goal of monotherapy with Keppra as outpatient Await further recs from Peds Neuro Continue as needed and scheduled analgesics **IVH:** At risk for intraventricular hemorrhage, start date 02/26/YYYY History: Perinatal depression. History of vacuum application (x6 pulls). No pop-offs. Significant/severe scalp edema/bogginess consistent with subgaleal hematoma. Assessment: Subgaleal hematoma Small (very) subdural hematoma noted on MRI Plan: Monitor clinically Repeat imaging if new concerns arise **Developmental delay:** At risk for developmental delay:	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Sedated, intubated at present, unable to assess neuro status appropriately. Plan: Qualifies for infant toddler (WY equivalent) Developmentally appropriate cares **Endocrine:** Diagnosis: Adrenal insufficiency, clinically, start date 03/03/YYYY. History: Difficult delivery with perinatal depression warranting TH Assessment: At risk for endocrinopathy, including adrenal insufficiency. On supplemental glucocorticoid therapy Plan: Discontinue Hydrocortisone Monitor for endocrinopathy **Patient contract:** Parents updated frequently. Encouraged by recent trends.	
03/04/YYYY	Facility/Provider Name	**Daily progress notes:** Extubated successfully Improved handling of oral secretions noted. No desaturation events following extubation. Tolerating increasing feeds. No clinical seizure activity noted. **Day of life:** #7. **Physical examination:** Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Bed type: Open crib. General: Responds to exam with semi-purposeful movement, no clinical seizure activity. Head/neck: Anterior fontanel open and flat, ears continue to protrude from scalp due to displacement by hematoma. NGT present. NCPAP prongs in position. Significant posterior scalp and posterior temple scalp bogginess with enlargement. Chest: Symmetrical excursion, non-labored respirations, good air exchange. Heart: Normal pulses. CRT 2-3 secs Abdomen: Absent bowel sounds, soft and non-distended. No HSM. Genitalia: Normal genitalia, patent anus, no abnormalities noted.	1582–1588

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Extremities Thready peripheral pulses, cool to the touch Neurologic: Some generalized hypotonia, no clonus, spontaneous and purposeful movement noted. Skin: Cool to the touch, no lesions noted. Right IJ clean/dry/intact. **Resp support:** Nasal CPAP, start date 03/03/YYYY, duration-2 days Fio2-0.25 CPAP-8 **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Acidosis onset < = 28 days, start date 02/26/YYYY History: Made NPO upon admission Acidosis that improved over the first 24 hours Moderate anasarca Day of life #1: Present-TPN (Fluid restriction) Day of life #5: Trophic feeds begun and advanced Assessment: Metabolic acidosis, resolved Anasarca/fluid overload Hyponatremia, resolved Hypertriglyceridemia (Mild) Plan: Continue mild fluid restriction with TF 120/kg, continue TPN Trend lytes closely Monitor weight gain/fluid overload. Discontinue Lasix. Trend urine output closely Advanced trophic feeds to 20ml/kg/day **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male Plan: Developmentally appropriate cares **Metabolic:** Acidosis onset < = 28 days of age, start date MM/DD/YYYY Hypothermia-Newborn, start date 02/26/YYYY Comment: Active cooling History:	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Newborn with profound metabolic acidosis from perinatal depression. Metabolic acidosis, improving. Assessment: Metabolic acidosis, now resolved Temps stable in open crib Plan: Monitor temps closely **Respiratory:** Respiratory failure onset < = 28 days age, start date 02/26/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Day of life 0-6: Mechanical ventilation (SIMV and Spontaneous) Assessment: Acute respiratory failure from perinatal birth depression Plan: Needs met on current support Wean BCPAP as able Blood gas as needed **Cardiovascular:** Bradycardia-Neonatal, start date 02/26/YYYY Comment: Secondary to cooling. History: Perinatal birth depression with evidence of myocardial injury by Troponin levels. Presently normocardiac/bradycardic and normotensive Day of life #0-Presnet: Dopamine, Milrinone Day of life #1: Echo: Elevated PAP (peri-systemic), adequate function, normal structure, arch poorly visualized. Milrinone decreased (0.25), Dopamine titrated Day of life #4: Milrinone off. Repeat Echo continue to show peri-systemic RV pressure but PDA closed. Normal function. Assessment: Normotensive on low dose vasopressor support Plan: Trend BP Monitor for PPHN Echo to re-eval function and pressures as needed **Infectious disease:** Infection screen < = 28 days, start date 02/26/YYYY History: At risk for bacterial process given HIE insult and ongoing cooling	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Assessment: At risk for infectious process Plan: Continue Ampicillin and Ceftazidime x 7 days Trend culture until final **Hematology:** Bruising-newborn, start date 02/26/YYYY Comment: Scalp. Coagulopathy-newborn, start date 02/26/YYYY History: Newborn male with concerns for unstable/expanding subgaleal hematoma in the face of a metabolic acidosis and hypothermia Hemostasis obtained through combination of blood products, acidosis correction and Tranexemic acid Assessment: Subgaleal hematoma, appears stabilized Mild coagulopathy appears corrected; continued to trend Plan: Trend coags and correct Trend HCT and transfuse as needed Follow platelet count Thrombophilia work-up (will obtain prior to pulling IJ) **Neurology:** Depression at birth, start date MM/DD/YYYY Electroencephalogram, abnormal, start date 02/26/YYYY Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized. History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE 02/26: Seizure activity noted (rhythmic fist clenching, tongue thrusting along with aEEG evidence). Phenobarbital load and maintenance begun with abatement. 03/01: Following warming, seizure activity noted (same as before). Phenobarbital mini-bolus given (level was checked and found to be 39). Keppra load given and maintenance begun (along with prn Ativan). Seizures resolved. 03/02: New seizures developed. Trileptal added. Seizures resolved.	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		03/02: MRI: Ischemic parenchymal injury involving right MCA territory (Right frontoparietal region, insula, lateral occipital, deep nuclei & internal capsule). Some subdural hematomas noted on falx and cerebellum. Subgaleal hematoma also noted. Assessment: Severe HIE Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Check Phenobarbital level in morning on 03/05, target levels approaching 40-50 Continue Keppra and Trileptal Trend aEEG. Await formal EEG prior to discharge (To get better baseline) Goal is once seizures controlled to remove Phenobarbital first, wait 2-3 days then remove Trileptal with ultimate goal of monotherapy with Keppra as outpatient Await further recs from Peds Neuro Continue as needed and scheduled analgesics **IVH:** At risk for intraventricular hemorrhage, start date 02/26/YYYY History: Perinatal depression. History of vacuum application (x6 pulls). No pop-offs. Significant/severe scalp edema/bogginess consistent with subgaleal hematoma. Assessment: Subgaleal hematoma Small (very) subdural hematoma noted on MRI Plan: Monitor clinically Repeat imaging if new concerns arise **Developmental delay:** At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Sedated, intubated at present, unable to assess neuro status appropriately. Plan: Qualifies for infant toddler (WY equivalent)	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Developmentally appropriate cares **Endocrine:** Diagnosis: Adrenal insufficiency, clinically, start date 03/03/YYYY. History: Difficult delivery with perinatal depression warranting therapeutic hypothermia Day of life: 0-5: Hydrocortisone Assessment: At risk for endocrinopathy, including adrenal insufficiency. Transiently on supplemental glucocorticoid therapy Plan: Discontinue Hydrocortisone Monitor for endocrinopathy **Patient contract:** Parents updated frequently. Encouraged by recent trends.	
03/05/YYYY	Facility/Provider Name	**Daily progress notes:** Tolerating increasing feeds. Continues on weaning CPAP support. No clinical seizure activity noted since 3/2, continues on aEEG monitoring **Day of life:** #8. **Physical examination:** Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Bed type: Incubator General: The infant is alert and active. Looking around isolette. In no acute distress. Head/neck: Anterior fontanel open and flat, ears continue to protrude from scalp due to displacement by hematoma. NGT present. NCPAP prongs in position. Significant posterior scalp and posterior temple scalp bogginess with enlargement. Chest: Symmetrical. Heart: Normal pulses. CRT 2-3 secs Abdomen: Hypoactive bowel sounds, soft and non-distended, no organomegaly Genitalia: Normal genitalia, patent anus, no abnormalities noted. Extremities: Spontaneous peripheral movement of all extremities Neurologic: Some generalized hypotonia, no clonus, spontaneous and purposeful movement noted. Skin: Warm, pink, no lesions noted. Right IJ clean/dry/intact.	1574–1581

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Resp support: Nasal CPAP, start date 03/03/YYYY, duration-2 days Fio2-0.25 CPAP-9 **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Acidosis onset < = 28 days, start date 02/26/YYYY, end date 03/05/YYYY Gavage feeding, start date 03/05/YYYY History: Made NPO upon admission Acidosis that improved over the first 24 hours Moderate anasarca Day of life #1: Present-TPN (Fluid restriction) Day of life #5: Trophic feeds begun and advanced Assessment: History of HIE with severe metabolic acidosis, now resolved Metabolic acidosis, resolved Anasarca/fluid overload, resolving Hypertriglyceridemia (Mild) Plan: Increase TF 140/kg, continue TPN Trend lytes closely, CMP with TG in morning Monitor weight gain/fluid overload. Trend urine output closely Continue advancing feeds by 20ml/kg/day **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male Plan: Developmentally appropriate cares **Metabolic:** Acidosis onset < = 28 days of age, start date MM/DD/YYYY Hypothermia-Newborn, start date 02/26/YYYY Comment: Therapeutic hypothermia x 72 hours on admission History: Newborn with profound metabolic acidosis from perinatal depression. Metabolic acidosis, improving. Assessment:	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Metabolic acidosis, now resolved Temps stable in isolette Plan: Monitor temps closely, wean to OC as able **Respiratory:** Respiratory failure onset < = 28 days age, start date 02/26/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Day of life 0-6: Mechanical ventilation (SIMV and Spontaneous) Day of life 6 (3/3): Extubated to BCPAP Assessment: Acute respiratory failure from perinatal birth depression, improving Plan: Needs met on current support Wean BCPAP as able Blood gas as needed **Cardiovascular:** Bradycardia-Neonatal, start date 02/26/YYYY Comment: Secondary to cooling. Patent Ductus Arteriosus Patent foramen ovale Tricuspid regurgitation History: Perinatal birth depression with evidence of myocardial injury by Troponin levels. Presently normocardiac/bradycardic and normotensive Day of life #0-Presnet: Dopamine, Milrinone Day of life #1: Echo: Elevated PAP (peri-systemic), adequate function, normal structure, arch poorly visualized. Milrinone decreased (0.25), Dopamine titrated Day of life #4: Milrinone off. Repeat Echo continue to show peri-systemic RV pressure but PDA closed. Normal function. Tricuspid valve moderate regurgitation Day of life #6: Hydrocortisone off Assessment: Normotensive now off pressor support Last echo on 03/01 with small PFO, PDA and continued moderate PHTN with TR peak 77 mmHg and moderate tricuspid valve regurgitation Plan: Trend BP Monitor for PPHN Echo to re-eval function and pressures as needed	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Infectious disease: Infection screen < = 28 days, start date 02/26/YYYY Bandemia Sepsis newborn suspected History: At risk for bacterial process given HIE insult and ongoing cooling. Culture negative clinical sepsis s/p Amp + Ceftaz antibiotics therapy for 7 days with clinical improvement, now off pressor therapy and bandemia resolved. Initial blood culture, final negative. Assessment: Culture negative clinical sepsis s/p Amp + Ceftaz antibiotics therapy for 7 days with clinical improvement, now off pressor therapy and bandemia resolved. Initial blood culture, final negative Plan: Monitor clinically **Hematology:** Bruising-newborn, start date 02/26/YYYY Comment: Scalp. Coagulopathy-newborn, start date 02/26/YYYY History: Newborn male with concerns for unstable/expanding subgaleal hematoma in the face of a metabolic acidosis and hypothermia Hemostasis obtained through combination of blood products, acidosis correction and Tranexemic acid Assessment: Subgaleal hematoma, appears stabilized Mild coagulopathy appears corrected Plan: Trend HCT and transfuse as needed Follow platelet count Thrombophilia work-up (will obtain prior to pulling IJ)-Prot C, Prot S and anti-thrombin 3 testing (will discuss with hematology Dr. XXXX for now and outpatient follow-up) **Neurology:** Depression at birth, start date MM/DD/YYYY Electroencephalogram, abnormal, start date 02/26/YYYY Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized.	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE 02/26: Seizure activity noted (rhythmic fist clenching, tongue thrusting along with aEEG evidence). Phenobarbital load and maintenance begun with abatement. 03/01: Following warming, seizure activity noted (same as before). Phenobarbital mini-bolus given (level was checked and found to be 39). Keppra load given and maintenance begun (along with prn Ativan). Seizures resolved. 03/02: New seizures developed. Trileptal added. Seizures resolved. 03/02: MRI: Ischemic parenchymal injury involving right MCA territory (Right frontoparietal region, insula, lateral occipital, deep nuclei & internal capsule). Some subdural hematomas noted on falx and cerebellum. Subgaleal hematoma also noted. 03/05: Stopped Phenobarbital Assessment: Severe HIE Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Discontinue Phenobarbital-Will wean out of system slowly given 70+ hour half-life in neonates, discussed with Castellanos. Continue Keppra and Trileptal Trend aEEG. Await formal EEG prior to discharge (To get better baseline) Goal is once seizures controlled to remove Phenobarbital first, wait 2-3 days then remove Trileptal with ultimate goal of monotherapy with Keppra as outpatient Await further recs from Peds Neuro Continue as needed and scheduled analgesics Discontinue Morphine as not required any in 2 days now **IVH:** At risk for intraventricular hemorrhage, start date 02/26/YYYY History: Perinatal depression. History of vacuum application (x6 pulls). No pop-offs. Significant/severe scalp edema/bogginess consistent with subgaleal hematoma. Assessment: Subgaleal hematoma Small (very) subdural hematoma noted on MRI Plan:	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Monitor clinically Repeat imaging if new concerns arise **Developmental delay:** At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Sedated, intubated at present, unable to assess neuro status appropriately. Plan: Qualifies for infant toddler (WY equivalent) High risk NICU follow-up clinic Developmentally appropriate cares **Endocrine:** Diagnosis: Adrenal insufficiency, clinically, start date 03/03/YYYY. History: Difficult delivery with perinatal depression warranting therapeutic hypothermia Day of life: 0-5: Hydrocortisone Assessment: At risk for endocrinopathy, including adrenal insufficiency. Transiently on supplemental glucocorticoid therapy Plan: Monitor for endocrinopathy **Patient contract:** Parents updated frequently. Encouraged by recent trends.	
03/07/YYYY	Facility/Provider Name	**Daily progress notes:** Tolerating increasing feeds. Now tolerating HFNC. No clinical seizure activity noted since 3/2, continues on aEEG monitoring, off phenobarbital since 03/05. **Day of life:** 10. **Physical examination:** Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Bed type: Incubator General: The infant is alert and active. In no acute distress.	1561–1566, 1522–1528

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Head/neck: Anterior fontanel open and flat. NGT present. Nasal prongs in good position. Significant posterior scalp and posterior temple scalp bogginess, slowly improving. MMM without cyanosis. Abdomen: Hypoactive bowel sounds, soft non-tender and non-distended Extremities: Spontaneous peripheral movement of all extremities Neurologic: Some generalized hypotonia, no clonus, spontaneous and purposeful movement noted. Skin: Warm, pink, no lesions noted. Right IJ clean/dry/intact. **Resp support:** High flow nasal cannula delivering CPAP, start date 03/06/YYYY, duration 2 Delivering CPAP Setting for high flow nasal cannula delivering CPAP Fio2 0.25, flow 3-lpm **Assessment/plan:** **GI nutrition:** Feeding problems <= 28 days, start date 02/26/YYYY Gavage feeding, start date 03/05/YYYY Hypoalbuminemia, start date 03/06/YYYY Assessment: History of HIE with severe metabolic acidosis, now resolved Anasarca/fluid overload, resolving Hypertriglyceridemia (Mild) Growth: Still 265gms above BWT at 10 days of life Plan: TF 160/kg, continue TPN BMP, TG, MG on 03/08 morning Monitor weight gain/fluid overload-Resolving. Continue advancing feeds by 20ml/kg/day Modified barium swallow today regarding allowance to per oral given perinatal stroke history **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male with severe HIE status post hypothermia therapy Plan: Developmentally appropriate cares	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Respiratory: Respiratory failure onset < = 28 days age, start date 02/26/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Day of life 0-6: Mechanical ventilation (SIMV and Spontaneous) Day of life 6 (3/3): Extubated to BCPAP Day of life 9: To HFNC Assessment: Acute respiratory failure from perinatal birth depression, improving Plan: Wean to HFNC as able Blood gas as needed **Cardiovascular:** Patent Ductus Arteriosus Patent foramen ovale Tricuspid regurgitation History: Perinatal birth depression with evidence of myocardial injury by Troponin levels. Presently normocardiac/bradycardic and normotensive Day of life #0-Presnet: Dopamine, Milrinone Day of life #1: Echo: Elevated PAP (peri-systemic), adequate function, normal structure, arch poorly visualized. Milrinone decreased (0.25), Dopamine titrated Day of life #4: Milrinone off. Repeat Echo continue to show peri-systemic RV pressure but PDA closed. Normal function. Tricuspid valve moderate regurgitation Day of life #6: Hydrocortisone off Assessment: Normotensive now off pressor support Last echo on 03/01 with small PFO, PDA and continued moderate PHTN with TR peak 77 mmHg and moderate tricuspid valve regurgitation Plan: Monitor with vitals and clinically Echo prior to discharge, sooner if symptoms worsen **Hematology:** Bruising-newborn, start date 02/26/YYYY Comment: Scalp subgaleal hemorrhage History: Newborn male with concerns for unstable/expanding subgaleal hematoma in the face of a metabolic acidosis and hypothermia Hemostasis obtained through combination of blood products, acidosis correction and Tranexemic acid. 3/6 Thrombophilia evaluation will be	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		needed at some point given significant subgaleal and MCA distribution ischemic stroke on MRI -Discussed today with Dr. XXXX Hematology who agreed with holding off on any workup currently as normal levels can be difficult to interpret especially given blood product administration and being a newborn therefore, unless there continues to be concern for abnormal bleeding times then he would recommend work up outpatient with parental testing to aid in more complete evaluation. Dr. XXXX also agreed it is safest to do circumcision in NICU prior to discharge. Assessment: Subgaleal hematoma, appears stabilized Mild coagulopathy resolved Plan: Trend HCT and PLT levels Hematology follow-up with Dr. XXXX 2 months after discharge for thrombophilia evaluation, ok to circumcise in NICU prior to discharge **Neurology:** Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized. History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE 03/05: Stopped Phenobarbital Assessment: Severe HIE Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage. PHB level 48 on 3/5, last seizures on 3/2. Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Continue Keppra and Trileptal Discontinue aEEG, consider discharge home. Plan to repeat a formal EEG prior to discharge home (to get better baseline) Will touch base with Dr. XXXX on 3/8 or 3/9 regarding wean off Trileptal with ultimate goal of monotherapy with Keppra as outpatient Continue discussion with Dr. XXXX Neuro Continue as needed Ativan for if breakthrough seizures	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Developmental delay: At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Hypotonia with clinical seizures, now controlled on multiple AEDs. Plan: Qualifies for infant toddler program High risk NICU follow-up clinic Developmentally appropriate cares **Patient contract:** Parents updated frequently. Encouraged by recent trends.	
03/07/YYYY	Facility/Provider Name	**Barium swallow study:** **Indication:** Hypoxic ischemic encephalopathy. Failure to thrive. **Findings:** Multiple episodes of superficial and deep penetration were identified during the course of the examination. These were rapid with quick resolution. No evidence of aspiration. No nasopharyngeal aspiration or reflux. Several episodes of gastroesophageal reflux were documented. Fluoroscopy time: 1.7 minutes. Impression: Transient penetration without aspiration seen. Please also refer to the separately reported SLP documentation for additional detail.	1633
03/09/YYYY	Facility/Provider Name	**Procedure report:** PIV insertion performed by Denni Roberson on 03/09/YYYY 0300. Comments by Denni Roberson: Comfort measures taken prior to the insertion of the IV. The site was cleansed per protocol and allowed to dry prior to the IV attempt. A 24 gauge catheter was inserted into the left foot. The IV flushes easily and does not blanch. The catheter was secured with an occlusive transparent dressing. Infant tolerated the procedure well. Total attempts x 2. Active time-out per protocol completed.	797
03/09/YYYY	Facility/Provider Name	**Daily progress notes:** **Day of life:** 12. Tolerating increasing feeds now tolerating HFNC. No clinical seizure activity noted since 3/2 and off phenobarbital since 3/5. Right IJ removed yesterday afternoon without complication.	1547–1553

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Physical examination: Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Bed type: Incubator General: The infant is alert and active. In no acute distress. Head/neck: Anterior fontanel open and flat. NGT present. Nasal prongs in good position. Significant posterior scalp and posterior temple scalp bogginess, slowly improving. Oral mucosal hydrated and acyanotic Abdomen: Hypoactive bowel sounds, soft non-tender and non-distended Extremities: Spontaneous peripheral movement of all extremities Neurologic: Some generalized hypotonia, no clonus, spontaneous and purposeful movement noted. Skin: Warm, pink, no lesions noted. **Resp support:** High flow nasal cannula delivering CPAP, start date 03/06/YYYY, duration 4 Delivering CPAP Setting for high flow nasal cannula delivering CPAP Fio2 0.25, flow 2-lpm **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Gavage feeding, start date 03/05/YYYY Hypoalbuminemia, start date 03/06/YYYY Hypomagnesemia, neonatal, start date 03/08/YYYY History: Made nil per oral upon admission Acidosis that improved over the first 24 hours Moderate anasarca Day of life #10: Modified barium swallow-No aspiration Assessment: History of HIE with severe metabolic acidosis, now resolved Anasarca/fluid overload, resolving Hypertriglyceridemia Hypomagnesemia LFTs normalizing	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Growth: Still 265gms above BWT at 10 days of life Plan: Goal TG 160, continue nipple/gavage Discontinue IVF and follow QAC glucose until > 50 x 2 after off fluids MG, TG on 03/10 Monitor weight gain/fluid overload-Resolving. Continue advancing feeds by 20ml/kg/day ST/OT involved **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male with severe HIE status post hypothermia therapy Plan: Developmentally appropriate cares **Respiratory:** Respiratory failure onset < = 28 days age, start date 02/26/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Day of life 0-6: Mechanical ventilation (SIMV and Spontaneous) Day of life 6 (3/3): Extubated to BCPAP Day of life 9: To HFNC Assessment: Acute respiratory failure from perinatal birth depression, improving Plan: Trial 1 LNC off wall, may room air trial daily Blood gas as needed **Cardiovascular:** Patent Ductus Arteriosus Patent foramen ovale Tricuspid regurgitation Assessment: Normotensive now off pressor support Last echo on 03/01 with small PFO, PDA and continued moderate PHTN with TR peak 77 mmHg and moderate tricuspid valve regurgitation Plan: Monitor with vitals and clinically Echo prior to discharge, sooner if symptoms worsen **Hematology:**	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Assessment: Subgaleal hematoma, resolving Mild coagulopathy resolved Thrombocytopenia resolved Plan: Follow clinically Hematology follow-up with Dr. XXXX 2 months after discharge for thrombophilia evaluation, ok to circumcise in NICU prior to discharge **Neurology:** Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized. History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE 03/05: Stopped Phenobarbital Assessment: Severe HIE Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage. PHB level 48 on 3/5, last seizures on 3/2. Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Continue Keppra Monday 3/11-wean Trileptal toI5mg/kg/day x 1 week then 10 mg/kg/day x 1 week then 5 mg/kg/day x 1 week then stop Will plan to discharge home Keppra + what is left of wean per Dr. XXXX with follow up with ped neurology in 1 month Plan to repeat a formal EEG prior to discharge home (Sometime week of 3/11 questionable) Continue discussion with Dr. XXXX Neuro Continue as needed Ativan for if breakthrough seizures **Developmental delay:** At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Hypotonia with clinical seizures, now controlled on multiple	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		AEDs. Plan: Qualifies for infant toddler program High risk NICU follow-up clinic Developmentally appropriate cares **Patient contract:** Parents updated frequently. Encouraged by recent trends.	
03/10/YYYY	Facility/Provider Name	**Daily progress notes:** **Day of life:** 13. Tolerating increasing feeds. Now tolerating LFNC. No clinical seizure activity noted since 3/2 and off phenobarbital since 3/5. **Physical examination:** Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Bed type: Open crib General: The infant is sleepy but easily aroused. Swaddled comfortably. Head/neck: Anterior fontanel open and flat. NGT present. Nasal prongs in good position. Significant posterior scalp and posterior temple scalp bogginess, slowly improving. Oral mucosal hydrated and acyanotic Abdomen: Hypoactive bowel sounds, soft non-tender and non-distended Extremities: Spontaneous peripheral movement of all extremities Neurologic: Normal tone, no clonus, spontaneous and purposeful movement noted. Skin: Warm, pink, no lesions noted. **Resp support:** Nasal cannula, start date 03/09/YYYY, duration days-2 Fio2 0.21, flow 1-lpm **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Gavage feeding, start date 03/05/YYYY Hypoalbuminemia, start date 03/06/YYYY Hypomagnesemia, neonatal, start date 03/08/YYYY History:	1541–1546

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Made nil per oral upon admission Acidosis that improved over the first 24 hours Moderate anasarca Day of life #12: Full enteral feeds via N/G, IVF stopped Assessment: History of HIE with severe metabolic acidosis, now resolved Anasarca/fluid overload, resolving Hypertriglyceridemia, resolved Hypomagnesemia, resolved LFTs normalizing Growth: Still 265gms above BWT at 10 days of life Plan: Goal TG 160, continue nipple/gavage Monitor weight gain/fluid overload-Resolving. ST/OT involved **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male with severe HIE status post hypothermia therapy Plan: Developmentally appropriate cares **Respiratory:** Respiratory failure onset < = 28 days age, start date 02/26/YYYY Pulmonary insufficiency/immaturity, start date 03/10/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Assessment: Acute respiratory failure from perinatal birth depression, improved with mild pulmonary insufficiency, stable on 1 liter NC Plan: Trial 1 LNC off wall, may room air trial daily Blood gas as needed **Cardiovascular:** Patent Ductus Arteriosus Patent foramen ovale Tricuspid regurgitation Plan: Monitor with vitals and clinically Echo prior to discharge, sooner if symptoms worsen	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Hematology: Assessment: Subgaleal hematoma, resolving Mild coagulopathy resolved Thrombocytopenia resolved Plan: Follow clinically Hematology follow-up with Dr. XXXX 2 months after discharge for thrombophilia evaluation, ok to circumcise in NICU prior to discharge **Neurology:** Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized. History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE 03/05: Stopped Phenobarbital Assessment: Severe HIE Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage. PHB level 48 on 3/5, last seizures on 3/2. Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Continue Keppra Monday 3/11-wean Trileptal toI5mg/kg/day x 1 week then 10 mg/kg/day x 1 week then 5 mg/kg/day x 1 week then stop Will plan to discharge home Keppra + what is left of wean per Dr. XXXX with follow up with ped neurology in 1 month Plan to repeat a formal EEG prior to discharge home (Sometime week of 3/11 questionable) Continue discussion with Dr. XXXX Neuro Continue as needed Ativan for if breakthrough seizures **Developmental delay:** At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Assessment: Hypotonia with clinical seizures, now controlled on multiple AEDs. Plan: Qualifies for infant toddler program High risk NICU follow-up clinic Developmentally appropriate cares **Patient contract:** Parents updated frequently. Encouraged by recent trends.	
03/11/YYYY	Facility/Provider Name	**Daily progress notes:** **Day of life:** 14. Now tolerating full enteral N/G feeds. In room air since 3/10 morning. No clinical seizure activity noted since 3/2 and off Phenobarbital since 3/5. Trileptal weaned to 15mg/kg/day starting 3/11, next wean on 3/18. **Physical examination:** Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Bed type: Open crib General: The infant is alert and active. In no acute distress. Head/neck: Anterior fontanel open and flat. NGT present. Nasal prongs in good position. Significant posterior scalp and posterior temple scalp bogginess, slowly improving. Oral mucosal hydrated and acyanotic Abdomen: Normoactive bowel sounds, soft non-tender and non-distended Extremities: Spontaneous peripheral movement of all extremities Neurologic: Normal tone, no clonus, spontaneous and purposeful movement noted. Skin: Warm, pink, no lesions noted. **Resp support:** Room air, start date 03/11/YYYY, day-1 **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Gavage feeding, start date 03/05/YYYY Hypoalbuminemia, start date 03/06/YYYY Hypomagnesemia, neonatal, start date 03/08/YYYY	1534–1540, 1501–1507

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		History: Made nil per oral upon admission Acidosis that improved over the first 24 hours Moderate anasarca Day of life #12: Full enteral feeds via N/G, IVF stopped Assessment: History of HIE with severe metabolic acidosis, now resolved Anasarca/fluid overload, resolving Hypertriglyceridemia, resolved Hypomagnesemia, resolved LFTs normalizing Growth: Still 265gms above BWT at 10 days of life Plan: Goal TG 160, continue nipple/gavage Monitor growth ST/OT involved **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male with severe HIE status post hypothermia therapy Plan: Developmentally appropriate cares **Respiratory:** Respiratory failure onset < = 28 days age, start date 02/26/YYYY Pulmonary insufficiency/immaturity, start date 03/10/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Day of life #13: To room air Assessment: Acute respiratory failure from perinatal birth depression, improved with mild pulmonary insufficiency, stable in room air. Plan: Continue on room air. **Cardiovascular:** Patent Ductus Arteriosus Patent foramen ovale Tricuspid regurgitation	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Plan: Monitor with vitals and clinically Echo prior to discharge, sooner if symptoms worsen **Hematology:** Assessment: Subgaleal hematoma, resolving Mild coagulopathy resolved Thrombocytopenia resolved Plan: Follow clinically Hematology follow-up with Dr. XXXX 2 months after discharge for thrombophilia evaluation, ok to circumcise in NICU prior to discharge **Neurology:** Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized. History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE 03/11: Weaned Trileptal to 15mg/kg/day x 1 week Assessment: Severe HIE status post cooling Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage. PHB level 48 on 3/5, last seizures on 3/2. Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Continue Keppra 03/11-Eaned Trileptal to 15mg/kg/day x 1 week 03/18-Will wean Trileptal to 10 mg/kg/day x 1 week 03/25-Will wean Trileptal to 5 mg/kg/day x 1 week then stop Will plan to discharge home Keppra + what is left of Trileptal wean per Dr. XXXX with follow up with ped neurology in 1 month Plan to repeat a formal EEG prior to discharge home (Sometime week of 3/11 questionable) Continue discussion with Dr. XXXX Neuro Continue as needed Ativan for if breakthrough seizures	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Developmental delay: At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Hypotonia with clinical seizures, now controlled on multiple AEDs. Plan: Qualifies for infant toddler program High risk NICU follow-up clinic Developmentally appropriate cares **Patient contract:** Parents updated frequently.	
03/12/YYYY	Facility/Provider Name	**Lactation note:** Mom doing well at maintaining pumped breast milk supply and lots of skin to skin. No questions or concerns.	696
03/12/YYYY	Facility/Provider Name	**Daily progress notes:** **Day of life:** 15. Now tolerating full enteral nasogastric feeds. In room air since 3/10 morning. No clinical seizure activity noted since 3/2 and off Phenobarbital since 3/5. Trileptal weaned to 15mg/kg/day starting 3/11, next wean on 3/18. **Physical examination:** Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Bed type: Open crib General: Alert and active this morning, with normal tone in no acute distress. Head/neck: Anterior fontanel open and flat. NGT present. No significant posterior scalp and posterior temple scalp bogginess. Abdomen: Normoactive bowel sounds, soft non-tender and non-distended Genitalia: Normal genitalia for age. Tanner 1. Extremities: Spontaneous peripheral movement of all extremities Neurologic: Normal tone, no clonus, spontaneous and purposeful movement noted.	1529–1533, 1488–1493

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Skin: Warm, pink, no lesions noted. **Resp support:** Room air, start date 03/11/YYYY, day-2 **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Gavage feeding, start date 03/05/YYYY Hypoalbuminemia, start date 03/06/YYYY Hypomagnesemia, neonatal, start date 03/08/YYYY History: Made nil per oral upon admission Acidosis that improved over the first 24 hours Moderate anasarca Day of life #12: Full enteral feeds via N/G, IVF stopped Assessment: History of HIE with severe metabolic acidosis, now resolved Anasarca/fluid overload, resolving Hypertriglyceridemia, resolved Hypomagnesemia, resolved LFTs normalizing Growth: Still 265gms above BWT at 10 days of life Plan: Goal TG 160, continue nipple/gavage Monitor growth ST/OT involved **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male with severe HIE status post hypothermia therapy Plan: Developmentally appropriate cares **Respiratory:** Respiratory failure onset < = 28 days age, start date 02/26/YYYY Pulmonary insufficiency/immaturity, start date 03/10/YYYY History: Infant with respiratory failure related to significant acidosis, CNS dysfunction Day of life #13: To room air	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Assessment: Acute respiratory failure from perinatal birth depression, improved with mild pulmonary insufficiency, stable in room air. Plan: Continue on room air. **Cardiovascular:** Patent Ductus Arteriosus Patent foramen ovale Tricuspid regurgitation Plan: Monitor with vitals and clinically Echo prior to discharge, sooner if symptoms worsen **Hematology:** Assessment: Subgaleal hematoma, resolving Mild coagulopathy resolved Thrombocytopenia resolved Plan: Follow clinically Hematology follow-up with Dr. XXXX 2 months after discharge for thrombophilia evaluation, ok to circumcise in NICU prior to discharge **Neurology:** Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY showed normal cranial ultrasound. Scalp region not visualized. History: Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE 03/11: Weaned Trileptal to 15mg/kg/day x 1 week Assessment: Severe HIE status post cooling Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage. PHB level 48 on 3/5, last seizures on 3/2. Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Continue Keppra 03/11-Eaned Trileptal to 15mg/kg/day x 1 week 03/18-Will wean Trileptal to 10 mg/kg/day x 1 week 03/25-Will wean Trileptal to 5 mg/kg/day x 1 week then stop Will plan to discharge home Keppra + what is left of Trileptal wean per Dr. XXXX with follow up with ped neurology in 1 month Plan to repeat a formal EEG prior to discharge home (Sometime week of 3/11 questionable) Continue discussion with Dr. XXXX Neuro Continue as needed Ativan for if breakthrough seizures **Developmental delay:** At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Hypotonia with clinical seizures, now controlled on multiple AEDs. Plan: Qualifies for infant toddler program High risk NICU follow-up clinic Developmentally appropriate cares **Patient contract:** Parents updated frequently.	
03/13/YYYY	Facility/Provider Name	**Daily progress notes:** **Day of life:** 16. Now tolerating full enteral nasogastric feeds. In room air since 3/10 morning. No clinical seizure activity noted since 3/2 and off Phenobarbital since 3/5. Trileptal weaned to 15mg/kg/day starting 3/11, next wean on 3/18. No acute events. Doing well. **Physical examination:** Intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring. Bed type: Open crib General: Alert, feeding in nurses in arms in no acute distress. Head/neck: Anterior fontanel open and flat. NGT present. No significant posterior scalp and posterior temple scalp bogginess. Abdomen: Normoactive bowel sounds, soft non-tender and non-distended	1482–1487

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Genitalia: Normal genitalia for age. Tanner 1 male. Extremities: Spontaneous peripheral movement of all extremities Neurologic: Normal tone, no clonus, spontaneous and purposeful movement noted. Skin: Warm, pink, no lesions noted. **Resp support:** Room air, start date 03/11/YYYY, day-3 **Assessment/plan:** **GI nutrition:** Feeding problems < = 28 days, start date 02/26/YYYY Gavage feeding, start date 03/05/YYYY Hypoalbuminemia, start date 03/06/YYYY Hypomagnesemia, neonatal, start date 03/08/YYYY Assessment: History of HIE with severe metabolic acidosis, now resolved Anasarca/fluid overload, resolving Hypertriglyceridemia, resolved Hypomagnesemia, resolved LFTs normalizing Growth: Still 265gms above BWT at 10 days of life Plan: Goal TG 160, continue nipple/gavage Monitor growth ST/OT involved **Gestation:** Term infant, start date 02/26/YYYY History: Term AGA male infant Assessment: Term AGA singleton male with severe HIE status post hypothermia therapy Plan: Developmentally appropriate cares **Cardiovascular:** Patent Ductus Arteriosus Patent foramen ovale Tricuspid regurgitation Plan: Monitor with vitals and clinically	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Echo prior to discharge, sooner if symptoms worsen **Hematology:** Assessment: Subgaleal hematoma, resolving Mild coagulopathy resolved Thrombocytopenia resolved Plan: Follow clinically Hematology follow-up with Dr. XXXX 2 months after discharge for thrombophilia evaluation, ok to circumcise in NICU prior to discharge **Neurology:** Hypotonia newborn, start date MM/DD/YYYY Hypoxic ischemic encephalopathy (severe), start date MM/DD/YYYY Subgaleal hemorrhage, start date MM/DD/YYYY Assessment: Severe HIE status post cooling Seizure; recalcitrant to therapy. Requiring triple antiepileptic coverage. PHB level 48 on 3/5, last seizures on 3/2. Multifocal ischemic injury (strokes) primarily involving MCA distribution At risk for severe, permanent CNS injury Plan: Monitor closely for breakthrough seizures Continue Keppra 03/11-Eaned Trileptal to 15mg/kg/day x 1 week 03/18-Will wean Trileptal to 10 mg/kg/day x 1 week 03/25-Will wean Trileptal to 5 mg/kg/day x 1 week then stop Will plan to discharge home Keppra + what is left of Trileptal wean per Dr. XXXX with follow up with ped neurology in 1 month Plan to repeat a formal EEG prior to discharge home (Sometime week of 3/11 questionable) Continue discussion with Dr. XXXX Neuro Continue as needed Ativan for if breakthrough seizures **Developmental delay:** At risk for developmental delay: History: At very high risk for severe permanent neurodevelopmental delays/injury Assessment: Hypotonia with clinical seizures, now controlled on multiple AEDs.	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Plan: Qualifies for infant toddler program High risk NICU follow-up clinic Developmentally appropriate cares **Patient contract:** Parents updated frequently.	
03/15/YYYY	Facility/Provider Name	**Lactation note:** Reviewed transitioning to exclusive breast feeding at home after NICU stay, given information on outpatient lactation services.	634
03/15/YYYY	Facility/Provider Name	**Procedure report:** **Pre-procedure diagnosis:** Uncircumcised male infant. **Post-procedure diagnosis:** Circumcised male infant **Procedure performed:** Circumcision. **Post-procedure details:** Tolerated procedure well, dressing applied, tissue discarded, care discussed with family. **Complications:** None.	1472–1473, 635–637
03/15/YYYY	Facility/Provider Name	**Discharge summary note:** **Admission date:** 02/26/YYYY. **Discharge date:** 03/15/YYYY. **Gestation age:** 43, 4/7 weeks. **Admission history and procedures:** 3.84kg, 41 0/7 weeks, appropriate for gestational age baby boy born to a G2, P1 never married mother, EDC 03/25/YYYY (dates). Labor began on MM/DD/YYYY. Rupture of membranes occurred on MM/DD/YYYY. Infant born by emergency cesarean delivery at 2313 hrs on MM/DD/YYYY for a viable baby boy. APGARs 1/3/, born at St. John's Medical Center. Transported from St. John's Medical Center. Maternal complications: Post-dates > 40 weeks, prolonged second stage > 2 hours. Maternal medications: Antibiotics, Epidural, General anesthesia. Screen: Chlamydia unknown, Cytomegalovirus unknown, E. Coli unknown, Gonorrhea Group B strep unknown, Hepatitis B unknown, Herpes Genitalis unknown, HIV infection Unknown, Mycoplasma unknown, Rubella immune unknown, Rubella non-immune unknown, Syphilis unknown, Toxoplasmosis unknown. Perinatal comment: Induction for post-dates. No significant prenatal history. Mother ruptured for 10 hours and spiked fever of 101 towards end of laboring. Antibiotics given. Pushed for 5 hours with vacuum extraction attempts x 6 and then delivered via cesarean section. History of HSV, given Valtrex. Other maternal labs unknown at this time. Infant discharged home with	622–624

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		parent. **Diagnosis summary (all):** 37 or more completed weeks of gestation-Onset 02/26/YYYY. **Hyperbilirubinemia summary:** Phototherapy was first initiated on 02/27/YYYY and last discontinued on 03/03/YYYY. During that time, the infant received 5 days of phototherapy. The highest total bilirubin ever was 4.5 recorded on 02/27/YYYY. The highest direct bilirubin ever was 0.5 recorded on 03/02/YYYY. The last direct bili was 0.4 recorded on 03/03/YYYY. The last total bili was 0.5 recorded on 03/06/YYYY. **Medication summary:** Keppra. **Oxygen therapy summary:** As of 02/26/YYYY at 07:00 (Day of life #2) the infant was on either CPAP support or intubated and being given ventilator support. The last day the infant received ventilator or CPAP support was 3/6/19. The following is a summary of all O2 therapy that was provided: Bubble CPAP (BCPAP): 2 days 23 hours (Max O2: 45%) (Max O2 > 2 hours: 32%) High Humidity Nasal Cannula (HHNC): 2 days 22 hours (Max O2: 25%) (Max O2 > 2 hours: 25%). Invasive Ventilation (Invasive Ventilation): 5 days 8 hours (Max O2: 100%) (Max O2 > 2 hours: 100%). Low flow nasal cannula (blended O2) (LFNC (blended)): 1 day (Max O2: 23%) (Max O2 > 2 hours: 23%). PPV with ETT (PPV (ETT)): 1 hour (Max O2: 100%). Total time on oxygen therapy: 12 days 6 hours (Max O2: 100%) (Max O2 > 2 hours: 100%). **State screens:** Submitted: 02/28/YYYY: No results reviewed. Submitted: 02/26/YYYY: No results reviewed. **Referrals:** Dr. XXXX (Pediatrics)-Regional Hearing and Balance (Audiology)-9 Months after discharge Dr. XXXX (Neurology)-2-months after discharge	
03/15/YYYY	Facility/Provider Name	**Discharge summary:** **Admission date:** 02/26/YYYY. **Discharge date:** 03/15/YYYY. **Admit date:** 02/26/YYYY **Birth date:** MM/DD/YYYY **Birth gestation:** 41 weeks, 1 day **Birth weight:** 3840 (gms) 26-50%tile **Birth length:** 51 (cm) 26-50%tile **Day of life:** 18. **Birth head circumference:** 39 cm 91-95%tile	423–433

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Disposition: Discharged. Discharged home under care of parents. **Discharge weight:** 3930 gms **Discharge length:** 51 cm **Discharge head circumference:** 39 cm 91-95%tile **Discharge post-mens age:** 43 weeks, 5 days **Discharge follow-up:** Jackie Hardenbrook-Teton Valley Pediatrics, Jackson, WY Dr. XXXX cardiology-if echo remains abnormal questionable-Appt in 2 months questionable Peter Castellanos-Peds neurology-Appt in 1 month after discharge NICU high risk clinic-6 to 12 months after discharge **Infant toddler referral:** Dr. XXXX Hematology/bleeding disorder-2 months after discharge **Discharge respiratory support:** Room air. **Discharge meds:** Trileptal: Intent to wean off over the next two weeks Levetiracetam **Discharge fluids:** Enfamil Lipil Breast Milk-Term **New born screening:** 02/28/YYYY-Done-Pending results 02/26/YYYY-Done-Sennt from EIRMC **Hearing screening:** 03/15/YYYY **Immunization:** Hep B MM/DD/YYYY, given at St. Johns prior to transfer **Active diagnosis:** At risk for developmental delay-Start date 02/26/YYYY Bruising-Newborn-Start date 02/26/YYYY Feeding problems <=28 days-Start date 02/26/YYYY-Scalp subgaleal hemorrhage Gavage feeding-Start date 03/05/YYYY Hypoalbuminemia-Start date 03/06/YYYY Hypoxic-ischemic encephalopathy (severe)-Start date MM/DD/YYYY Patent Ductus Arteriosus (PAD)-Start date 02/26/YYYY Patent Foramen Ovale (PFO)-Start date 02/26/YYYY Subgaleal hemorrhage-Start date MM/DD/YYYY	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Term Infant-Start date 02/26/YYYY Tricuspid Regurgitation-Start date 03/01/YYYY **Resolved diagnosis:** Acidosis onset <=28 days age-Start date MM/DD/YYYY Acidosis onset <=28 days age-Start date 02/26/YYYY Adrenal insufficiency-Start date 03/03/YYYY, clinically At risk for intraventricular hemorrhage-03/05/YYYY, clinically Bandemia-Start date 02/26/YYYY Bradycardia-Neonatal-Start date 02/26/YYYY, secondary to cooling Coagulopathy-Newborn-Start date 02/26/YYYY Depression at birth-Start date MM/DD/YYYY Electroencephalogram-Abnormal-Start date 02/26/YYYY Hypomagnesaemia-Neonatal-Start date 03/08/YYYY Hypothermia-Newborn-Start date 02/26/YYYY, therapeutic hypothermia x 72 hours on admission Hypotonia-Newborn-Start date MM/DD/YYYY Infectious screen <=28 days-Start date 02/26/YYYY Pain management-Start date 02/27/YYYY Pulmonary-Start date 03/10/YYYY Insufficiency/immaturity respiratory failure onset <= 28 days age-Start date 02/26/YYYY Sepsis-newborn-suspected-Start date 02/26/YYYY **Maternal history:** Moms age: 34 Blood type: A positive G: 2, P: 1 RPR/serology: Non-reactive HIV: Negative Rubella: Immune GBS: Negative HBsAg: Negative EDC-OB: 02/18/YYYY Prenatal care: Yes Mom's first name: Katherine Mom's last name: Cheever **Family history:** Mom and dad recently married. Dad's first child. Mother with history of HSV. No family history of congenital disorders. Complications during pregnancy, labor or delivery: Yes. Placental abruption, peri-natal Depression Maternal steroids: No Medications during pregnancy or labor: Yes **Pregnancy comment:** Mother with a history of HSV. No active lesions at time of delivery.	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Delivery: Date of birth: MM/DD/YYYY. Time of birth: 2313 hrs. Live births: Single Birth order: Single rupture of membrane. Prior to delivery: Yes. Date: MM/DD/YYYY at 1300 hrs Fluid at delivery: Clear Birth hospital: St. Johns Medical Center Jackson, Wyoming presentation: Vertex Anesthesia: Epidural Delivery type: Cesarean section **Procedures/medications at delivery:** NP/OP suctioning, Monitoring vitals, supplemental O2 Intubation on 02/26/YYYY, 4.0 ETT placed. Positive pressure VE 02/26/YYYY. 25 minutes at St. Johns prior to ETT **APGARs:** 1 min 1, 5 min 3 **Others at delivery:** XXXX, M.D. **Labs and delivery comment:** SOL. SROM (Spontaneous Rupture of Membrane). Failure to progress. Vacuum applied once. Used with 2 sets of contractions (three pushes each (6 total)). Decision made to proceed with cesarean sections. Maternal fever (101) just prior to delivery. Amp and Gent given x 1 prior to delivery. **Admission comment:** Admitted following transport from St. Johns for enrollment into therapeutic hypothermia protocol. **Vitals:** Temp 37, HR 144 bpm, RR 45, BP 71/41, mean BP 50, Spo2 94%. **Discharge physical examination:** Bed type: Open crib General: Awake, feeding in moms arms in no acute distress Head/Neck: AFSF. No significant scalp and bilateral temple scalp bogginess. MMM without cyanosis. Genitalia: Normal genitalia for age. Tanner 1 male. Extremities: Spontaneous peripheral movement of all extremities Neurological: Normal tone, no clonus, spontaneous and purposeful movement noted Skin: Warm, pink, healing scab on crown without associated edema or erythema **GI/Nutrition:** Feeding problems <=28 days-Start date 02/26/YYYY	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Acidosis onset <=28 days age-Start date 02/26/YYYY, end date 03/05/YYYY Gavage feeding-Start date 03/05/YYYY Hypoalbuminemia-Start date 03/06/YYYY Hypomagnesemia-neonatal-Start date 03/08/YYYY, end date 03/10/YYYY **History:** **Made nil per oral upon admission** **Acidosis that improved over the first 24 hours** **Moderate anasarca** DOL #1: TPN (Fluid restriction) and nil per oral DOL #5: Trophic feeds begun and advanced DOL #10 : Modified barium swallow no aspiration DOL #12: Full enteral feeds via nasogastric, IVF stopped Assessment: History of HIE, take full volumes orally without difficulty Monitor growth as outpatient Term infant, start date 02/26/YYYY **Term AGA male infant:** Assessment: Term AGA singleton male with severe HIE (Hypoxic Ischemic Encephalopathy) status post hypothermia therapy Plan: Developmentally appropriate cares Diagnosis: Acidosis onset <= 28 days age, start date MM/DD/YYYY, end date 03/05/YYYY Hypothermia-newborn, start date 02/26/YYYY, end date 03/05/YYYY Comment: Therapeutic hypothermia x 72 hours on admission **Newborn with profound metabolic acidosis from perinatal depression:** **Acidosis (metabolic); resolved:** 03/09: Weaned to open crib. Assessment: Temps stable in open crib Plan: Monitor temps as indicated as outpatient **Infant with respiratory failure related to significant acidosis, CNS dysfunction:** Day of life #0-6: Mechanical ventilation (SIMV and Spontaneous) Day of life #6 (3/3) : Extubated to BCPAP Day of life #9: HFNC Day of life #13 : Room air Assessment: Comfortable in room air Plan: Continue in room air Monitor for respiratory distress as outpatient	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Cardiovascular: Secondary to cooling Patent Ductus Arteriosus on 02/26/YYYY Patent Foramen Ovale on 02/26/YYYY Tricuspid regurgitation on 03/01/YYYY **Perinatal birth depression with evidence of myocardial injury by Troponin levels:** Day of life #0: Dopamine, Milrinone begun Day of life #1: Echo: Elevated PAP (peri-systemic), small PDA, L-->R PFO, adequate function, normal structure, arch poorly visualized Day of life #4: Milrinone, Dopamine weaned off. Repeat echo: Continue to show PPHN TR of 77mmHg. L--R PFO, bidi small PDA, normal function, moderate TR noted Day of life #6: hydrocortisone off Day of life #17: Echo: PFO, otherwise normal Assessment: Normotensive Normal Echo (03/14, day of life #17) Plan: No further follow up warranted **Infectious disease:** Infectious screen <=28 days, start date 02/26/YYYY, end date 03/05/YYYY Bandemia, start date 02/26/YYYY, end date 03/05/YYYY Sepsis-newborn-suspected, start date 02/26/YYYY, end date 03/05/YYYY History: At risk for bacterial process given HIE insult and ongoing cooling. Culture negative clinical sepsis s/p Amp + Ceftaz antibiotics therapy for 7 days with clinical improvement now off pressor therapy and bandemia resolved. Initial blood culture final negative. Assessment: No evidence of infectious process during hospitalization Plan: Monitor clinically **Hematology:** Bruising-newborn, start date 02/26/YYYY Comment: Scalp subgaleal hemorrhage Coagulopathy-newborn, start date 02/26/YYYY, end date 03/05/YYYY **History:** Newborn male with concerns for unstable/expanding subgaleal hematoma in the face of a metabolic acidosis and hypothermia. Hemostasis obtained through combination of blood products, acidosis correction and Tranexemic acid. 03/06, Thrombophilia evaluation will be needed at some point given significant subgaleal and MCA distribution ischemic stroke on MRI - - discussed today with Dr. XXXX Hematology who agreed with holding off on any workup currently as normal levels can be difficult to interpret especially given blood product administration and being a newborn therefore , unless there continues to be concern for abnormal bleeding times then he would recommend work up outpatient with parental	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		testing to aid in more complete evaluation. Dr. XXXX also agreed it is safest to do circumcision in NICU prior to discharge. Assessment: Subgaleal hematoma resolved Mild coagulopathy resolved Thrombocytopenia resolved Mild hyperbilirubinemia resolved Plan: Follow clinically Hematology follow up with Dr. XXXX 2 months after discharge for thrombophilia evaluation **Neurology:** Depression at birth, start date MM/DD/YYYY, end date 03/05/YYYY Electroencephalogram-Abnormal, start date 02/26/YYYY, end date 03/05/YYYY Hypotonia-newborn, start date MM/DD/YYYY, end date 03/10/YYYY Hypoxic-Ischemic Encephalopathy (severe), subgaleal hemorrhage, start date MM/DD/YYYY Cranial ultrasound on 02/26/YYYY. Normal cranial ultrasound. Scalp region not visualized. MRI dated 03/02/YYYY: Acute ischemic injury of right middle cerebral artery area, foci of ischemic injury present with in right deep nuclei and internal capsule. Ischemic injury is seen within the descending cortical spinal tract. Some subdural blood products along right tentorium and right occipital and cerebellar lobe and right lateral ventricle along the superior margin of the choroid plexus. **History:** Perinatal depression resulting in severe HIE on TH protocol with abnormal aEEG and PE 02/26: Seizure activity noted (rhythmic fist clenching, tongue thrusting along with wake EEG evidence). Phenobarbital load and maintenance begun with abatement. 03/01: Following warming, seizure activity noted (same as before). Phenobarbital mini -bolus given (level was checked and found to be 39). Keppra load given and maintenance begun (along with prn Ativan). Seizures resolved. 03/02: New seizures developed. Trileptal added. Seizures resolved. 03/02: MRI: Ischemic parenchymal injury involving right MCA territory (Right frontoparietal region, insula, and lateral occipital, deep nuclei internal capsule). Some subdural hematomas noted on falx and cerebellum. Subgaleal hematoma also noted. 03/05: Stopped Phenobarbital 03/11: Trileptal wean begun 03/15: EEG (to establish baseline for outpatient follow-up): By verbal report, no obvious abnormality noted.	

DATE	FACILITY/ PROVIDER	MEDICAL EVENTS	PDF REF
		Assessment: History of severe HIE History of ischemic stroke (Right MCA distribution (primarily)) History of subdural hemorrhage (small) S/p Therapeutic hypothermia Post-ischemic seizures **Plan**: Monitor closely for breakthrough seizures continue Keppra as outpatient **Continue Trileptal wean**: 03/11: Wean Trileptal to 15mg/kg/day x 1 week 03/18: Wean to 10 mg/kg/day x 1 week 03/25: Wean to 5 mg/kg/day x 1 week, then stop Will plan to discharge home on Keppra and continue Trileptal wean per Dr. XXXX with follow up with ped neurology in 2 months Plan to repeat a formal EEG prior to d/c home (sometime week of 3/11) **At risk for intraventricular hemorrhage:** Start date 03/05/YYYY, end date 03/06/YYYY *Cranial ultrasound dated 02/26/YYYY & MRI of head dated 03/02/YYYY reviewed.* Perinatal depression. History of vacuum application (x 6 pulls). No pop-offs, significant/severe scalp edema/bogginess c/w subgaleal hematoma. Assessment: History of subdural and subgaleal hemorrhages Plan: No follow-up imaging recommended at time of discharge At risk for developmental delay, start date 02/26/YYYY **At very high risk for severe permanent neurodevelopmental delays/injury:** Assessment: Seizures now controlled on AEDs Weaning AEDs toward monotherapy Plan: Qualifies for infant toddler program High risk NICU follow up clinic Developmentally appropriate cares **Endocrine:** Adrenal insufficiency clinically, start date 03/03/YYYY, end date 03/05/YYYY. **Difficult delivery with perinatal depression warranting therapeutic hypothermia:** Day of life 0-5: Hydrocortisone.	

<table>
<tr><th>DATE</th><th>FACILITY/ PROVIDER</th><th>MEDICAL EVENTS</th><th>PDF REF</th></tr>
<tr><td></td><td></td><td>
Assessment: Transient need for supplemental glucocorticoid therapy
Plan: Monitor for endocrinopathy

Respiratory support:

<table>
<tr><th>Resp support</th><th>Start date</th><th>Stop date</th><th>Duration</th><th>Comment</th></tr>
<tr><td>Ventilator</td><td>MM/DD/YYYY</td><td>03/03/YYYY</td><td>7</td><td>Intubated at St. Johns. 4.0 ETT placed. Minimal ventilator setting</td></tr>
<tr><td>Nasal CPAP</td><td>03/03/YYYY</td><td>03/06/YYYY</td><td>4</td><td></td></tr>
<tr><td>High flow nasal cannula delivering CPAP</td><td>03/06/YYYY</td><td>03/09/YYYY</td><td>4</td><td></td></tr>
<tr><td>Nasal cannula</td><td>03/09/YYYY</td><td>03/10/YYYY</td><td>2</td><td></td></tr>
<tr><td>Room air</td><td>03/11/YYYY</td><td></td><td>5</td><td></td></tr>
</table>

Procedures:
Car seat test on 03/15/YYYY-Passed.
Circumcision done on 03/15/YYYY by XXXX, M.D. with no complications.
MRI on 03/02/YYYY
Cranial ultrasound, start date 02/26/YYYY, stop date 03/04/YYYY, duration 7
Echocardiogram, start date 02/26/YYYY, stop date 03/04/YYYY, duration 7
Echocardiogram, start date 03/01/YYYY, stop date 03/04/YYYY, duration 4
Positive pressure VE, start date 02/26/YYYY, stop date 02/26/YYYY, duration 1
AEEG, start date 02/26/YYYY, stop date 03/07/YYYY, duration 10
Blood transfusion, start date 02/27/YYYY, stop date 03/02/YYYY, duration 4
Cooling method, start date 02/26/YYYY, stop date 03/01/YYYY, duration 4
Cryoprecipitate, start date 02/26/YYYY, stop date 03/02/YYYY, duration 5
EEG, start date 02/26/YYYY, stop date 03/02/YYYY, duration 5
Fresh Frozen Plasma, start date 02/26/YYYY, stop date 03/02/YYYY, duration 5
Platelet transfusion, start date 02/26/YYYY, stop date 03/02/YYYY, duration 5
UAC, start date 02/26/YYYY, stop date 03/02/YYYY, duration 5
Ultrasound, start date 03/02/YYYY, stop date 03/02/YYYY, duration 1
</td><td></td></tr>
</table>

<table>
<tr><th>DATE</th><th>FACILITY/ PROVIDER</th><th>MEDICAL EVENTS</th><th>PDF REF</th></tr>
<tr><td></td><td></td><td>X-ray, start date 02/26/YYYY, stop date 03/02/YYYY, duration 5
Barium swallow, start date 03/07/YYYY, stop date 03/07/YYYY, duration 1
CVL-Percutaneous, start date 02/26/YYYY, stop date 03/08/YYYY, duration 11
Peripherally inserted, start date 02/26/YYYY, stop date 02/26/YYYY, duration 1
Intubation, start date 02/26/YYYY, stop date 03/03/YYYY, duration 6

Intake/output:
Enfamil Lipil 20cal/ox, Amt 45
Breast milk-term, Amt 546

No of voids: 9.

Stools: 6.

Medications:
Trileptal: Intent to wean off over the next two weeks, start date 03/02/YYYY, duration 14
Levetiracetam, start date 03/01/YYYY, duration 15

Inactive:

<table>
<tr><th>Medications</th><th>Start date</th><th>Stop date</th><th>Duration</th></tr>
<tr><td>Ampicillin</td><td>02/26/YYYY</td><td>03/05/YYYY</td><td>8</td></tr>
<tr><td>Gentamicin</td><td>02/26/YYYY</td><td>02/27/YYYY</td><td>2</td></tr>
<tr><td>Morphine Sulfate</td><td>02/26/YYYY</td><td>03/05/YYYY</td><td>8</td></tr>
<tr><td>Midazolam</td><td>02/26/YYYY</td><td>03/03/YYYY</td><td>6</td></tr>
<tr><td>Milrinone</td><td>02/27/YYYY</td><td>03/01/YYYY</td><td>3</td></tr>
<tr><td>Dopamine</td><td>02/27/YYYY</td><td>03/01/YYYY</td><td>3</td></tr>
<tr><td>Ceftazidime</td><td>02/27/YYYY</td><td>03/05/YYYY</td><td>7</td></tr>
<tr><td>Phenobarbital</td><td>02/26/YYYY</td><td>03/05/YYYY</td><td>8</td></tr>
<tr><td>Acetaminophen</td><td>02/26/YYYY</td><td>02/28/YYYY</td><td>3</td></tr>
<tr><td>Lorazepam</td><td>03/02/YYYY</td><td>03/13/YYYY</td><td>12</td></tr>
<tr><td>Hydrocortisone IV</td><td>02/27/YYYY</td><td>03/03/YYYY</td><td>5</td></tr>
</table>

Parental contact: Parents updated frequently. Felt empowered to assume care.</td><td></td></tr>
</table>

Other records:

Consent, blank pages, assessment.

PDF Ref: *402–404, 410–420, 406, 452, 1634–1641, 1686–1690, 1692, 1694–1695.*

****Reviewer's comment:*** *All the significant details are included in the chronology. These records have been reviewed and do not contain any significant information. Hence not elaborated.*