Arkansas Neonatal and Maternal Levels of Care Regulations for Levels 1, 2, 3A, 3B and 4

	LEVELS OF CARE				
Neonatal <u>and</u> Maternal	Level I (Basic) Community-Based Maternal- Newborn Service	Level II (Specialty) Community-Based Maternal-Newborn Service with a Special Care Nursery	Level III A (Subspecialty) Perinatal Care Center and Neonatal Intensive Care Unit	Level III B (Subspecialty) Perinatal Care Center and Neonatal Intensive Care Unit with Neonatal Subspecialty Service	<u>Level IV</u> Perinatal care center or Freestanding Pediatric Hospital with Neonatal Subspecialty Service
	PATIENTS POPULATION				
Minimum Number of VLBW or infants <32 weeks gestation per year	N/A	N/A	25* *The volume requirement should be based on the previous year, averaged over the previous 2 years, or if the volume requirement would reasonably be expected to be reached in the next year	75* *The volume requirement should be based on the previous year, averaged over the previous 2 years, or if the volume requirement would reasonably be expected to be reached in the next year	N/A
Neonatal					
Gestation/weight/risk	Level I Greater or equal to 35 weeks gestation in pregnancies unlikely to deliver before 35 weeks gestation that have a low likelihood of neonatal or maternal morbidity. Care of the physiologically stable infants and normal newborns	Level II Greater than 32 weeks gestation and weighing more than 1,500 grams (uncomplicated preterm infant)	Level IIIA Level II + 26 weeks or greater gestation and weighing 750 grams or more	Level IIIB Level III A + Less than 26 weeks gestation or weighing less than 750 grams or who have severe or complex illnesses	Level IV All neonates who have severe or complex illnesses
Maternal					
Gestation/weight/risk	Level I Pregnancies > 35 weeks gestation in pregnancies unlikely to deliver before 35	Level II Pregnancies >32 weeks gestation and fetus >1500 grams in selected high-risk	Level III A Pregnancies >25 weeks gestation and fetus >750 grams in women without	Level III B Pregnancies all gestational ages and all maternal conditions, i.e <26 week	<u>Level IV</u> <u>N/A</u>

	weeks gestation that have low likelihood of neonatal or maternal morbidity	pregnancy conditions judged unlikely to deliver before 33 weeks with low risk of neonatal or maternal morbidity	significant co-morbidities	gestational age, fetus < 750 grams, severe maternal complex illness	
Neonatal	SURGERIES/PROCEDURES				
Intensive care support	Level I Stabilization of sick newborn infants until transfer 1. Somebody trained in NRP will attend every delivery 2. Annual NRP update will be available for training hospital personnel. Surgery: NA	Level II Level I + CPAP as needed and mechanical ventilation for less than 24 hours Surgery: NA	Level III A Level II + CPAP and prolonged mechanical ventilation inhaled nitric oxide (iNO) for those who are not ECMO candidates. Consider consultation and transfer to an ECMO center for high levels of ventilatory support (e,g, an OI >25). Surgery: minor – central line and hernia repair	Level III B Level III A + inhaled nitric oxide (iNO) for those who are not ECMO candidates. Consider consultation and transfer to an ECMO center for high levels of ventilatory support (e,g, an OI >25). Surgery: minor – central line and hernia repair. Surgical consultation may be obtained via telemedicine or telephone as appropriate	Level IV All patients requiring surgery including complex surgery by surgical subspecialists including cardiovascular, urological, neurological, otolaryngology and pediatric orthopedic, and GI surgery and ECMO (Extracorporeal membrane oxygenation) and cardiac surgery.
Maternal					
Triage System	Level I Experienced obstetric Registered Nurse with physician availability within 30 minutes	Level II Experienced obstetric Registered Nurse with physician availability within 30 minutes	Level III A Experienced obstetric Registered Nurse with physician available for consult or directly providing service. Midlevel care provider (CNM, APN, RNP, or PA) or physician is available 24/7 within 30 minutes to triage patients transferred from lower level health care facility.	Level III B Experienced obstetric Registered Nurse with physician available in hospital for consult or directly providing service. Midlevel care provider (CNM, APN, RNP, or PA) or physician is available 24/7 in house to triage patients transferred from lower level health care	Level IV N/A

				facility.		
Cesarean Section	Level I Within 30 minutes of decision and appropriate to the current clinical situation	Level II Within 30 minutes of decision and appropriate to the current clinical situation	Level III A Within 30 minutes of decision and appropriate to the current clinical situation	Level III B Within 30 minutes of decision and appropriate to the current clinical situation	<u>Level IV</u> N/A	
Intensive Care Support	No	No	No	Required (does not require a dedicated obstetric unit)	Required (does not require a dedicated obstetric unit)	
	HOSPITAL ORGANIZATION					
Neonatal and Maternal						
Organization	 The hospital will commit to the Arkansas Department of Hea clinical outcome data as defined 	al patients. This commitment s ospital agrees to meet the Arka patients shall receive medical c uses standards by board resolu alth. Participation in the Arkansa	shall be demonstrated by: ansas Department of Health S are commensurate with the le tion and designate a perinata as Perinatal System Standard ent of Health as appropriate fo	tandards for its specific level of vel of the hospital's designation. I budget to commit to the standa Is as described by this documen r system and quality manageme	designation. rds designated by the t including submission of	
Neonatal			far Daria atal Cara 7 th ad (A)			
Transport	 <u>All Levels will conform to the standards set forth in Guidelines for Perinatal Care, 7th ed (AAP, ACOG and MOD, 2012, pp 87-91). Additionally:</u> Hospital nurseries will communicate and facilitate transfer to the most appropriate level of care. Transfer agreements will be in place for transport Ensure a provider's continuing responsibility for care until transport team assumes full responsibility. Provide communication (as defined by memorandum of transfer by EMTALA) regarding patient care at transfer. If maternal or neonatal air transports are accepted, then the hospital shall have a heliport, helipad, or access to a helicopter landing site near the hospital. Patients whose condition has stabilized and no longer require specialized services should be considered for transporting back to the referring hospital. 					
NICU Transition and Discharge	Level I Must have a relationship or memorandum of understanding with a NICU follow-up clinic	Level II Must have_a relationship or memorandum of understanding with a NICU follow-up clinic	Level III A Must have a relationship or memorandum of understanding with a NICU follow-up clinic	Level III B. Must have a relationship or memorandum of understanding with a NICU follow-up clinic	Level IV Must have a NICU follow- up clinic within the hospital system	

Education for the		Level II	Level III A	Level III B	Level IV
Region: The staff of regional centers shall		N/A	N/A	N/A	Requirement for regional perinatal center:
provide perinatal educational programs in both maternal and neonatal care in the region on a regular basis					 Review major perinatal conditions, their medical treatment and nursing care for the region
					2. Review of perinatal complications via chosen outcomes for the region with input by the Arkansas Department of Health
					 Feedback to referring hospitals for transports regarding outcomes
Maternal					
Transport	Level I	Level II	Level III A	Level III B	Level IV
	Relationship with Level 2B, 3A or 3B hospitals to facilitate/coordinate maternal transport out; responsibility for care continues until care assumed by receiving hospital -Stabilization and transport for unexpected maternal problems consistent with ACOG guidelines -Establish guidelines /procedures for identifying patients at risk who should be transferred -Transfer via advanced life support if felt appropriate to the clinical situation	Relationship with levels. 3A and B hospitals to facilitate/coordinate maternal transport out; and with Level 1 hospitals for transport in. Responsibility for care continues until care assumed by receiving hospital -Stabilization and transport for unexpected maternal problems consistent with ACOG guidelines -Establish guidelines /procedures for identifying patients at risk who should be transferred and (in case of diversion) for necessary communication from between units -Transfer via advanced life	Relationship with Level 3B hospitals to facilitate/coordinate transport out and with Levels 1 and 2 for transport in; responsibility for care continues by referring hospital until care assumed by receiving hospital - Maintain 24 hour system for reliable comprehensive communications between hospitals for immediate consultation and approval of transports - Establish guidelines /procedures for identifying patients at risk who should be transferred and (in case of diversion)	Relationship with Levels I, 2 and 3 A to facilitate/coordinate maternal transport in; responsibility for care continues by referring hospital until care assumed by receiving hospital - Maintain 24 hour system for reliable comprehensive communications within and between hospitals for immediate consultation and approval of transports and within systems (i.e., EMS) - Involvement in statewide perinatal educational outreach programs in both OB and neonatal specialties in collaboration with the Arkansas Dept of Health	<u>N/A</u>

		support if felt appropriate to the clinical situation	necessary communication from upper level to lower level unit - Involvement in statewide perinatal educational outreach programs in both OB and neonatal specialties in collaboration with the Arkansas Dept of		
			Health		
	UNIT CAPABILITY				
Neonatal					
Equipment, Supplies, and Personnel (The hospital shall demonstrate its capability of providing uncomplicated and complicated neonatal care through written standards, protocols, or guidelines.)	Level I Resuscitation and stabilization of unexpected neonatal problems according to most current Neonatal Resuscitation Program (NRP) guidelines. 1. Selection and management of neonatal patients at a neonatal risk level appropriate to its capability - Antibiotic administration, Glucose management, IV fluid administration, Oxygen administration, Dygen administration, Cardiorespiratory monitoring Provision for parental contact	Level II Level 1 + Capability to include 1. Mechanical ventilation (<24 hrs) and nCPAP. 2. Umbilical lines	Level III A Level II + 1. Capability for prolonged mechanical ventilation 2. May have capability for minor surgery – central line placement or inguinal hernia repair	Level III B Level III A + 1. Management of all neonatal patients, including those requiring advanced modes of neonatal ventilation and life support, pediatric subspecialty services, 3. Development and evaluation of new technology and therapy	Level IV Pediatric subspecialty medical, surgical and anesthesiology services such as pediatric cardio- thoracic open-heart surgery, pediatric organ transplant, urology, and neurosurgery, ECMO, genetics, cardiology, neurology, nephrology, gastroenterology, hematology, infectious disease, immunology, ophthalmology, pulmonary and developmental pediatrics will be available although not necessarily in house. Pediatric anesthesiology will be available in house 24/7

	prior to transfer etc.				
Maternal					
Labor and Delivery	Level I Electronic fetal monitoring capabilities Level I Ultrasound (US) available to delivery area with appropriate support staff and equipment	Level II Electronic fetal monitoring capabilities Level II Ultrasound (US) available to delivery area with appropriate support staff and equipment	Level III A Electronic fetal monitoring capabilities <u>Level III A</u> - US available in L&D -Advanced level ultrasound available on- site	Level III B Electronic fetal monitoring capabilities Level III B - US available in L&D -Advanced level ultrasound available on-site	<u>Level IV</u> <u>N/A</u>
	PERSONNEL				
Neonatal					
Leadership (Medical Director)	Level I Physician board-certified in pediatrics, med-peds, neonatal- perinatal medicine or family medicine	Level II Physician board-certified in pediatrics, med-peds or in neonatal-perinatal medicine	Level III A Physician board-certified in neonatal-perinatal medicine	Level III B Physician board-certified in neonatal-perinatal medicine	Level IV Physician board-certified in neonatal-perinatal medicine
Coverage for Urgent Neonatal Issues	Level I Physician board-certified in pediatrics, med-peds, family medicine, NNP, or APN available within 30 minutes	Level II Pediatrician, med-peds, NNP, family medicine or APN available within 30 minutes*. *Any patient requiring advanced respiratory support (i.e. CPAP, CMV)) or advanced neonatal procedures (i.e., UAC, UVC, PICC) will require direct supervision by health care providers experienced in such care as determined by hospital policy	<u>Level III A,</u> Neonatologist to be available in house within 30 minutes	Level III B Neonatologist, Pediatrician, med-peds, APN, NNP or neonatal fellow to be available in house 24/7. Neonatologist to be available in house within 30 minutes. This requirement to be in place by 2017	Level IV Neonatologist or upper level neonatal fellow to be available in house 24/7.

Subspecialty Staff	Level 1	Level II The hospital shall	Level III A	Level III B	Level IV
	The hospital shall have ready access (e.g. telephone, Telemedicine) to pediatric subspecialty care	have ready access (e.g. telephone, Telemedicine) to pediatric subspecialty care	The hospital shall have on staff an ophthalmologist or the ability to perform ROP screening exams through electronic means with experience in neonatal retinal examination The hospital shall have ready access (e.g. telephone, Telemedicine) to pediatric subspecialty care	The hospital shall have the following pediatric specialists on staff, in active practice and, if needed, in-house within 30 minutes or be urgently available at a closely related institution in person. If not on staff, agreements will be in place by telemedicine or telephone for consultation and/or transfer to a higher level of care.: <u>Pediatric subspecialists</u> : Pediatric surgical subspecialists: pediatric surgery, neurosurgery, cardiothoracic surgery, plastic surgery, urology, ophthalmology and ECMO team, pediatric anesthesiology, and pediatric subspecialists: genetics, cardiology, pulmonology, neurology, and pediatric radiology	The hospital shall have te following pediatric specialties on staff, in active practice, and, if needed, in house within 30 minutes: Pediatric surgical subspecialists: pediatric surgery, neurosurgery, cardiothoracic surgery, orthopedic surgery, plastic surgery, urology, ophthalmology and ECMO team, pediatric anesthesiology, and pediatric subspecialists: genetics, cardiology, pulmonology, nephrology, and pediatric radiology
Nursing Staff Meet the requirements of the most current version of the Guidelines for Perinatal Care (6 th Edition, chapter 2)	2. A registered nurse with demunit 24 hours a day.	onstrated training and experien orns must possess demonstrat nould have specialty certificatio	ice in the assessment, evaluat ed knowledge in observation a n or advanced training and ex		y available to the neonatal appropriate level of care.
Nursing –		Level II NA	Level III A	Level III B	Level IV
Neonatal Surgery			A hospital perinatal program that performs neonatal surgery shall have nurses on staff with	A hospital perinatal program that performs neonatal surgery shall have nurses on staff with special expertise in	A hospital perinatal program that performs neonatal surgery shall have nurses on staff with special expertise in

			special expertise in perioperative management of neonates. Lactation consultation shall be readily available	perioperative management of neonates. Lactation consultation shall be readily available	perioperative management of neonates. Lactation consultation shall be readily available
Nurse-Patient Ratio All levels: Appropriately qualified nurses must be available in adequate numbers to deliver safe and effective care to each patient			1.	1.	1.
Administrative Nursing Staff	Level I BSN optimal; RN as licensed by the State of Arkansas required for programmatic responsibility for the neonatal services	Level II BSN required for programmatic responsibility for the neonatal services with experience in maternal and neonatal services	Level III A Shall have administrative staff, a RN with BSN preferably with a Master's or higher degree in nursing or a health related field and experience with high-risk neonatal nursing who shall have programmatic responsibility for the neonatal nursing services.	Level III B Shall have administrative staff, a RN with BSN preferably with a Master's or higher degree in nursing or a health related field and experience with high-risk neonatal nursing who shall have programmatic responsibility for the neonatal nursing services.	Level IV Shall have administrative staff, a RN with BSN preferably with a Master's or higher degree in nursing or a health related field and experience with high-risk neonatal nursing who shall have programmatic responsibility for the neonatal nursing services
Maternal					
L&D Medical Director	Level I Board certified or active candidate for board certification in Family Practice or OB/GYN	Level II Board certified or active candidate in OB/GYN or Family Practice with demonstrated knowledge and experience in Obstetrics and Current	Level III A Board certified or active candidate in OB/GYN	Level III B Board certified or active candidate in MFM	<u>Level IV</u> <u>N/A</u>

		CME in Obstetrics (see competencies).			
Hospital medical Obstetric Care Providers on Staff	Level I Family practice physician (with cesarean section privileges or general surgeon available for c/s in 30 minutes) Or Ob/Gyn or CNM with C/S back-up; Health care provider to be available in house within 30 minutes	Level II Obstetrician (Board certified or active candidate with ACOG or ACOOG). Health care provider to be available in house within 30 minutes +	Level III A, Obstetrician (Board certified or active candidate with ACOG or ACOOG) + Level 2. Health care provider to be available in house within 30 minutes	Level III B Maternal-Fetal Medicine on staff (Board certified or active candidate with ACOG or ACOOG) + Level 3A; physician is in house 24/7	Level IV N/A
Maternal-Fetal Medicine support	Level I Relationship allowing telephone consultation for immediate support as needed	Level II Formalized working consultative relationship	Level III A Maternal-Fetal Medicine on staff for consultation or co-management with privileges and credentialing (telemedicine consultation with MFM acceptable) All pregnancies <32 weeks gestational; age or <1500 grams will have MFM consultation	Level III B Maternal-Fetal Medicine on staff (practice 75% time at this hospital) for co- management, consultation, or bedside management	Level IV <u>N/A</u>
Administrative Nursing Staff	Level I BSN optimal; RN required for programmatic responsibility for the obstetrical and neonatal nursing services	<u>Level II</u> BSN	<u>Level III A</u> BSN	<u>Level III B</u> BSN	<u>Level IV</u> <u>N/A</u>
	OTHER PERSONEL				
ANESTHESIA					
Neonatal	Level I NA	Level II NA	Level III A If the hospital performs neonatal surgery, then a board-certified	<u>Level III B</u> If the hospital performs neonatal surgery, then a board-certified	Level IV Anesthesiologist with experience in neonatal anesthesia shall be present for every surgery.

			anesthesiologist with experience in neonatal anesthesia shall be present for every surgery.	anesthesiologist with experience in neonatal anesthesia shall be present for every surgery.	
Maternal	Level I Anesthesia available to begin c/s within 30 minutes of notification	Level II Anesthesia available to begin c/s within 30 minutes of notification.	Level III A Level 1 + 24/7 in house anesthesia with board certified or active candidate in anesthesiology or CRNA readily available to delivery area	Level III B Level 1 +Dedicated obstetric anesthesia team	<u>Level IV</u> <u>N/A</u>
RADIOLOGY SERVICES					
Neonatal	Level I – Staff radiologist on call with daily availability	Level II - Staff radiologist on call with daily availability	Level I III A - Staff radiologist on call with daily availability	Level III B The hospital shall have a physician on the medical staff or at a closely related institution with privileges for providing critical interventional radiology services.	Level IV The hospital shall have 24/7 coverage available within 30 minutes. The hospital shall have a physician on the medical staff with privileges for providing critical interventional radiology services.
Maternal	Level I Staff radiologist on call with daily availability	Level II Staff radiologist on call with daily availability	<u>Level I III A</u> -Staff radiologist on call with daily availability	Level III B Staff radiologist on call with daily availability	<u>Level IV</u> <u>N/A</u>
DIETICIAN					
Neonatal	<u>Level I</u> Optional	Level II Optional	Level III A The hospital shall have a registered dietician or other health care professional with knowledge of and experience in neonatal parenteral/enteral management on staff.	Level III B The hospital shall have a registered dietician or other health care professional with knowledge of and experience in neonatal parenteral/enteral management on staff.	Level IV The hospital shall have a registered dietician or other health care professional with knowledge of and experience in neonatal parenteral/enteral management on staff.
Maternal	Level I Consultation available	Level II Consultation available	Level III A Registered dietician on staff	<u>Level III B</u> Registered dietician on staff	<u>Level IV</u> <u>N/A</u>

SOCIAL WORK	KER				
Neonatal	Level 1 The hospital shall have a licensed social worker with experience in psychosocial assessment and intervention with women and their families readily available to the perinatal service.	Level II The hospital shall have a licensed social worker with experience in psychosocial assessment and intervention with women and their families readily available to the perinatal service.	Level III A The hospital shall have a licensed social worker with experience in psychosocial assessment and intervention with women and their families readily available to the perinatal service.	Level III B 1. The hospital shall have a licensed social worker with a Master's degree (MSW - for every 30 beds) and experience in psychosocial assessment and intervention with women and their families dedicated to the NICU, available 7 days / week. 2. Personnel skilled in pastoral care available as needed.	Level IV 1. The hospital shall have a licensed social worker with a Master's degree (MSW - for every 30 beds) and experience in psychosocial assessment and intervention with women and their families dedicated to the NICU, available 7 days / week. 2. Personnel skilled in pastoral care available as needed.
Maternal	Level 1 The hospital shall have a licensed social worker with experience in psychosocial assessment and intervention with women and their families readily available to the perinatal service.	Level II The hospital shall have a licensed social worker with experience in psychosocial assessment and intervention with women and their families readily available to the perinatal service.	Level III A Full time MSW with experience in socioeconomic and psychosocial problems of high risk mothers available 24/7	Level III B Dedicated obstetric/perinatal social worker with experience in socioeconomic and psychosocial problems of high risk mothers. Back-up MSW available 24/7	<u>Level IV</u> <u>N/A</u>
RESPIRATOR	Y THERAPIST				
Neonatal	Level I Respiratory therapist (RT) available 24/7 certified in NRP	Level II Respiratory therapist (RT) available 24/7 certified in NRP	Level III A Respiratory therapist (RT) available 24/7 certified in NRP	Level III B The hospital shall have respiratory therapists skilled in neonatal ventilator management and certified in NRP assigned to the NICU and not shared with other units on a given shift 24 hours a day	Level IV The hospital shall have respiratory therapists skilled in neonatal ventilator management and certified in NRP assigned to the NICU and not shared with other units on a given shift 24 hours a day
Maternal	Level I Respiratory therapist (RT) available 24/7	Level II Respiratory therapist (RT) available 24/7	Level IIA Respiratory therapist (RT) available 24/7	Level III B Respiratory therapist (RT) available 24/7	<u>Level IV</u> <u>N/A</u>

GENETICS					
Neonatal	Level 1 The hospital shall have genetic consultation available (e.g. by telephone or Telemedicine)	Level II The hospital shall have genetic consultation available (e.g. by telephone or Telemedicine)	Level III A The hospital shall have genetic consultation available (e.g. by telephone or Telemedicine)	Level III B The hospital shall have genetic consultation available (e.g. by telephone or Telemedicine)	Level 4 Genetics will be on staff and available 24/7 for consultation
Maternal	Level 1 Genetic diagnostic and counseling services or consultation and referral agreements for these services	Level II Genetic diagnostic and counseling services or consultation and referral agreements for these services	Level III A Genetic diagnostic and counseling services or consultation and referral agreements for these services (telemedicine consultation acceptable)	Level III B Genetic diagnostic and counseling services or consultation and referral agreements for these services (telemedicine consultation acceptable)	Level IV <u>N/A</u>
PEDIATRIC NEURODEVELOP MENTAL FOLLOW UP	<u>All Levels</u> Transition plan to home Assess the need for a home v Referral to a regional follow-up				
NICU Follow-up Clinic	Level I NA	Level II NA	<u>Level III A</u> NA	Level III B NA	Level IV Core Team shall include: - Neurodevelopmental pediatrician or neonatologist as medical director of the clinic - Nurse Coordinator (RN) - Social Worker - Nutritionist or WIC RD - Psychologist - Physical and Occupational Therapist - Speech and Language Pathologist

STAFF					 Audiologist or staff trained to do objective hearing assessment Team members may come from the hospital or community setting.
EDUCATOR					
Neonatal	All Levels A hospital perinatal program shall	I have nurses with special expe	ertise in obstetrical and neona	tal nursing identified for staff ed	ucation.
PHARMACY					
Neonatal	Level I 24 hours provision of access to emergency drugs. Registered Pharmacist with Neonatal pharmacology resources available by telephone consultation.	Level II 24 hours provision of access to emergency drugs. Registered Pharmacist with Neonatal pharmacology resources available by telephone consultation.	Level III A 24 hours provision of access to emergency drugs. Registered Pharmacist with Neonatal pharmacology resources available by telephone consultation.	Level III B 1. 24 hours provision of access to emergency drugs. 2. Registered Pharmacist with Neonatal pharmacology resources available in-house 24 hours / 7 days per week	 Level IV 24 hours provision of access to emergency drugs. Registered Pharmacist with Neonatal pharmacology resources available in- house 24 hours / 7 days per week .
Maternal	Level I Registered pharmacist immediately available for telephone consultation 24/7 with provision for or access to emergency drugs.	Level II Registered pharmacist available 24/7	Level III A Registered pharmacist available 24/7	Level III B Registered pharmacist available 24/7	Level IV N/A
LACTATION	All Levels				
Neonatal	Lactation services available by	y consultation			
Maternal	Level I Nursing or staff trained in lactation consultation	Level II Nursing or staff trained in lactation consultation	<u>Level III A</u> Dedicated consultant. Must have access to	Level III B Dedicated Consultant.	<u>Level IV</u> <u>N/A</u>

NON-OBSTETRIC SPECIALTY	Must have access to consultation with a lactation consultant certified by the International Board of Certified Lactation Consultants (IBCLC) Must have hospital grade electric pump and collection kit Policies for milk storage	Must have access to consultation with a certified lactation consultant (IBCLC) Must have hospital grade electric pump and collection kit Policies for milk storage	consultation with a certified lactation consultant (IBCLC)	Must have access to consultation with a certified lactation consultant (IBCLC	
CONSULTATION Maternal	Level I General Surgery Family Practice	Level II General Surgery Internal Medicine	Level III A More complete range of consultative services for adults including but not limited to Pulmonary, GI, Cardiology, Infectious Diseases, etc	Level III B More complete range of consultative services for adults including but not limited to Genetics, pulmonary, GI, Cardiology, Infectious Diseases, etc Access to Pediatric Pathology –	<u>Level IV</u> <u>N/A</u>
ENGINEERING					
Neonatal and Maternal	All Levels Shall comply with the Arkansas S The hospital engineering departm the equipment.	U U	nechanical and biomedical tec	hnicians who are responsible fo	r the safety and reliability of
NEONATAL ICU Transition and Discharge Planning	 Level I Transition plan to home Assess the need for a home visit Referral to a regional neonatal follow-up clinic if infant is a back transfer and meets follow-up criteria 	 Level II Transition plan to home Assess the need for a home visit Referral to a regional neonatal follow-up clinic if infant is a back transfer and meets follow-up criteria 	 Level III A Transition plan to home Assess the need for a home visit Referral to a regional neonatal follow-up clinic if infant is a back transfer and meets follow-up criteria 	 Level III B Transition plan to home Assess the need for a home visit Referral to a regional neonatal follow-up clinic if infant is a back transfer and meets follow-up criteria 	 Level IV Transition plan to home Assess the need for home visitation. Schedule follow-up in regional neonatal follow- up clinic if infant meets criteria Must have a neonatal follow-up clinic with

					appropriate staffing, linked with early intervention system.
	Other professional staff as neede	an, med-peds, family practice			
	 feeding issues Reflux issues Calorie needs Follow-up care, including 	plan including the designation services ons and discuss follow-up nment for the child	appointments the specific challenges of the of a primary care physician ar	e NICU graduate.	e pediatric subspecialists
NICU FOLLOW- UP SERVICES	All levels Must have access to NICU f provide multidisciplinary follo	ollow-up care if they meet the f ow-up care. : s with cranial ultrasound abnorn seizures, hydrocephalus)	following criteris as part of the	e discharge planning process. Le	-

	 Culture proven sepsis or me Abnormal neurologic exam a 	•						
	_	Encephalopathy persisting at discharge						
	Twin-twin transfusion Meningitis							
	Extracorporeal Membrane O	xygenation						
	Other infants or preterm infants w	here there are significant conc	erns from the medical team s	should be referred for follow-up.				
	Ideally, all infants with level III act	uity would be referred to early i	ntervention for ongoing follow	v-up between the time of discha	rge from the hospital			
	Develop a plan_with public health and other community resources for home visitation prior to discharge and one to two weeks after discharge for neonates who need these services - Discuss family planning (make sure the mother has follow-up with OB) - Assess ability to care for child - Assess ability to get to medical appointments - Assess/discuss sleep environment							
	- Generally, patients are seen in the	regional follow-up clinic in addition	on to visits with the PCP within	3-4 months after discharge or soon	er depending on need			
	LABORATORY							
Neonatal								
Processing and	Level I	Level II	Level III A	Level III B	Level IV			
Reporting Time	The hospital laboratory shall demonstrate the capability to immediately obtain appropriate samples, process, and timely report urgent/emergent neonatal laboratory requests.	Level I + 1. Lab technician in house 24 hours per day 2. Micro technique for hematocrit and blood gases available within 15 minutes	Comprehensive services available 24 hours / day.	Comprehensive services available 24 hours / day.	Comprehensive services available 24 hours / day.			
Hearing Test	All Levels							
3 - - -	The hospital shall have available institution as required by the Univ the infant is term. If being discha	ersal Newborn Hearing Screer	ning, Diagnosis, and Interven	earing screening on all infants b tion Guidelines. The hearing tes	orn at or transferred to the tshould be performed when			
Maternal	Level I	Level II	Level III A	Level III B	Level IV			
	The hospital laboratory shall demonstrate the capability to immediately obtain appropriate samples, process, and timely report urgent /emergent	Level I, plus Lab tech available 24/7 Phlebotomist available 24/7	Comprehensive lab services available 24/7 with established network	Comprehensive lab services available 24/7 with established network	<u>N/A</u>			

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	obstetric laboratory requests				
	Policy to report critical results				
	Standard maternal antepartum testing shall be available to the providers prior to discharge, if not will be performed during the hospitalization and available prior to d/c of neonate				
	Rapid HIV available 24/7				
	BLOOD BANK				
Maternal	Level I	Level II	Level III A	Level III B	Level IV
	Provision for emergent availability of blood products Techs present 24/7	24 hour/day availability of blood products	24 hour/day availability of blood products	24 hour/day availability of blood products	<u>N/A</u>
	GENETIC TESTING				
Neonatal and Maternal	services in place.	nolecular, cytogenetic, and bic	bchemical genetic testing avail	able or written consultation and	referral agreements for these
IMAGING CAPABILITIES		u u			
Neonatal Portable X-Ray and Ultrasound	All Levels Portable x-ray, with the services of	of appropriate support staff, sha	all be available to the neonata	l units.	
Ultrasound, CT	Level I	Level II	Level III A	Level III B	Level IV
Scan and MRI	Optional	Optional	Ultrasound capability with appropriate support staff and radiology interpretation available daily	Portable ultrasound, Computerized tomography (CT) and Magnetic resonance imaging (MRI) capability, with the services	Ultrasound, Computerized tomography (CT) and Magnetic resonance imaging (MRI) capability, with the services of appropriate
				of appropriate support staff and radiological interpretation, shall be available within 30 minutes	support staff and radiological interpretation, shall be available within 30 minutes
Interventional	Level 1	Level II	Level III A	and radiological interpretation, shall be	interpretation, shall be

					equipment and for performing interventional radiology services.
Neonatal	Level 1	Level II	Level III A	Level III B	Level IV
Echocardiography	Optional	Optional	Neonatal echocardiography shall be available as needed at least on a daily basis	Neonatal echocardiography shall be available as needed at least on a daily basis	Neonatal echocardiography equipment and experienced technician shall be available as needed with interpretation by pediatric cardiologist available 24/7 within 30 minutes
Pediatric Cardiac	Level 1	Level II	Level III A	Level III B	Level IV
Catheterization Laboratory	NA	NA	NA	Optional	The hospital shall have a pediatric cardiac catheterization laboratory and appropriate staff available within 30 minutes.
Maternal					
Radiology Support	Level I	Level II	Level III A	Level III B	Level IV
	Optimal but not expected to have interventional radiology	Optimal but not expected to have interventional radiology	Interventional radiology optimal	Interventional radiology	<u>N/A</u>
	EQUIPMENT				
Neonatal Equipment and Supplies	All Levels The hospital shall have all of the follo	owing equipment and supplies im	mediately available for existing	patients and for the next potential	patient:
		ope, intravenous infusion pumps			
		very room and available in the ne	onatal units		
	 c. Oxygen hood with humidit d. Bag and masks capable of e 	y delivering a controlled concentra	tion of oxygen to the infant		
	e. Orotracheal tubes and neo				
	f. Aspiration equipment				
	g. Laryngoscope				
	h. Umbilical vessel catheters	and insertion tray			
	i. Cardiac monitor				
	j. Pulse oximeterk. Phototherapy unit				
	I. Doppler blood pressure for	r neonates			
10					

	n. Resuscitation equipment f	suction outlets for mothers and r					
Intensive Care Bed	Level 1 Physical facilities meet the requirements of the Arkansas Department of HealthThe hospital shall have a neonatal intensive care unit bed set up and equipment available at all times for an emergency admission as per state licensing requirements	Level II Physical facilities meet the requirements of the Arkansas Department of Health Perinatal Care. The hospital shall have a neonatal intensive care unit bed set up and equipment available at all times for an emergency admission as per state licensing requirements 	Level III A Physical facilities meet the requirements of the most current version of the Arkansas Department of Health . The hospital shall have a neonatal intensive care unit bed set up and equipment available at all times for an emergency admission as per state licensing requirements	Level III B Physical facilities meet the requirements of the most current version of the Arkansas Department of Health. The hospital shall have a neonatal intensive care unit bed set up and equipment available at all times for an emergency admission as per state licensing requirements	Level IV Physical facilities meet the requirements of the most current version of the Arkansas Department of Health Perinatal Care. The hospital shall have a neonatal intensive care unit bed set up and equipment available at all times for an emergency admission as per state licensing requirements		
Laser Coagulation for Treatment of Retinopathy of Prematurity	<u>Level 1</u> NA	<u>Level II</u> NA	<u>Level III A</u> NA	Level III B The hospital shall have laser coagulation capability for retinopathy of prematurity available there or at a closely related institution	Level IV The hospital shall have laser coagulation capability for retinopathy of prematurity		
Respiratory Equipment	All Levels The hospital shall have appropriate equipment (including back-up equipment) for neonatal respiratory care as well as protocols for the use and maintenance of the equipment as required by its defined level status.						
Advanced Ventilatory Support including high frequency ventilation and nitric oxide	Level I NA	Level II NA	<u>Level III A</u> <u>NA</u> Nitric oxide will be available on an interim basis until transfer to an appropriate facility if	Level III B The hospital shall be capable of providing advanced ventilatory support for neonates of all birth weights.	Level IV The hospital shall be capable of providing advanced ventilatory support for neonates of all birth weights.		

Neonatal Emergency Medications	All Levels Emergency medications, as listed shall be present in the delivery are		patient is an ECMO candidate Program of the American Aca	Nitric oxide will be available on an interim basis until transfer to an appropriate facility if patient is an ECMO candidate	eart Association (AAP/AHA),
Emergent Medications	Level I The following medications shall be immediately available to the neonatal units: a. Antibiotics, anticonvulsants, and emergency cardiovascular drugs	Level II The following medications shall be immediately available to the neonatal units: a. Antibiotics, anticonvulsants, and emergency cardiovascular drugs Surfactant, prostaglandin E1	Level III A The following medications shall be immediately available to the neonatal units: b. Antibiotics, anticonvulsants, and emergency cardiovascular drugs Surfactant, prostaglandin E1	Level III B The following medications shall be immediately available to the neonatal units: c. Antibiotics, anticonvulsants, and emergency cardiovascular drugs Surfactant, prostaglandin E1	Level IV The following medications shall be immediately available to the neonatal units: d. Antibiotics, anticonvulsants, and emergency cardiovascular drugs e. Surfactant, prostaglandin E1
	EDUCATION				
Neonatal					
Competencies	All Levels The hospital shall have identified practice and on a regular basis the		rinatal clinical staff, not otherw	vise credentialed, that are asses	sed prior to independent
Education for Physicians	All Levels The hospital shall provide continu obstetrical and neonatal patients.		ysicians, nurses, and allied he	ealth personnel on staff concerni	ng the treatment and care of
Education for Referring Hospital/Providers	Level I N/A	<u>Level II</u> <u>NA</u>	Level III A A hospital that accepts maternal or neonatal primary transports shall provide the following to the referring hospital/providers: • Guidance on indications for consultation and referral of	Level III B A hospital that accepts maternal or neonatal primary transports shall provide the following to the referring hospital/providers: Guidance on indications for consultation and referral of patients at high risk Information about the accepting	Level IV A hospital that accepts maternal or neonatal primary transports shall provide the following to the referring hospital/providers: Guidance on indications for consultation and referral of patients at high risk

Education for Pediatrics	Level I NA	Level II NA	 patients at high risk Information about the accepting hospital's response times and clinical capabilities Information about alternative sources for specialized care not provided by the accepting hospital Guidance on the pre- transport stabilization of patients Feedback on the pre- transport care of patients Level III A Optional: The NICU Follow-up Clinic shall provide for continuing education programs for physicians, psychologists, nurses and other allied health professionals on the follow-up of the NICU graduate. 	 hospital's response times and clinical capabilities Information about alternative sources for specialized care not provided by the accepting hospital Guidance on the pre-transport stabilization of patients Feedback on the pre-transport care of patients NRP certification Level III Optional: The NICU Follow-up Clinic shall provide for continuing education programs for physicians, psychologists, nurses and other allied health professionals on the follow-up of the NICU graduate.	 Information about the accepting hospital's response times and clinical capabilities Information about alternative sources for specialized care not provided by the accepting hospital Guidance on the pre-transport stabilization of patients Feedback on the pre-transport care of patients NRP certification <u>Level IV</u> The NICU Follow-up Clinic shall provide for continuing education programs for physicians, psychologists, nurses and other allied health professionals on the follow-up of the NICU graduate.
Competencies	All Levels The hospital shall have identified minimum competencies for the obstetric clinical staff, not otherwise credentialed, that are assessed on a regular basis thereafter (ie fetal monitoring interpretation, management of obstetric emergencies)				

Education for Physicians	All Levels The hospital shall provide continuing education programs for physicians, nurses, and allied health personnel on staff concerning the care of obstetric patients				
Education for Referring Physicians	Level I N/A	Level II N/A	 Level III A A hospital that accepts maternal transports needs to provide to the referring hospital or health care provider the following: Guidance on indications for consultation Information about the accepting hospital regarding how to proceed with a transfer Information about alternative locations for referral in the circumstance where a transport cannot be taken (this should be an unusual occurrence) Guidance on the pre-transport stabilization of the maternal condition Feedback on the pre-transport care 	Level III BA hospital that accepts maternal transports needs to provide to the referring hospital or health care provider the following:1. Guidance on indications for consultation2. Information about the accepting hospital regarding how to proceed with a transfer3. Information about alternative locations for referral in the circumstance where a transport cannot be taken (this should be an unusual occurrence)4. Guidance on the pre-transport stabilization of the maternal condition5. Feedback on the pre-transport care6. Information regarding the outcome and	<u>Level IV</u> <u>N/A</u>

Education for Pediatrics	The NICU Follow-up Clinic shall provide for continuing education programs for physicians, psychologists, nurses and other allied health professionals on the follow-up of the NICU graduate.		 Information regarding the outcome and condition of the patient at discharge Information regarding care after discharge 	condition of the patient at discharge 7. Information regarding care after discharge	
	IMPROVEMENT				
Neonatal					
Continuous Quality Improvement (CQI)	Level I Ongoing assessment of stabilization and resuscitation	Level II Ongoing assessment of stabilization and resuscitation	 Level III A Data collection, storage and retrieval. Identifying processes in need of improvement The hospital shall have a multi- disciplinary continuous quality improvement program for improving maternal and neonatal health outcomes that includes initiatives to promote patient safety including safe medication practices, Universal Protocol to prevent surgical error, 	 Level III B Data collection, storage and retrieval. Identifying processes in need of improvement The hospital shall have a multi-disciplinary continuous quality improvement program for improving maternal and neonatal health outcomes that includes initiatives to promote patient safety including safe medication practices, Universal Protocol to prevent surgical error, and educational programs to improve communication and teamwork. Vermont 	 Level 4 Hospital 7. Data collection, storage and retrieval. 8. Identifying processes in need of improvement 9. The hospital shall have a multi-disciplinary continuous quality improvement program for improving maternal and neonatal health outcomes that includes initiatives to promote patient safety including safe medication practices, Universal Protocol to prevent surgical error, and educational programs to improve communication and teamwork. Vermont

			and educational programs to improve communication and teamwork. Vermont Oxford Network quality improvement could be one of the resources for CQI.	Oxford Network quality improvement could be one of the resources for CQI. <u>NICU Follow-up Clinic (if</u> <u>applicable)</u> 1. Data collection, storage and retrieval. 2. Identifying processes in need of improvement.	Oxford Network quality improvement could be one of the resources for CQI. <u>NICU Follow-up Clinic</u> 1. Data collection, storage and retrieval. 2. Identifying processes in need of improvement.
Case Reviews	All Levels The hospital shall conduct interna	l perinatal case reviews, which	include all neonatal deaths,	as well as all neonatal transport	S
Health Department and Infant Mortality Review	All Levels The hospital shall participate with				
Improving Arkansas Perinatal Health Outcomes	All Levels The hospital shall participate in th perinatal health outcomes	e collaborative collection and a	assessment of data with the A	rkansas Department of Health f	or the purpose of improving
Maternal					
Continuous Quality Improvement (CQI)	All Levels 1. Data collection, storage, and retrieval 2. Identifying processes in need of improvement 3. The hospital shall have a multi-disciplinary continuous quality improvement program for improving maternal health care and promote patient safety including safe medication practices, protocols to prevent surgical error, and education programs promoting teamwork and communication				<u>N/A</u>

Measures for monitoring outcomes	All LevelsQuality Performance Measuresfor Monitoring of Outcomesshould also incorporate theknowledge that the largestimpact on maternal and fetaloutcomes may relate to accessto prenatal care, preterm birthrates, and delivery of pretermgestations in a facility able toprovide appropriate intensiveneonatal care.Specific indices:1.2.Gestational ageand birthweightrange at deliveryand numberoutside theDefined Level3.3.B-methasoneadministrationprior to delivery in<34 weeks intact	Form a board of 2 representatives from each Level 3 A and 3B hospitals to develop and outcomes measures and review process and perform a quarterly review of the data. The board will be governed by ADH policies.	Form a board of 2 representatives from each Level 3 A and 3B hospitals to develop and outcomes measures and review process and perform a quarterly review of the data. The board will be governed by ADH policies.	

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	history of prior non-iatrogenic (spontaneous) preterm singleton birth 7. Fetal Trauma/Birth trauma 8. Elective delivery via induction or						
	cesarean section prior to 39 weeks						
	gestation						
	9. Prenatal care						
	(gestational age at onset)						
	01300						
	POLICIES AND PROTOCAL						
Neonatal Written Policies	 <u>All Levels</u> The hospital shall have written policies and protocols for: The initial stabilization and continuing care of all neonatal patients appropriate to the level of care rendered at its facility. Neonatal resuscitation protocols. The hospital medical staff credentialing process shall include documentation of competency to perform neonatal invasive procedures appropriate to its designated level of care. The hospital shall have written guidelines for accepting or transferring neonates as "back transports" including criteria for accepting the patient and patient information on the required care. The hospital shall have a licensed neonatal transport service or written agreement with a licensed neonatal transport service. The hospital shall have policies that allow families (including siblings) to be together in the hospital following the birth of an infant and that promote parental involvement in the care of the neonate including the neonate in the NICU 						
Maternal							
Written Policies	All Levels The hospital will have written policies and protocols for: 1. The initial stabilization and continuing care of all obstetric patients appropriate to the level of care rendered at its facility 2. The hospital shall have						

protocols for treatment of common obstetric conditions including medication use for oxytocin, Magnesium sulfate, cytotec, 3. The hospital medical staff credentialing process shall include	
conditions including medication use for oxytocin, Magnesium sulfate, cytotec, 3. The hospital medical staff credentialing process shall include	
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3. The hospital medical staff credentialing process shall include	
staff credentialing process shall include	
process shall include	
documentation of	
competency to perform	
common obstetric	
procedures (including	
spontaneous vaginal	
delivery, operative	
vaginal delivery,	
breech delivery,	
cesarean section)	
dependent on the level	
of privileges granted	
and management of	
high risk obstetric	
patients	
4. The hospital shall have	
written guidelines for	
accepting or	
transferring obstetric	
patients	
5. The hospital shall have	
a transport service or	
agreement on method	
of transportation of	
appropriate patients	
The hospital shall have policies	
that allow families to be	
together for the birthing process	
unless emergent circumstances	
prevent	

The above document is meant to be a guideline. Exceptions, especially after consultation with subspecialists, may and should be made with the collaboration of the health care providers involved.

Review process:

A hospital wishing to receive certification or change certification in maternal or neonatal care will apply to the Arkansas Department of Health (ADH) and schedule an inspection. A site visit will be scheduled within 6 months, with approval based on compliance with Arkansas Levels of Care. Approval may be withheld based upon community need, outcome data or failure to comply with ADH standards.

Approval actions to be taken by the ADH include:

- 1. Approval if ADH standards are met
- 2. Conditional approval, not to exceed 6 months, if documentation is lacking or there are readily available solutions to comply with ADH standards.
- 3. Denial if conditions cannot be met

Hospitals participating in this program will be inspected biannually for compliance with ADH standards as part of their routine inspection.

Back transport guidelines must be followed starting 2 weeks of age for Level 3 nursery transfers unless objected by parents Guidelines include: (all babies transferred back will be counted towards annual VLBW volume requirement for the Level III A and B NICUs

Level 1 nurseries

- 1. Stable oxygen requirement
- 2. Full enteral feeds
- 3. Not in need of subspecialty care
- 4. Infants greater than 1500 grams and 32 weeks post conceptual age

Level 2 nurseries

- 1. Stable oxygen requirement
- 2. Enteral feeds started
- 3. Not in need of subspecialty care
- 4. Infants greater than 1200 grams and greater than 30 weeks PCA

Level 3 nurseries

- 1. Babies on stable conventional ventilation, nasal C-PAP or nasal cannula
- 2. Babies on stable hyperalimentation fluid or feeds
- 3. Infants on Comfort Care
- 4. Babies not anticipated to require onsite subspecialty intervention
- 5. Infants weighing greater than 750 grams on stable respiratory support irrespective of PMA
- 6. Parents not refusing back transport for their babies unless contraindicated