



**2014 NCC Content Validation Task Analysis Study**  
**Neonatal Intensive Care Nursing Examination**

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**NCC**  
**676 N. Michigan Ave, Suite 3600**  
**Chicago, IL 60611**  
**312 -951-0207**



## **Table of Contents**

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**Background and Overview**

**Development Process**

**Data Collection**

**Review and Results**

**Exhibits 1, 2, & 3**

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## **1. Background and Overview**

The purpose of the content validation/task analysis study is to describe the domain of practice, knowledge, skills and abilities that are essential to the neonatal intensive care nurse (NIC).

The data collected from the content validation/task analysis study is used to identify content to be included in the NIC certification examination for neonatal intensive care nurses and to insure skills, knowledge and abilities of those engaging in neonatal intensive care nursing practice are reflected in the NCC testing process.

The focus of the Neonatal Intensive Care Nursing certification is to demonstrate the special knowledge of the neonatal intensive care nurse.

NCC content team members, a geographically diverse group representing both academic and clinical practice venues, were charged with development of the tasks as associated with existing exam content outlines. NCC leadership for content teams can be found at <http://www.nccwebsite.org/NCC-Leadership.aspx>.

In addition, over the past year NCC delivered a post-exam feedback survey to NIC examinees to evaluate that the content on the exam reflects their current practice. All NIC examinees received the post-exam survey regardless of pass/fail results.

## **2. Development process**

With psychometric consultation, the knowledge competencies and tasks/skills/interventions identified by the content team were formulated into a survey instrument. Questions asked for each knowledge component or domain for query centered on general assessment and management, assessment and management of pathophysiologic states, assessment and management of psychosocial/behavioral adjustments and professional issues including:

- Demographics and Practice Characteristics of certified neonatal intensive care nurses
- Frequency and Criticality of Patient Care
- Skills

In preparation of survey development the content team reviewed the current NCC competency statements and general and detailed exam content outlines for the NIC examination. The content team identified essential knowledge, skills and abilities for this core examination and identified competencies and practice skills of the low risk neonatal nurse. General discussion on how current competency statements and content included in the exam outline related to the professional literature was also initiated. Based on this discussion, the content team prioritized the list of tasks/skills. In addition to this the following documents were reviewed:

- Standards for Professional Nursing Practice in the Care of Women and Newborns, 7<sup>th</sup> Edition, 2009 AWHONN
- Neonatal Nurse Practitioners; Standards of Educational & Practice, National Association of Neonatal Nurses (NANN)
- Neonatal Nursing: Clinical Competencies and Educational Guide, 6<sup>th</sup> Edition , AWHONN
- Pertinent literature review

The NIC Content Team based on the document review identified competencies and practice skills of the neonatal intensive care nurse. General discussion on the recently developed competency statements and content included in the exam outline was also initiated. After general discussion, the related tasks and skills associated with the specific content area were identified and prioritized.

### **3. Data Collection**

Proprietary software was used for survey deployment and aggregate data compilation from survey responses. All NCC certified neonatal intensive care nurses with a valid email address (11,453) were notified by email contact and a general invitation to participate was posted on the NCC website. To encourage participation constituents could earn CE if they completed the survey. This resulted in a 68% increase in survey responses from the 2009 survey. 1678 participated in the current content validation survey, which provided a 15% response rate.

A copy of the content validation survey can be found in Exhibit 1 and the survey results can be found in Exhibit 2. New items included in the content validation survey were validation of the core competency statements for the NIC examination and invitations to survey takers to identify content or competencies that were not addressed in the survey.

Additionally, post-exam surveys were sent to recent examinees asking them to rate the applicability of the content tested to their practice. Participation was voluntary and was offered to all who took the exam regardless of pass or fail outcomes. A copy of the post-exam feedback survey can be found in Exhibit 3.

### **4. Survey Results and Review**

Overall, the content validation analysis demonstrated extremely high ratings of the content included on the exam and the stated competency statements. The survey results can be found in Exhibit 2. Survey demographics reported that 96% of neonatal intensive care nurses who took the survey work in a hospital setting designated most of the time as level III (66%) or Level IV (21%). Nineteen percent of responders held either a masters or doctoral degree while 59% held a BSN and 22% had an Associate or diploma degree. Eight-one percent provide direct patient care with others mostly in education (7%) or management (8%). The majority of participants had over 15 years of practice (59%) and on average worked 35-45 hours a week (61%). Participants represented a broad demographic region from 50 different states. Certification was reported to be required by the employer for 10% of neonatal intensive care nurses and encouraged by employers in 71%. A financial incentive for certification was reported by 29% of respondents and 62% reported that the attained certification for personal reasons.

In reviewing the survey results the first area on the survey was the core competency review. It was found that 89-100% of survey takers felt the core competencies were essential and either a frequent expectation or critical to patient outcomes for neonatal intensive care nurses in their practice. Ninety-nine percent felt the competencies represented the neonatal intensive care nurses practice. The majority of content was considered essential by participants and the survey was rich in comments and thought. Some items may have been considered essential but were rarely seen or done but continue to be low volume high risk areas where knowledge is essential. The survey results underscore a few items that were discussed by the content team including:

- Maternal psychiatric issues
- Maternal history and its impact on the neonate including teen mothers
- Substance abuse and abstinence scoring
- HIE and cooling
- Examining the depth of content regarding abnormal labs and practice (cortisol, lactate, avastin, betablockers, sildenafil)
- Donor milk and milk banks, human milk fortifier
- Knowledge concerning inhaled medications

- New ventilation strategies and equipment: NAVA, NIV and Vapotherm

The decision was made to add questions on the above content except for NAVA which is still relatively new and not a standard of care. Some core content was seen as essential but were rarely or never seen in 50-75% of respondents. These were further discussed by the content team for ongoing exam inclusion. It was decided the following would not be part of the core competencies or exam and included:

- Continuing distending pressure
- Partial Liquid ventilation
- Proportional assist ventilation
- Scoliosis
- Suprapubic bladder tap
- Maternal anemia and asthma
- Vitamin D levels

There were no questions on these topics on the exams. In addition to the content validation, over the past year, we have surveyed new examinees to evaluate how the exam reflected on their practice and 209 completed the surveys. During this time frame 1238 took the examination which provided us with a 17% response rate for the post-exam survey. The post-exam survey results can be found in Exhibit 3. Of those completing the post-exam survey 27% had been practicing 2-5 years, 28% 6-10 years and 21% for more than 20 years. Eighty-two percent of respondents are working full time providing direct patient care (95%) working mostly in level III hospitals (88%). Seventy-eight percent of examinees reported that they were obtaining certification for professional self development. The majority of examinees felt the content areas on the exam were about right (>80%) and reflected what is applied to their daily practice (> 85%).

In addition to the above changes the content team felt that new questions needed to be written for the following:

- Developmental Care, maturation of sleep cycles
- Breast Feeding and Feeding Cues, Probiotics
- Questions on GBS with the new guidelines
- Trisomy 21, DiGeorge and Turners
- Thermoregulation including heat mattresses and wraps
- Oral care and VAP
- Colitis, bloody stools, protein allergies
- Delayed cord clamping
- Airway: Vocal cord paralysis, TE Fistula, Pierre Robin
- Back to sleep, safe sleep, shaken baby, plagiocephaly
- Quality and Safety: "team steps"

Both the post-exam and the content validation surveys were reviewed at the NIC content team meeting on February 23 and 24, 2015. The reviews were used to align the exam content with current neonatal intensive care nursing practice. Overall participants believe that the exam reflects their practice and the amount of content on the examination is appropriate to their practice as well. The majority of participants felt that the core competencies were essential and a frequent expectation or critical to patient outcomes for those who practice as low risk neonatal nurses.

### Introduction

NCC is conducting a content validation study for the Neonatal Intensive Care Nursing exam. This is based on previous results of past content validations, review of standards of practice, professional literature and research.

Your responses as a Certified Neonatal Intensive Care nurse, when compiled with the responses of your peers, will impact the test outline and drive new questions for future NCC examinations. Your input will be invaluable to the content team who is responsible for test development to insure the examination continues to reflect current practice in the specialty.

Upon your completion of the Neonatal Intensive Care Nursing content validation survey, NCC will award one (1) CE hour in the Professional Practice Core Competency. Your CE hour will be automatically recorded into your online maintenance application within 12 hours. There will be no CE certificate issued as the credit is given in recognition of your participation in this content validation process and is not transferable for other purposes.

Thank you for your help with this process.

**NCC**

### Neonatal Intensive Care (NIC) Nursing Core Competencies

The options that will be asked for each competency include

- This competency is essential and is a frequent expectation of the Neonatal Intensive Care nurse
- This competency is essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed
- This competency is not essential
- This is not an expected competency of the Neonatal Intensive Care nurse

**Essential** - an expected competency that a NIC nurse should possess no matter the educational background, practice setting, patient population focus or years of experience.

	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	Not essential	Not an expected competency of the Neonatal Intensive Care nurse
<b>Identify antepartal and intrapartal indicators of neonatal risk and their potential significance</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Systematically assess all body systems utilizing physical examination, gestational age assessment and neurobehavioral assessment</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Apply knowledge of anatomy and physiology (maternal, fetal, transitional, newborn), pathophysiology, pharmacology, nutrition, and behavioral psychology to assess the neonate and differentiate abnormal from normal</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Recognize normal values and deviations in clinical laboratory and diagnostic data and identify potential significance</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Assess the neonate's family, community and environment to identify areas of risk</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Utilize biophysical monitoring techniques to identify body system alterations</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Develop an individualized plan of care for the restoration, maintenance and promotion of health for the high risk neonate and family unit during hospitalization and following discharge</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Implement diagnostic, therapeutic and educational plans in collaboration with other health care providers to provide direct care for the high risk neonate and family, including development</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Identify life-threatening states and initiate appropriate interventions</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Evaluate the plan of care in collaboration with other health care providers and the family and modify the plan of care as indicated</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Identify professional nursing issues which impact on the role of the neonatal nurse</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are these competencies in your experience?

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

- A. Representative of the practice of the Neonatal Intensive Care nurse  
 B. Not Representative of the practice of the Neonatal Intensive Care nurse

If you selected B, please comment on your rationale for your opinion.

Are there any additional competencies that are not represented?

## General Assessment

### Maternal Factors Affecting Neonatal Outcomes

Listed below are risk factors related to maternal conditions, or maternal/family lifestyle. Please indicate the essentiality and frequency in which you manage neonates with this maternal history. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected knowledge competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

**Lifestyle risks** (check all that apply)

	Essential	Routinely seen	Occasionally seen	Rarely seen	Never seen
Illegal drug exposure (cocaine, heroin etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legal drug exposure (prescription, alcohol, nicotine)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor maternal nutrition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No prenatal care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Maternal Conditions - Antepartum** (check all that apply)

	Essential	Routinely seen	Occasionally seen	Rarely seen	Never seen
Altered antepartum testing results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amniotic fluid disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Autoimmune disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cardiac disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposure to toxic substances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypertension (all types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multiple gestation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obesity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Renal/GU disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thyroid disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

## Maternal Conditions - Intrapartum (check all that apply)

	Essential	Routinely seen	Occasionally seen	Rarely seen	Never seen
Cesarean delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effects of maternal analgesia/anesthesia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Induction of labor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Labor disorders (prolonged, precipitous etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Malpresentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operative vaginal birth (vacuum, forceps)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Placental disorders (placenta previa, abruption, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preterm labor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prolonged pregnancy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## General Assessment

### Physical Assessment

Listed below are a variety of physical assessments. Please indicate the essentiality and frequency in which neonates require these types of assessments. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

### Physical Assessment (check all that apply)

	Essential	Routinely done	Occasionally done	Rarely done	Never done
Behavioral assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Genetic work up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gestational age assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Head-to-toe exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neurological exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ophthalmologic exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No



# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

If yes, please list specifics below

## General Assessment

### Thermoregulation

Listed below are a variety of issues related to thermoregulation. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge to manage your patients. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

**Thermoregulation** (check all that apply)

	Essential	Routinely seen/done	Occasionally seen/done	Rarely seen/done	Never seen/done
<b>Cold stress</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Heat loss by conduction</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Heat loss by convection</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Heat loss by evaporation</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Heat loss by radiation</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hyperthermia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hypothermia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Infant on radiant warmers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Infants in incubators</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Infants requiring humidification</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge factors that put neonate at risk for hypothermia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of neutral thermal environment</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of thermoregulation physiology</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## General Assessment

### Fluids and Electrolytes

Listed below are a variety of issues related to fluid and electrolyte management. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge to manage your patients. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

## Fluids and Electrolytes (check all that apply)

	Essential	Routinely seen/done	Occasionally seen/done	Rarely seen/done	Never seen/done
<b>Hypercalcemia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hyperkalemia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hypernatremia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hypocalcemia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hypokalemia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hyponatremia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hypophosphatemia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of preventing fluid and electrolyte imbalance</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of water balance physiology</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## General Assessment

### Nutrition and Feeding

Listed below are a variety of issues related to nutritional management. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge to manage your patients. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

### Nutrition and Feeding (Check all that apply)

	Essential	Routinely seen/done	Occasionally seen/done	Rarely seen/done	Never seen/done
<b>Breastfeeding and its benefits</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Enteral nutrition</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Gavage feeding</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Kangaroo care</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of formula composition and indications for use</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of GI development</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of human milk composition</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of human milk fortifiers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of lactation physiology</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Knowledge of non-nutritive sucking and its benefits</b>	10 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Knowledge of nutritional requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of vitamin and mineral supplements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oral care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parenteral nutrition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special nutritional needs of the late preterm infant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special nutritional needs of the preterm infant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## General Assessment

### Resuscitation

Listed below are a variety of issues related to infants requiring resuscitation and stabilization. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge to manage a neonate requiring resuscitation. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

**Resuscitation** (check all that apply)

	Essential	Routinely seen/done	Occasionally seen/done	Rarely seen/done	Never seen/done
Infants requiring chest compressions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infants requiring endotracheal intubation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infants requiring laryngeal mask airway insertion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infants requiring positive pressure ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infants requiring resuscitation medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infants requiring stimulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infants requiring suctioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of physiology and anatomy of transition to extrauterine life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thermoregulation management of neonate undergoing resuscitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## General Assessment

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

## Oxygenation and Acid-Base Homeostasis

Listed below are a variety of issues related to oxygenation and homeostasis. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge regarding oxygenation and homeostasis. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

## Oxygenation and Acid-Base Homeostasis (check all that apply)

	Essential	Routinely seen/done	Occasionally seen/done	Rarely seen/done	Never seen/done
Assist Control ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bi-level CPAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuing distending pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CPAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECMO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High flow nasal cannula	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High frequency ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I:E ratio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermittent mandatory ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of acid base homeostasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of oxyhemoglobin saturation curve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mean airway pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nasal intermittent positive pressure ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partial liquid ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient triggered ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peak inspiratory pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure regulated volume control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure support ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proportional assist ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## General Assessment

### Development Care

Listed below are a variety of issues related to developmental care. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge requiring developmental care. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

## Development Care (check all that apply)

	Essential	Routinely	Occasionally	Rarely	Never
Knowledge of how light affects premature infants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of how noise affects premature infants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of infant cues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of neonatal behavioral states	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of neonatal circadian rhythms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of neurobehavioral development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of proper positioning and handling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of sensory capabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of the principles of development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of the role of smell and taste in the premature infant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Promotion of kangaroo care and its benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## Laboratory Testing and Diagnostic Evaluation

### Neonatal Laboratory Test Diagnostic Procedures

For the following tests and diagnostic studies, indicate the frequency, essentiality and nature of what you are responsible for in regard to the specific test listed. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

### Neonatal Laboratory Test Diagnostic Procedures (check all that apply)

	Essential	Routinely done	Occasionally done	Rarely done	No longer used	Interpret Results	Explain results
Antibody screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arterial blood gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bilirubin (indirect)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bilirubin (total)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood glucose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood type and Rh	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BUN and creatinine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C-reactive protein	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Calcium and Phosphorous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Capillary blood gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clotting studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complete blood count	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coombs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrolyte panel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fecal occult blood testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Genetic screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hct and Hgb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hepatitis screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HIV screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kleihauer Betke test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liver function studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Magnesium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Newborn screen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sickle cell screen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spinal fluid analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T assay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thyroid studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ultrasound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urinalysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urine culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Venous blood gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin D levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
White cell count with differential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-rays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If Other (please specify)

Are there other laboratory tests or procedures that are routine to your practice that are not included in this list?

Yes

No

If yes, please list specifics below

## Assess And Manage Pathophysiologic States

### Cardiac and Pulmonary

Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with cardiac and/or pulmonary disorders. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

## Cardiac and Pulmonary (check all that apply)

	Essential	Routinely seen	Occasionally seen	Rarely seen	Never seen
Abnormal heart sounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aortic stenosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apnea of prematurity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atrial septal defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atrioventricular septal defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bronchopulmonary dysplasia/chronic lung disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coarctation of the aorta (interrupted arch)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Congenital cardiac defects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Congestive heart failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diaphragmatic hernia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ebstein anomaly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Endocardial cushion defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluation of cyanosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypertension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypoplastic left heart syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypoplastic lungs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypotension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laryngeal tracheomalacia/stenosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meconium aspiration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oxygen delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patent ductus arteriosus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persistent pulmonary hypertension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pneumonia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pulmonary air leaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pulmonary hemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respiratory distress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respiratory distress syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rhythm disturbances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tetralogy of Fallot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total anomalous venous return	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transient tachypnea of the newborn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transition to extrauterine life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transposition of the great vessels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tricuspid atresia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Truncus arteriosus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ventilator management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ventricular septal defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## Assess And Manage Pathophysiologic States

### GI/Renal, Metabolic/Endocrine and Genitourinary Care

Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with GI/renal, metabolic/endocrine and/or genitourinary disorders. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

### GI/Renal, Metabolic/Endocrine and Genitourinary Care (check all that apply)

	Essential	Routinely seen	Occasionally seen	Rarely seen	Never seen
Abdominal mass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abdominal wall defects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acute renal failure/insufficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adrenal insufficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ambiguous genitalia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anomalies/obstruction of the upper and/or lower GI tract	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cystic fibrosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diarrhea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digestive and absorptive disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disorders of suck, swallow, motility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Duplications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exstrophy of the bladder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Galactosemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GE reflux	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GI bleeds/peritonitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High output renal failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hydronephrosis/ ureter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hyperammonemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypercalcemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hyperglycemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypermagnesemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypocalcemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypoglycemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypomagnesemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypospadias/epispadias	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Imperforate anus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inborn error of metabolism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infant of a mother with diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inguinal hernia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Malabsorption/maldigestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Malrotation/volvulus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meconium syndrome/plug	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Necrotizing enterocolitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obstructions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osteopenia/rickets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ostomy care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perforations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PKU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Polycystic/dysplastic kidneys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pyloric stenosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Renal vein/artery thrombosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short gut syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Testicular torsion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thyroid disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tracheo-esophageal fistula	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urinary outflow tract obstruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## Assess And Manage Pathophysiologic States

### Hematopoietic/Infection

Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with hematopoietic disorders and/or infections. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

**Hematopoietic/Infection** (check all that apply)

	Essential	Routinely seen	Occasionally seen	Rarely seen	Never seen
Acute bilirubin encephalopathy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breast milk jaundice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Candidiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Chlamydia/gonorrhea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CMV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disseminated intravascular coagulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E.Coli infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enterococcus infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Group B strep infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hematological disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hemorrhagic disease of the newborn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hepatitis B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Herpes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospital acquired infections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hyperbilirubinemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infection control and universal precautions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Klebsiella infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liver disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meningitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Methicillin resistant staph infections (MRSA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neutropenia/netrophilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osteomyelitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Polycythemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RH Disease/ABO incompatibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rubella	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Septic arthritis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Septic shock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staphylococcal infections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Syphilis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thrombocytopenia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thrombocytosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toxoplasmosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Varicella	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ventilator associated infections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

Yes

No

If yes, please list specifics below

**Assess And Manage Pathophysiologic States**

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

## Neurologic and Musculoskeletal

Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with neurologic and/or musculoskeletal disorders. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

## Neurologic and Musculoskeletal (check all that apply)

	Essential	Routinely seen	Occasionally seen	Rarely seen	Never seen
Abnormalities of the skeleton	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achondroplasia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acute skin conditions, e.g contact dermatitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arthrogryposis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Auricular tags	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Birth injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clubfoot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dislocation of the hip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ecchymosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Epidermolysis bullosa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erb's palsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erythema toxicum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fetal alcohol syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fractures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hemangiomas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Holoprocencephaly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hydrocephalus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hyperpigmentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypopigmentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypoxic ischemic encephalopathy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metatarsus adductus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Milia/miliara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mongolian spots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Musculoskeletal birth injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neonatal pustula melanosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neonatal withdrawal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neural tube defects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Periventricular leukomalacia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Periventricular/intraventricular hemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Petechiae	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Port wine stains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scoliosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seizures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Skin disorders - chronic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subcutaneous fat necrosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subdural hemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subgaleal hemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tibial bowing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torticollis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

Yes

No

If yes, please list specifics below

## Assess And Manage Pathophysiologic States

### Genetics and Head, Ears, Eyes, Nose and Throat

Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with genetics and/or head, ears, nose and throat disorders. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

### Genetics and Head, Ears, Eyes, Nose and Throat (check all that apply)

	Essential	Routinely seen	Occasionally seen	Rarely seen	Never seen
Autosomal dominant disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Autosomal recessive disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beckwith syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Caput succedaneum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cataracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cephalohematoma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Choanal atresia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chromosomal anomalies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cleft lip and palate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coloboma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conjunctivitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deletion/duplication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eye prophylaxis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glaucoma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Malformation of the ears	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mendelian inheritance patterns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multifactorial inheritance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nasolacrimal duct obstruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nondisjunction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Osteogenesis imperfecta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potter syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retinopathy of prematurity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sex linked inheritance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strabismus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tracheal stenosis/atresia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tracheomalacia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tracheostomy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Translocation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trisomy 13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trisomy 18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trisomy 21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turner syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VACTERL/VATER syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

Yes

No

If yes, please list specifics below

## Assess And Manage Psychosocial/Behavioral Adjustment

### Discharge Planning and Follow Up

Indicate below the frequency, essentiality and nature of your practice regarding managing neonates through discharge planning and follow up. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

### Discharge Planning and Follow Up (check all that apply)

	Essential	Routinely done	Occasionally done	Rarely done	Never done
Car seat testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CPR training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developmental follow up appointment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hearing screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Immunizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parent teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pulse oximetry screening for congenital heart disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SIDS evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special equipment training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching about motor, cognitive and language delays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vision screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## Pharmacology

### Pharmacology

What drug categories do you administer on a routine basis.

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

	Routinely administered	Occasionally administered	Rarely administered	Never administered
<b>Analgesics/narcotics</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Anesthetics/paralytics</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Antacids/GI motility</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Antibiotics/anti-microbials</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Anticoagulants</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Anticonvulsants</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Antidysrhythmia drugs</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Antifungals</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Antihypertensives</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Betablockers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Bronchodilators</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Calcium channel blockers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Diuretics</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hypoglycemic agents</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Inotropes</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Nitric oxide</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Prostaglandins</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Respiratory stimulants</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Sedatives/hypnotics</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Steroids</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Surfactant</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Vaccinations</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Vasodilators</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Vitamins</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If Other (please specify)

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

## Skills

### Specified Skills - Maternal Factors Affecting Neonatal Outcome

Listed below are a variety of skills used in providing care to the neonate and family. Please indicate the frequency and the knowledge essentiality applicable to the performance of these skills as it applies to the neonates you manage. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected knowledge competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

### Specified Skills (check all that apply)

	Essential	Routinely done	Occasionally done	Rarely done	Never done
Assess parent-infant attachment behaviors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Determine gestational age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Documenting normal and abnormal findings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate the appropriate growth of the infant at birth (AGA, SGA, LGA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identify barriers to parent/infant interactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintain and apply knowledge of equipment used in practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obtain family history and address factors affecting family integration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan care to insure skin integrity is maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan for risks associated with large- or small-for-gestational age infants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan for risks associated with preterm and post-term infants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prepare families for discharge and follow up needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prepare for delivery of newborns based on maternal emergencies and type of delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide culturally sensitive care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide neonatal ventilation as needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide support systems and referrals to families as needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recognize fetal heart rate patterns before and during delivery that impact the newborn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recommend parental support groups and bereavement groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review maternal conditions, treatments and delivery room history that impact the newborn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review maternal labs and diagnostic procedures that impact the neonate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review maternal medications and anesthesia that impact the neonate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review perinatal factors (antepartum and intrapartum) that affect the neonate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Take preventive measures to insure skin integrity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utilize adult learning principles when teaching others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utilize your knowledge of the grieving process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other skills that are routine to your practice that are not included in this list?

Yes

No

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

If yes, please list specifics below

## Skills

### Specified Skills - Management of fluid and electrolytes, nutrition and feeding, oxygenation and ventilation, thermoregulation, resuscitation and developmental care.

Listed below are a variety of skills used in providing care to the neonate. Please indicate the frequency and the knowledge criticality applicable to the performance of these skills as it applies to the neonates you manage.

- **Essential** - an expected knowledge competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience
- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

**Specified Skills** (check all that apply)

	Essential	Routinely done	Occasionally done	Rarely done	Never done
Alter the NICU environment to meet the infant's developmental needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assist mothers in breast feeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assist parents/family with kangaroo care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Develop feeding plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate and respond to drug levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate calories	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate drug interactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate formula compositions and infant needs based on illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate the effects of elicit drugs on breastfeeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate the effects of maternal drugs on breastfeeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate the nutritional status of the neonate using key indicators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluate the oxygenation and ventilation status of the infant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gavage feed infants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hang and monitor drips (i.e. pressors, prostins)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Implement dietary supplements and fortifiers as ordered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interpret blood gases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintain current knowledge about advances in neonatal care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manage infants during transports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manage the thermoregulation of the neonate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitor oxygenation and ventilation status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitor the side-effects of drugs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitor the urinary output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participate in the diagnosis and plan of care with an inter-professional team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perform pain assessment with vital signs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide education about SIDS and/or shaken baby syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide enteral feeds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide neonatal resuscitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide neonatal stabilization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Provide nonnutritive sucking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide non-pharmacologic interventions for pain control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide parenteral fluids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide sensory experiences to the neonate based on gestation age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recognize dehydration and overhydration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respond to blood gases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review and modify the nursing plan of care based on ongoing evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review electrolytes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other skills that are routine to your practice that are not included in this list?

Yes

No

If yes, please list specifics below

## Skills

### Specified Skills - Diagnostic Procedures, Techniques and Equipment

Listed below are a variety of skills used in diagnostic procedures, techniques and equipment. Please indicate the frequency and the knowledge essentiality applicable to the performance of these skills as it applies to the neonates you manage. *Note: All listings are presented in alphabetical order and the importance of the item should not be based on where it is placed on the list.*

Check the box if you consider the item essential as defined below. Leave the box blank if not essential.

- **Essential** - an expected knowledge competency that a Neonatal Intensive Care nurse should possess no matter the educational background, practice setting, patient population focus or years of experience

Check the frequency that is most representative of your practice.

- **Routinely** - at least once a month or more
- **Occasionally** - every 2-6 months
- **Rarely** - less than 1-2 times per year

**Specified Skills** (check all that apply)

**Set up and assist with the following**

	Essential	Routinely done	Occasionally done	Rarely done	Never done
Chest tube insertion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exchange transfusion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intubation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lumbar puncture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Needle Aspiration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peripheral arterial line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suprapubic bladder tap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surfactant replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Umbilical line placement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Perform the following**

	Essential	Routinely done	Occasionally done	Rarely done	Never done
Arterial puncture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bag mask ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood pressures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood product transfusions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Chest tube removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dosage calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heel stick	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nasal gastric tube	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peripheral intravenous catheter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peripherally inserted central line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suctioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T-piece ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transpyloric tube	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urinary catheterization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Venous puncture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Manage infants on and trouble shoot the following

	Essential	Routinely done	Occasionally done	Rarely done	Never done
CPAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECMO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
End tidal CO2 monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High flow cannulae	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High frequency ventilators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Incubators and radiant warmers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indwelling lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infants in humidified environments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive and noninvasive blood gas monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neonatal conventional ventilators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phototherapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Set up and manage Chest tube drainage systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tracheostomies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Evaluate and report abnormalities for the following

	Essential	Routinely done	Occasionally done	Rarely done	Never done
Blood drug levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EEG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EKG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recognize acid base balance abnormalities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other skills that are routine to your practice that are not included in this list?

Yes

No

If yes, please list specifics below

## Professional Practice

### Professional Issues

Which of the following professional issues are essential to the Neonatal Intensive Care nursing practice?

	Yes	No
Ethical Issues	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Evidence-based practice	<input type="checkbox"/>	<input type="checkbox"/>
Legal Issues	<input type="checkbox"/>	<input type="checkbox"/>
Nursing Research	<input type="checkbox"/>	<input type="checkbox"/>
Patient Safety	<input type="checkbox"/>	<input type="checkbox"/>

Are there other items that are routine to your practice that are not included in this list?

- Yes  
 No

If yes, please list specifics below

## Current Certification Test Outline

The current certification test outline allocates question weighting with the following percentages.

Based on your personal experiences, do you believe these percentages are under-represented, over-represented or just about right?

	Under-represented	Over-represented	Just about right
<b>General Assessment and Management at 45-50%</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Assess &amp; Manage Pathophysiologic States at 45-55%</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Assess and Manage Psychosocial/Behavioral Adjustments at 5-10%</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Professional Issues at less than 5%</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The current certification test outline is listed below.

Does this content adequately reflect what is applied to your daily practice?

### General Assessment and Management

	Yes	No	Don't Know
<b>Maternal History and Risk Factors</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Gestational Age (at birth)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Physical Assessment</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Resuscitation and Stabilization</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Fluids and Electrolytes</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Nutrition and Feeding</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Oxygenation and Acid Base Homeostasis</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Thermoregulation</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Pharmacology</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Developmental Care</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Assess & Manage Pathophysiologic States

	Yes	No	Don't Know
<b>Cardiac</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Respiratory</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Gastrointestinal</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Genitourinary</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hematopoietic</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Neurological/Neuromuscular</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Infectious Diseases</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

Metabolic/Endocrine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infectious Disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Genetic Disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Head, Eye, Ear, Nose and Throat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Assess and Manage Psychosocial/Behavioral Adjustments

	Yes	No	Don't Know
Discharge Planning and Follow-up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grieving Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family Integration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Professional Issues

	Yes	No	Don't Know
Legal/Ethical Problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Demographic Information

### What best describes your practice setting?

- Hospital
- Follow Up Clinic
- Academic setting
- Administration
- Research
- Other (please specify)

### If Other (please specify)

### If you work in a hospital, is it designated as

- Level I normal newborn care
- Level II NICU
- Level III NICU
- Level IV NICU
- Not applicable
- Other (please specify)

### If Other (please specify)

### Are you employed by a

- Hospital
- Government Agency
- Private company
- Other (please specify)

### If Other (please specify)

### What is your highest level of education?

- Doctorate - Ph.D
- Doctorate - DNP
- Post Master's
- Master's

# Exhibit 1 Neonatal Intensive Care Nursing (NIC)

- Baccalaureate
- Associate
- Diploma
- Other (please specify)

**If Other (please specify)**

**What is your job title?**

- Staff Nurse
- Nurse Manager
- Nurse Educator
- Nursing Director
- Clinical Nurse Specialist
- Outreach Coordinator
- Patient Safety Nurse
- Nursing Instructor/Professor
- Researcher
- Other (Please specify)

**If Other (please specify)**

**How many hours a week do you work as a Neonatal Intensive Care nurse (clinical practice, education, research and administration)?**

- 46 hours or more
- 35-45 hours
- 20-34 hours
- less than 20 hours
- Not working as an Neonatal Intensive Care nurse at this time
- Retired

**What is the focus of your practice:**

- Direct patient care
- Education
- Management
- Research
- Unemployed
- Retired
- other (please specify)

**If Other (please specify)**

**Percentage of practice devoted to (enter whole numbers that total 100)**

Direct patient care

Education

Management

Research

**How long have you been a Neonatal Intensive Care nurse?**

- Less than a year
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- Over 20 years

What state do you live in

If Other (please specify)

Which of the following statements apply to your NCC Certification as a Neonatal Intensive Care nurse (check all that apply)

- Being NCC Certified is required for employment
- Being NCC Certified is encouraged
- Being NCC Certified is not required or encouraged
- There is a financial incentive tied to being NCC Certified
- There is no financial incentive tied to being NCC Certified
- My Certification as a Neonatal Intensive Care nurse was attained for personal reasons.
- Being a Certified Neonatal Intensive Care nurse is tied to other employer-based recognition (please specify)

Please specify other employer-based recognition

In the last 24 months what new practice change(s) have been incorporated into your practice?

- None
- Listed below

List practice change(s) here:

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
<b>Neonatal Intensive Care Nursing Core Competencies</b>				
Identify antepartal and intrapartal indicators of neonatal risk and their potential significance	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	1,610	70.71%	2277
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	585	25.69%	
	Not essential	49	2.15%	
	Not an expected competency of the Neonatal Intensive Care nurse	33	1.45%	
Systematically assess all body systems utilizing physical examination, gestational age assessment and neurobehavioral assessment	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	2,068	91.34%	2264
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	186	8.22%	
	Not essential	4	0.18%	
	Not an expected competency of the Neonatal Intensive Care nurse	6	0.27%	
Apply knowledge of anatomy and physiology (maternal, fetal, transitional, newborn), pathophysiology, pharmacology, nutrition, and behavioral psychology to assess the neonate and differentiate abnormal from normal	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	2,040	89.95%	2268
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	224	9.88%	
	Not essential	2	0.09%	
	Not an expected competency of the Neonatal Intensive Care nurse	2	0.09%	
Recognize normal values and deviations in clinical laboratory and diagnostic data and identify potential significance	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	1,952	86.18%	2265
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	308	13.60%	
	Not essential	2	0.09%	
	Not an expected competency of the Neonatal Intensive Care nurse	3	0.13%	
Assess the neonate's family, community and environment to identify areas of risk	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	1,323	58.49%	2262
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	816	36.07%	
	Not essential	71	3.14%	
	Not an expected competency of the Neonatal Intensive Care nurse	52	2.30%	
	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	1,328	59.18%	
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	660	29.41%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Utilize biophysical monitoring techniques to identify body system alterations	Not essential	133	5.93%	2244
	Not an expected competency of the Neonatal Intensive Care nurse	123	5.48%	
Develop an individualized plan of care for the restoration, maintenance and promotion of health for the high risk neonate and family unit during hospitalization and following discharge	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	1,610	71.11%	2264
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	562	24.82%	
	Not essential	64	2.83%	
	Not an expected competency of the Neonatal Intensive Care nurse	28	1.24%	
Implement diagnostic, therapeutic and educational plans in collaboration with other health care providers to provide direct care for the high risk neonate and family, including development	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	1,713	75.73%	2262
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	513	22.68%	
	Not essential	25	1.11%	
	Not an expected competency of the Neonatal Intensive Care nurse	11	0.49%	
Identify life-threatening states and initiate appropriate interventions	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	2,106	93.14%	2261
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	146	6.46%	
	Not essential	3	0.13%	
	Not an expected competency of the Neonatal Intensive Care nurse	6	0.27%	
Evaluate the plan of care in collaboration with other health care providers and the family and modify the plan of care as indicated	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	1,731	76.87%	2252
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	497	22.07%	
	Not essential	20	0.89%	
	Not an expected competency of the Neonatal Intensive Care nurse	4	0.18%	
Identify professional nursing issues which impact on the role of the neonatal nurse	Essential and is a frequent expectation of the Neonatal Intensive Care nurse	934	41.75%	2237
	Essential and critical to patient outcome for the Neonatal Intensive Care nurse but not often performed	994	44.43%	
	Not essential	237	10.59%	
	Not an expected competency of the Neonatal Intensive Care nurse	72	3.22%	
	A. Representative of the practice of the Neonatal Intensive Care nurse	2238	98.94%	



<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Are these competencies in your experience?	B. Not Representative of the practice of the Neonatal Intensive Care nurse	24	1.06%	2262
<b>General Assessment - Maternal Factors Affecting Neonatal Outcomes</b>				
<b>Lifestyle risks</b> - Listed below are risk factors related to maternal conditions, or maternal/family lifestyle. Please indicate the essentiality and frequency in which you manage neonates with this maternal history.				
Illegal drug exposure (cocaine, heroin etc)	Essential	1,395	74.76%	1866
	Routinely seen	888	47.59%	
	Occasionally seen	413	22.13%	
	Rarely seen	49	2.63%	
	Never seen	5	0.27%	
Legal drug exposure (prescription, alcohol, nicotine)	Essential	1,365	73.27%	1863
	Routinely seen	996	53.46%	
	Occasionally seen	319	17.12%	
	Rarely seen	38	2.04%	
	Never seen	2	0.11%	
Poor maternal nutrition	Essential	1,020	55.14%	1850
	Routinely seen	563	30.43%	
	Occasionally seen	675	36.49%	
	Rarely seen	261	14.11%	
	Never seen	25	1.35%	
No prenatal care	Essential	1,218	65.55%	1858
	Routinely seen	830	44.67%	
	Occasionally seen	513	27.61%	
	Rarely seen	85	4.57%	
	Never seen	2	0.11%	
<b>Maternal Conditions - Antepartum</b> - Listed below are risk factors related to maternal conditions, or maternal/family lifestyle. Please indicate the essentiality and frequency in which you manage neonates with this maternal history.				
Altered antepartum testing results	Essential	916	49.97%	1833
	Routinely seen	781	42.61%	
	Occasionally seen	587	32.02%	
	Rarely seen	143	7.80%	
	Never seen	42	2.29%	
Amniotic fluid disorders	Essential	1,053	56.80%	1854
	Routinely seen	738	39.81%	
	Occasionally seen	646	34.84%	
	Rarely seen	144	7.77%	
	Never seen	20	1.08%	
Anemia	Essential	866	47.19%	1835
	Routinely seen	654	35.64%	
	Occasionally seen	745	40.60%	
	Rarely seen	154	8.39%	
	Never seen	13	0.71%	
	Essential	578	31.72%	
	Routinely seen	483	26.51%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Asthma	Occasionally seen	795	43.63%	1822
	Rarely seen	343	18.83%	
	Never seen	31	1.70%	
Autoimmune disease	Essential	738	40%	1845
	Routinely seen	294	15.93%	
	Occasionally seen	911	49.38%	
	Rarely seen	438	23.74%	
	Never seen	21	1.14%	
Cardiac disease	Essential	822	44.60%	1843
	Routinely seen	331	17.96%	
	Occasionally seen	845	45.85%	
	Rarely seen	430	23.33%	
	Never seen	14	0.76%	
Diabetes	Essential	1,426	76.75%	1858
	Routinely seen	1,166	62.76%	
	Occasionally seen	115	6.19%	
	Rarely seen	11	0.59%	
	Never seen	8	0.43%	
Exposure to toxic substances	Essential	912	49.97%	1825
	Routinely seen	487	26.68%	
	Occasionally seen	514	28.16%	
	Rarely seen	450	24.66%	
	Never seen	89	4.88%	
Hypertension (all types)	Essential	1,411	75.98%	1857
	Routinely seen	1,159	62.41%	
	Occasionally seen	114	6.14%	
	Rarely seen	13	0.70%	
	Never seen	7	0.38%	
Infections	Essential	1,431	76.98%	1859
	Routinely seen	1,015	54.60%	
	Occasionally seen	244	13.13%	
	Rarely seen	25	1.34%	
	Never seen	6	0.32%	
Multiple gestation	Essential	1,398	75.24%	1858
	Routinely seen	1,075	57.86%	
	Occasionally seen	239	12.86%	
	Rarely seen	10	0.54%	
	Never seen	5	0.27%	
Obesity	Essential	1,145	61.86%	1851
	Routinely seen	1,130	61.05%	
	Occasionally seen	248	13.40%	
	Rarely seen	25	1.35%	
	Never seen	8	0.43%	
	Essential	736	40.02%	
	Routinely seen	330	17.94%	
	Occasionally seen	852	46.33%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Renal/GU disease	Rarely seen	437	23.76%	1839
	Never seen	19	1.03%	
Thyroid disease	Essential	749	41.00%	1827
	Routinely seen	405	22.17%	
	Occasionally seen	858	46.96%	
	Rarely seen	355	19.43%	
	Never seen	18	0.99%	
<b>Maternal Conditions - Intrapartum</b> - Listed below are risk factors related to maternal conditions, or maternal/family lifestyle. Please indicate the essentiality and frequency in which you manage neonates with this maternal history.				
Cesarean delivery	Essential	1,560	83.69%	1864
	Routinely seen	1,169	62.71%	
	Occasionally seen	25	1.34%	
	Rarely seen	2	0.11%	
	Never seen	8	0.43%	
Effects of maternal analgesia/anesthesia	Essential	1,417	76.10%	1862
	Routinely seen	895	48.07%	
	Occasionally seen	326	17.51%	
	Rarely seen	69	3.71%	
	Never seen	9	0.48%	
Hemorrhage	Essential	1,247	67.26%	1854
	Routinely seen	517	27.89%	
	Occasionally seen	743	40.08%	
	Rarely seen	166	8.95%	
	Never seen	11	0.59%	
Induction of labor	Essential	1,284	69.29%	1853
	Routinely seen	1,197	64.60%	
	Occasionally seen	110	5.94%	
	Rarely seen	11	0.59%	
	Never seen	13	0.70%	
Labor disorders (prolonged, precipitous etc)	Essential	1,337	71.92%	1859
	Routinely seen	1,073	57.72%	
	Occasionally seen	246	13.23%	
	Rarely seen	19	1.02%	
	Never seen	10	0.54%	
Malpresentation	Essential	1,182	63.93%	1849
	Routinely seen	828	44.78%	
	Occasionally seen	520	28.12%	
	Rarely seen	63	3.41%	
	Never seen	13	0.70%	
Operative vaginal birth (vacuum, forceps)	Essential	1,272	68.87%	1847
	Routinely seen	848	45.91%	
	Occasionally seen	483	26.15%	
	Rarely seen	54	2.92%	
	Never seen	10	0.54%	
	Essential	1,358	72.70%	
	Routinely seen	903	48.34%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Placental disorders (placenta previa, abruption, etc)	Occasionally seen	436	23.34%	1868
	Rarely seen	36	1.93%	
	Never seen	11	0.59%	
Preterm labor	Essential	1,542	82.99%	1858
	Routinely seen	1,138	61.25%	
	Occasionally seen	64	3.44%	
	Rarely seen	3	0.16%	
	Never seen	9	0.48%	
Prolonged pregnancy	Essential	1,116	61.05%	1828
	Routinely seen	679	37.14%	
	Occasionally seen	594	32.49%	
	Rarely seen	188	10.28%	
	Never seen	15	0.82%	
Are there other items that are routine to your practice that are not included in this list?	Yes	115	6.56%	1754
	No	1639	93.44%	
<b>General Assessment</b>				
<b>Physical Assessment-</b> Listed below are a variety of physical assessments. Please indicate the essentiality and frequency in which neonates require these types of assessments.				
Behavioral assessment	Essential	1,320	72.17%	1829
	Routinely done	979	53.53%	
	Occasionally done	217	11.86%	
	Rarely done	81	4.43%	
	Never done	28	1.53%	
Genetic work up	Essential	799	44.02%	1815
	Routinely done	504	27.77%	
	Occasionally done	906	49.92%	
	Rarely done	193	10.63%	
	Never done	16	0.88%	
Gestational age assessment	Essential	1,502	82.12%	1829
	Routinely done	956	52.27%	
	Occasionally done	156	8.53%	
	Rarely done	63	3.44%	
	Never done	23	1.26%	
Head-to-toe exam	Essential	1,749	95.42%	1833
	Routinely done	1,018	55.54%	
	Occasionally done	5	0.27%	
	Rarely done	0	0%	
	Never done	0	0%	
Neurological exam	Essential	1,500	82.15%	1826
	Routinely done	988	54.11%	
	Occasionally done	174	9.53%	
	Rarely done	27	1.48%	
	Never done	3	0.16%	
	Essential	972	53.79%	
	Routinely done	1,038	57.44%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Ophthalmologic exam	Occasionally done	286	15.83%	1807
	Rarely done	97	5.37%	
	Never done	82	4.54%	
Are there other items that are routine to your practice that are not included in this list?	Yes	95	5.54%	1715
	No	1620	94.46%	
<b>Thermoregulation</b> - Listed below are a variety of issues related to thermoregulation. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge to manage your patients.				
Cold stress	Essential	1,575	87.16%	1807
	Routinely seen/done	723	40.01%	
	Occasionally seen/done	351	19.42%	
	Rarely seen/done	96	5.31%	
	Never seen/done	1	0.06%	
Heat loss by conduction	Essential	1,491	82.79%	1801
	Routinely seen/done	739	41.03%	
	Occasionally seen/done	342	18.99%	
	Rarely seen/done	115	6.39%	
	Never seen/done	1	0.06%	
Heat loss by convection	Essential	1,492	82.75%	1803
	Routinely seen/done	745	41.32%	
	Occasionally seen/done	331	18.36%	
	Rarely seen/done	121	6.71%	
	Never seen/done	1	0.06%	
Heat loss by evaporation	Essential	1,504	83.56%	1800
	Routinely seen/done	789	43.83%	
	Occasionally seen/done	303	16.83%	
	Rarely seen/done	96	5.33%	
	Never seen/done	2	0.11%	
Heat loss by radiation	Essential	1,488	82.67%	1800
	Routinely seen/done	718	39.89%	
	Occasionally seen/done	335	18.61%	
	Rarely seen/done	134	7.44%	
	Never seen/done	3	0.17%	
Hyperthermia	Essential	1,380	76.92%	1794
	Routinely seen/done	589	32.83%	
	Occasionally seen/done	479	26.70%	
	Rarely seen/done	213	11.87%	
	Never seen/done	2	0.11%	
Hypothermia	Essential	1,509	84.02%	1796
	Routinely seen/done	793	44.15%	
	Occasionally seen/done	339	18.88%	
	Rarely seen/done	64	3.56%	
	Never seen/done	0	0%	
	Essential	1,648	91.10%	
	Routinely seen/done	1,039	57.44%	
	Occasionally seen/done	41	2.27%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Infant on radiant warmers	Rarely seen/done	14	0.77%	1809
	Never seen/done	1	0.06%	
Infants in incubators	Essential	1,673	92.64%	1806
	Routinely seen/done	1,054	58.36%	
	Occasionally seen/done	13	0.72%	
	Rarely seen/done	4	0.22%	
	Never seen/done	0	0%	
Infants requiring humidification	Essential	1,551	85.98%	1804
	Routinely seen/done	944	52.33%	
	Occasionally seen/done	134	7.43%	
	Rarely seen/done	57	3.16%	
	Never seen/done	25	1.39%	
Knowledge factors that put neonate at risk for hypothermia	Essential	1,694	93.75%	1807
	Routinely seen/done	993	54.95%	
	Occasionally seen/done	30	1.66%	
	Rarely seen/done	12	0.66%	
	Never seen/done	0	0%	
Knowledge of neutral thermal environment	Essential	1,686	93.41%	1805
	Routinely seen/done	1,005	55.68%	
	Occasionally seen/done	17	0.94%	
	Rarely seen/done	10	0.55%	
	Never seen/done	1	0.06%	
Knowledge of thermoregulation physiology	Essential	1,653	92.29%	1791
	Routinely seen/done	987	55.11%	
	Occasionally seen/done	39	2.18%	
	Rarely seen/done	9	0.50%	
	Never seen/done	0	0%	
Are there other items that are routine to your practice that are not included in this list?	Yes	102	6.09%	1674
	No	1572	93.91%	
<b>Fluids and Electrolytes - Listed below are a variety of issues related to fluid and electrolyte management. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge to manage your patients.</b>				
Hypercalcemia	Essential	1,181	66.35%	1780
	Routinely seen/done	554	31.12%	
	Occasionally seen/done	587	32.98%	
	Rarely seen/done	244	13.71%	
	Never seen/done	13	0.73%	
Hyperkalemia	Essential	1,266	71.12%	1780
	Routinely seen/done	663	37.25%	
	Occasionally seen/done	527	29.61%	
	Rarely seen/done	160	8.99%	
	Never seen/done	8	0.45%	
	Essential	1,293	72.85%	
	Routinely seen/done	736	41.46%	
	Occasionally seen/done	460	25.92%	
	Rarely seen/done	119	6.70%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Hypernatremia	Never seen/done	4	0.23%	1775
Hypocalcemia	Essential	1,269	71.25%	1781
	Routinely seen/done	768	43.12%	
	Occasionally seen/done	462	25.94%	
	Rarely seen/done	106	5.95%	
	Never seen/done	4	0.22%	
Hypokalemia	Essential	1,271	71.81%	1770
	Routinely seen/done	675	38.14%	
	Occasionally seen/done	514	29.04%	
	Rarely seen/done	127	7.18%	
	Never seen/done	4	0.23%	
Hyponatremia	Essential	1,311	73.82%	1776
	Routinely seen/done	804	45.27%	
	Occasionally seen/done	422	23.76%	
	Rarely seen/done	84	4.73%	
	Never seen/done	1	0.06%	
Hypophosphatemia	Essential	1,050	59.79%	1756
	Routinely seen/done	498	28.36%	
	Occasionally seen/done	567	32.29%	
	Rarely seen/done	318	18.11%	
	Never seen/done	36	2.05%	
Knowledge of preventing fluid and electrolyte imbalance	Essential	1,585	89.04%	1780
	Routinely seen/done	965	54.21%	
	Occasionally seen/done	86	4.83%	
	Rarely seen/done	21	1.18%	
	Never seen/done	2	0.11%	
Knowledge of water balance physiology	Essential	1,467	83.02%	1767
	Routinely seen/done	936	52.97%	
	Occasionally seen/done	139	7.87%	
	Rarely seen/done	42	2.38%	
	Never seen/done	9	0.51%	
Are there other items that are routine to your practice that are not included in this list?	Yes	72	4.40%	1635
	No	1563	95.60%	
<b>Nutrition and Feeding</b> - Listed below are a variety of issues related to nutritional management. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge to manage your patients.				
Breastfeeding and its benefits	Essential	1,689	95.48%	1769
	Routinely seen/done	1,004	56.76%	
	Occasionally seen/done	13	0.73%	
	Rarely seen/done	0	0%	
	Never seen/done	1	0.06%	
Enteral nutrition	Essential	1,657	93.88%	1765
	Routinely seen/done	1,014	57.45%	
	Occasionally seen/done	14	0.79%	
	Rarely seen/done	4	0.23%	
	Never seen/done	1	0.06%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Gavage feeding	Essential	1,660	94.00%	1766
	Routinely seen/done	1,018	57.64%	
	Occasionally seen/done	12	0.68%	
	Rarely seen/done	1	0.06%	
	Never seen/done	0	0%	
Kangaroo care	Essential	1,609	91.32%	1762
	Routinely seen/done	1,016	57.66%	
	Occasionally seen/done	43	2.44%	
	Rarely seen/done	11	0.62%	
	Never seen/done	0	0%	
Knowledge of formula composition and indications for use	Essential	1,162	66.86%	1738
	Routinely seen/done	935	53.80%	
	Occasionally seen/done	257	14.79%	
	Rarely seen/done	59	3.39%	
	Never seen/done	13	0.75%	
Knowledge of GI development	Essential	1,431	81.45%	1757
	Routinely seen/done	960	54.64%	
	Occasionally seen/done	143	8.14%	
	Rarely seen/done	31	1.76%	
	Never seen/done	4	0.23%	
Knowledge of human milk composition	Essential	1,229	70.75%	1737
	Routinely seen/done	911	52.45%	
	Occasionally seen/done	244	14.05%	
	Rarely seen/done	55	3.17%	
	Never seen/done	4	0.23%	
Knowledge of human milk fortifiers	Essential	1,341	76.37%	1756
	Routinely seen/done	1,024	58.31%	
	Occasionally seen/done	149	8.49%	
	Rarely seen/done	20	1.14%	
	Never seen/done	1	0.06%	
Knowledge of lactation physiology	Essential	1,224	70.22%	1743
	Routinely seen/done	987	56.63%	
	Occasionally seen/done	212	12.16%	
	Rarely seen/done	41	2.35%	
	Never seen/done	5	0.29%	
Knowledge of non-nutritive sucking and its benefits	Essential	1,542	87.22%	1768
	Routinely seen/done	1,043	58.99%	
	Occasionally seen/done	49	2.77%	
	Rarely seen/done	6	0.34%	
	Never seen/done	0	0%	
Knowledge of nutritional requirements	Essential	1,421	81.20%	1750
	Routinely seen/done	982	56.11%	
	Occasionally seen/done	122	6.97%	
	Rarely seen/done	21	1.20%	
	Never seen/done	3	0.17%	
	Essential	1,247	71.67%	



Exhibit 2 Neonatal Intensive Care Nursing (NIC)		# per answer option	% per answer option	Total per item
Questions	Answer Options			
Knowledge of vitamin and mineral supplements	Routinely seen/done	993	57.07%	1740
	Occasionally seen/done	187	10.75%	
	Rarely seen/done	39	2.24%	
	Never seen/done	6	0.34%	
Oral care	Essential	1,512	85.57%	1767
	Routinely seen/done	1,032	58.40%	
	Occasionally seen/done	63	3.57%	
	Rarely seen/done	9	0.51%	
	Never seen/done	2	0.11%	
Parenteral nutrition	Essential	1,558	88.42%	1762
	Routinely seen/done	1,035	58.74%	
	Occasionally seen/done	41	2.33%	
	Rarely seen/done	6	0.34%	
	Never seen/done	5	0.28%	
Special nutritional needs of the late preterm infant	Essential	1,477	84.16%	1755
	Routinely seen/done	1,011	57.61%	
	Occasionally seen/done	94	5.36%	
	Rarely seen/done	16	0.91%	
	Never seen/done	3	0.17%	
Special nutritional needs of the preterm infant	Essential	1,498	85.99%	1742
	Routinely seen/done	1,013	58.15%	
	Occasionally seen/done	61	3.50%	
	Rarely seen/done	10	0.57%	
	Never seen/done	4	0.23%	
Are there other items that are routine to your practice that are not included in this list?	Yes	89	5.45%	1633
	No	1544	94.55%	
<b>Resuscitation</b> - Listed below are a variety of issues related to infants requiring resuscitation and stabilization. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge to manage a neonate requiring resuscitation.				
Infants requiring chest compressions	Essential	1,434	81.71%	1755
	Routinely seen/done	412	23.48%	
	Occasionally seen/done	648	36.92%	
	Rarely seen/done	201	11.45%	
	Never seen/done	2	0.11%	
Infants requiring endotracheal intubation	Essential	1,549	88.31%	1754
	Routinely seen/done	947	53.99%	
	Occasionally seen/done	169	9.64%	
	Rarely seen/done	20	1.14%	
	Never seen/done	5	0.29%	
Infants requiring laryngeal mask airway insertion	Essential	903	51.96%	1738
	Routinely seen/done	183	10.53%	
	Occasionally seen/done	274	15.77%	
	Rarely seen/done	577	33.20%	
	Never seen/done	467	26.87%	
	Essential	1,607	91.83%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Infants requiring positive pressure ventilation	Routinely seen/done	982	56.11%	1750
	Occasionally seen/done	101	5.77%	
	Rarely seen/done	5	0.29%	
	Never seen/done	1	0.06%	
Infants requiring resuscitation medications	Essential	1,418	80.84%	1754
	Routinely seen/done	429	24.46%	
	Occasionally seen/done	600	34.21%	
	Rarely seen/done	246	14.03%	
	Never seen/done	4	0.23%	
Infants requiring stimulation	Essential	1,655	94.25%	1756
	Routinely seen/done	1,032	58.77%	
	Occasionally seen/done	17	0.97%	
	Rarely seen/done	3	0.17%	
	Never seen/done	1	0.06%	
Infants requiring suctioning	Essential	1,648	94.06%	1752
	Routinely seen/done	1,019	58.16%	
	Occasionally seen/done	32	1.83%	
	Rarely seen/done	4	0.23%	
	Never seen/done	1	0.06%	
Knowledge of physiology and anatomy of transition to extrauterine life	Essential	1,643	93.94%	1749
	Routinely seen/done	981	56.09%	
	Occasionally seen/done	34	1.94%	
	Rarely seen/done	4	0.23%	
	Never seen/done	2	0.11%	
Thermoregulation management of neonate undergoing resuscitation	Essential	1,630	93.14%	1750
	Routinely seen/done	944	53.94%	
	Occasionally seen/done	76	4.34%	
	Rarely seen/done	18	1.03%	
	Never seen/done	1	0.06%	
Are there other items that are routine to your practice that are not included in this list?	Yes	72	4.39%	1639
	No	1567	95.61%	
<b>Oxygenation and Acid-Base Homeostasis - Listed below are a variety of issues related to oxygenation and homeostasis. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge regarding oxygenation and homeostasis.</b>				
Assist Control ventilation	Essential	1,289	74.77%	1724
	Routinely seen/done	814	47.22%	
	Occasionally seen/done	256	14.85%	
	Rarely seen/done	92	5.34%	
	Never seen/done	42	2.44%	
Bi-level CPAP	Essential	983	58.37%	1684
	Routinely seen/done	570	33.85%	
	Occasionally seen/done	231	13.72%	
	Rarely seen/done	174	10.33%	
	Never seen/done	289	17.16%	
	Essential	647	39.67%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Continuing distending pressure	Routinely seen/done	339	20.78%	1631
	Occasionally seen/done	255	15.63%	
	Rarely seen/done	259	15.88%	
	Never seen/done	512	31.39%	
CPAP	Essential	1,530	87.98%	1739
	Routinely seen/done	1,010	58.08%	
	Occasionally seen/done	50	2.88%	
	Rarely seen/done	13	0.75%	
	Never seen/done	8	0.46%	
ECMO	Essential	517	30.32%	1705
	Routinely seen/done	189	11.09%	
	Occasionally seen/done	234	13.72%	
	Rarely seen/done	260	15.25%	
	Never seen/done	914	53.61%	
High flow nasal cannula	Essential	1,499	86.55%	1732
	Routinely seen/done	970	56.00%	
	Occasionally seen/done	77	4.45%	
	Rarely seen/done	39	2.25%	
	Never seen/done	14	0.81%	
High frequency ventilation	Essential	1,358	78.18%	1737
	Routinely seen/done	787	45.31%	
	Occasionally seen/done	240	13.82%	
	Rarely seen/done	91	5.24%	
	Never seen/done	82	4.72%	
I: E ratio	Essential	1,103	64.62%	1707
	Routinely seen/done	814	47.69%	
	Occasionally seen/done	248	14.53%	
	Rarely seen/done	135	7.91%	
	Never seen/done	78	4.57%	
Intermittent mandatory ventilation	Essential	1,170	68.66%	1704
	Routinely seen/done	768	45.07%	
	Occasionally seen/done	231	13.56%	
	Rarely seen/done	125	7.34%	
	Never seen/done	120	7.04%	
Knowledge of acid base homeostasis	Essential	1,510	87.18%	1732
	Routinely seen/done	967	55.83%	
	Occasionally seen/done	85	4.91%	
	Rarely seen/done	17	0.98%	
	Never seen/done	3	0.17%	
Knowledge of oxyhemoglobin saturation curve	Essential	1,066	62.78%	1698
	Routinely seen/done	701	41.28%	
	Occasionally seen/done	345	20.32%	
	Rarely seen/done	157	9.25%	
	Never seen/done	78	4.59%	
	Essential	1,358	78.91%	
	Routinely seen/done	949	55.14%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Mean airway pressure	Occasionally seen/done	141	8.19%	1721
	Rarely seen/done	36	2.09%	
	Never seen/done	9	0.52%	
Nasal intermittent positive pressure ventilation	Essential	1,118	65.23%	1714
	Routinely seen/done	672	39.21%	
	Occasionally seen/done	187	10.91%	
	Rarely seen/done	123	7.18%	
	Never seen/done	256	14.94%	
Partial liquid ventilation	Essential	345	20.68%	1668
	Routinely seen/done	115	6.89%	
	Occasionally seen/done	127	7.61%	
	Rarely seen/done	206	12.35%	
	Never seen/done	1,118	67.03%	
Patient triggered ventilation	Essential	1,073	62.97%	1704
	Routinely seen/done	742	43.54%	
	Occasionally seen/done	261	15.32%	
	Rarely seen/done	130	7.63%	
	Never seen/done	159	9.33%	
Peak inspiratory pressure	Essential	1,392	80.56%	1728
	Routinely seen/done	986	57.06%	
	Occasionally seen/done	122	7.06%	
	Rarely seen/done	32	1.85%	
	Never seen/done	11	0.64%	
Pressure regulated volume control	Essential	1,158	68.24%	1697
	Routinely seen/done	719	42.37%	
	Occasionally seen/done	262	15.44%	
	Rarely seen/done	118	6.95%	
	Never seen/done	122	7.19%	
Pressure support ventilation	Essential	1,325	76.95%	1722
	Routinely seen/done	902	52.38%	
	Occasionally seen/done	172	9.99%	
	Rarely seen/done	56	3.25%	
	Never seen/done	33	1.92%	
Proportional assist ventilation	Essential	663	40.08%	1654
	Routinely seen/done	372	22.49%	
	Occasionally seen/done	225	13.60%	
	Rarely seen/done	196	11.85%	
	Never seen/done	572	34.58%	
Are there other items that are routine to your practice that are not included in this list?	Yes	103	6.45%	1597
	No	1494	93.55%	
<b>Development Care</b> - Listed below are a variety of issues related to developmental care. Please indicate the essentiality and frequency in which you encounter or need the requisite knowledge requiring developmental care.				
	Essential	1,512	87.65%	
	Routinely	1,016	58.90%	
	Occasionally	61	3.54%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Knowledge of how light affects premature infants	Rarely	9	0.52%	1725
	Never	5	0.29%	
Knowledge of how noise affects premature infants	Essential	1,543	89.45%	1725
	Routinely	1,012	58.67%	
	Occasionally	41	2.38%	
	Rarely	7	0.41%	
	Never	4	0.23%	
Knowledge of infant cues	Essential	1,599	92.59%	1727
	Routinely	995	57.61%	
	Occasionally	34	1.97%	
	Rarely	2	0.12%	
	Never	0	0%	
Knowledge of neonatal behavioral states	Essential	1,557	90.10%	1728
	Routinely	1,003	58.04%	
	Occasionally	42	2.43%	
	Rarely	4	0.23%	
	Never	2	0.12%	
Knowledge of neonatal circadian rhythms	Essential	1,290	75.39%	1711
	Routinely	889	51.96%	
	Occasionally	200	11.69%	
	Rarely	70	4.09%	
	Never	32	1.87%	
Knowledge of neurobehavioral development	Essential	1,464	85.17%	1719
	Routinely	1,003	58.35%	
	Occasionally	85	4.94%	
	Rarely	15	0.87%	
	Never	4	0.23%	
Knowledge of proper positioning and handling	Essential	1,618	93.58%	1729
	Routinely	995	57.55%	
	Occasionally	15	0.87%	
	Rarely	3	0.17%	
	Never	0	0%	
Knowledge of sensory capabilities	Essential	1,459	84.63%	1724
	Routinely	959	55.63%	
	Occasionally	114	6.61%	
	Rarely	20	1.16%	
	Never	4	0.23%	
Knowledge of the principles of development	Essential	1,500	87.06%	1723
	Routinely	994	57.69%	
	Occasionally	75	4.35%	
	Rarely	12	0.70%	
	Never	1	0.06%	
Knowledge of the role of smell and	Essential	1,219	71.54%	
	Routinely	836	49.06%	
	Occasionally	228	13.38%	
	Rarely	106	6.22%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
taste in the premature infant	Never	49	2.88%	1704
Promotion of kangaroo care and its benefits	Essential	1,569	91.06%	1723
	Routinely	1,003	58.21%	
	Occasionally	35	2.03%	
	Rarely	10	0.58%	
	Never	0	0%	
Are there other items that are routine to your practice that are not included in this list?	Yes	60	3.76%	1594
	No	1534	96.24%	
<b>Neonatal Laboratory Test Diagnostic Procedures - For the following tests and diagnostic studies, indicate the frequency, essentiality and nature of what you are responsible for in regard to the specific test listed.</b>				
Antibody screening	Essential	1,079	64.19%	1681
	Routinely done	859	51.10%	
	Occasionally done	294	17.49%	
	Rarely done	103	6.13%	
	No longer used	9	0.54%	
	Interpret Results	178	10.59%	
	Explain results	124	7.38%	
Arterial blood gas	Essential	1,540	89.64%	1718
	Routinely done	964	56.11%	
	Occasionally done	76	4.42%	
	Rarely done	9	0.52%	
	No longer used	0	0%	
	Interpret Results	436	25.38%	
	Explain results	314	18.28%	
Bilirubin (indirect)	Essential	1,472	86.08%	1710
	Routinely done	968	56.61%	
	Occasionally done	75	4.39%	
	Rarely done	18	1.05%	
	No longer used	6	0.35%	
	Interpret Results	347	20.29%	
	Explain results	278	16.26%	
Bilirubin (total)	Essential	1,555	90.41%	1720
	Routinely done	1,029	59.83%	
	Occasionally done	8	0.47%	
	Rarely done	2	0.12%	
	No longer used	0	0%	
	Interpret Results	390	22.67%	
	Explain results	319	18.55%	
Blood culture	Essential	1,567	91.26%	1717
	Routinely done	990	57.66%	
	Occasionally done	29	1.69%	
	Rarely done	2	0.12%	
	No longer used	0	0%	
	Interpret Results	352	20.50%	
	Explain results	302	17.59%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Blood glucose	Essential	1,616	93.79%	1723
	Routinely done	987	57.28%	
	Occasionally done	5	0.29%	
	Rarely done	0	0%	
	No longer used	0	0%	
	Interpret Results	427	24.78%	
	Explain results	351	20.37%	
Blood type and Rh	Essential	1,478	86.03%	1718
	Routinely done	1,008	58.67%	
	Occasionally done	64	3.73%	
	Rarely done	2	0.12%	
	No longer used	0	0%	
	Interpret Results	294	17.11%	
	Explain results	226	13.15%	
BUN and creatinine	Essential	1,423	82.68%	1721
	Routinely done	985	57.23%	
	Occasionally done	102	5.93%	
	Rarely done	15	0.87%	
	No longer used	0	0%	
	Interpret Results	295	17.14%	
	Explain results	173	10.05%	
C-reactive protein	Essential	1,361	79.31%	1716
	Routinely done	885	51.57%	
	Occasionally done	181	10.55%	
	Rarely done	69	4.02%	
	No longer used	13	0.76%	
	Interpret Results	333	19.41%	
	Explain results	236	13.75%	
Calcium and Phosphorous	Essential	1,381	80.57%	1714
	Routinely done	1,016	59.28%	
	Occasionally done	88	5.13%	
	Rarely done	19	1.11%	
	No longer used	0	0%	
	Interpret Results	280	16.34%	
	Explain results	160	9.33%	
Capillary blood gas	Essential	1,543	89.66%	1721
	Routinely done	949	55.14%	
	Occasionally done	76	4.42%	
	Rarely done	12	0.70%	
	No longer used	2	0.12%	
	Interpret Results	397	23.07%	
	Explain results	286	16.62%	
	Essential	1,093	64.07%	
	Routinely done	596	34.94%	
	Occasionally done	551	32.30%	
	Rarely done	179	10.49%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Clotting studies	No longer used	4	0.23%	1706
	Interpret Results	230	13.48%	
	Explain results	133	7.80%	
Complete blood count	Essential	1,591	92.45%	1721
	Routinely done	998	57.99%	
	Occasionally done	11	0.64%	
	Rarely done	3	0.17%	
	No longer used	0	0%	
	Interpret Results	389	22.60%	
	Explain results	276	16.04%	
Coombs	Essential	1,359	79.33%	1713
	Routinely done	944	55.11%	
	Occasionally done	173	10.10%	
	Rarely done	33	1.93%	
	No longer used	5	0.29%	
	Interpret Results	269	15.70%	
	Explain results	184	10.74%	
Electrolyte panel	Essential	1,557	90.73%	1716
	Routinely done	988	57.58%	
	Occasionally done	23	1.34%	
	Rarely done	4	0.23%	
	No longer used	0	0%	
	Interpret Results	366	21.33%	
	Explain results	247	14.39%	
Fecal occult blood testing	Essential	912	53.40%	1708
	Routinely done	401	23.48%	
	Occasionally done	493	28.86%	
	Rarely done	377	22.07%	
	No longer used	140	8.20%	
	Interpret Results	239	13.99%	
	Explain results	179	10.48%	
Genetic screening	Essential	914	53.67%	1703
	Routinely done	493	28.95%	
	Occasionally done	708	41.57%	
	Rarely done	232	13.62%	
	No longer used	6	0.35%	
	Interpret Results	106	6.22%	
	Explain results	58	3.41%	
Hct and Hgb	Essential	1,562	90.92%	1718
	Routinely done	986	57.39%	
	Occasionally done	20	1.16%	
	Rarely done	8	0.47%	
	No longer used	1	0.06%	
	Interpret Results	367	21.36%	
	Explain results	270	15.72%	
	Essential	1,038	61.31%	



<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Hepatitis screening	Routinely done	535	31.60%	1693
	Occasionally done	393	23.21%	
	Rarely done	320	18.90%	
	No longer used	29	1.71%	
	Interpret Results	163	9.63%	
	Explain results	101	5.97%	
HIV screening	Essential	916	54.33%	1686
	Routinely done	418	24.79%	
	Occasionally done	462	27.40%	
	Rarely done	454	26.93%	
	No longer used	28	1.66%	
	Interpret Results	153	9.07%	
Kleihauer Betke test	Explain results	83	4.92%	1618
	Essential	553	34.18%	
	Routinely done	197	12.18%	
	Occasionally done	457	28.24%	
	Rarely done	616	38.07%	
	No longer used	125	7.73%	
Liver function studies	Interpret Results	112	6.92%	1707
	Explain results	121	7.48%	
	Essential	1,171	68.60%	
	Routinely done	764	44.76%	
	Occasionally done	349	20.45%	
	Rarely done	135	7.91%	
Magnesium	No longer used	8	0.47%	1708
	Interpret Results	195	11.42%	
	Explain results	115	6.74%	
	Essential	1,290	75.53%	
	Routinely done	880	51.52%	
	Occasionally done	213	12.47%	
Newborn screen	Rarely done	55	3.22%	1717
	No longer used	4	0.23%	
	Interpret Results	244	14.29%	
	Explain results	146	8.55%	
	Essential	1,565	91.15%	
	Routinely done	976	56.84%	
	Occasionally done	10	0.58%	1717
	Rarely done	6	0.35%	
	No longer used	1	0.06%	
	Interpret Results	163	9.49%	
	Explain results	140	8.15%	
	Essential	762	45.79%	1717
	Routinely done	348	20.91%	
	Occasionally done	375	22.54%	
	Rarely done	561	33.71%	
	No longer used	83	4.99%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Sickle cell screen	Interpret Results	100	6.01%	1664
	Explain results	66	3.97%	
Spinal fluid analysis	Essential	1,011	59.33%	1704
	Routinely done	588	34.51%	
	Occasionally done	571	33.51%	
	Rarely done	192	11.27%	
	No longer used	20	1.17%	
	Interpret Results	174	10.21%	
	Explain results	102	5.99%	
T assay	Essential	467	29.67%	1574
	Routinely done	210	13.34%	
	Occasionally done	383	24.33%	
	Rarely done	590	37.48%	
	No longer used	169	10.74%	
	Interpret Results	59	3.75%	
	Explain results	76	4.83%	
Thyroid studies	Essential	867	51.45%	1685
	Routinely done	555	32.94%	
	Occasionally done	521	30.92%	
	Rarely done	294	17.45%	
	No longer used	26	1.54%	
	Interpret Results	136	8.07%	
	Explain results	79	4.69%	
Ultrasound	Essential	1,298	76.35%	1700
	Routinely done	954	56.12%	
	Occasionally done	136	8%	
	Rarely done	32	1.88%	
	No longer used	4	0.24%	
	Interpret Results	108	6.35%	
	Explain results	109	6.41%	
Urinalysis	Essential	1,184	69.52%	1703
	Routinely done	707	41.51%	
	Occasionally done	384	22.55%	
	Rarely done	125	7.34%	
	No longer used	18	1.06%	
	Interpret Results	204	11.98%	
	Explain results	141	8.28%	
Urine culture	Essential	1,176	69.01%	1704
	Routinely done	691	40.55%	
	Occasionally done	405	23.77%	
	Rarely done	132	7.75%	
	No longer used	13	0.76%	
	Interpret Results	216	12.68%	
	Explain results	170	9.98%	
	Essential	1,293	76.01%	
	Routinely done	787	46.27%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Venous blood gas	Occasionally done	240	14.11%	1701
	Rarely done	89	5.23%	
	No longer used	32	1.88%	
	Interpret Results	291	17.11%	
	Explain results	210	12.35%	
Vitamin D levels	Essential	686	41.55%	1651
	Routinely done	382	23.14%	
	Occasionally done	453	27.44%	
	Rarely done	451	27.32%	
	No longer used	108	6.54%	
	Interpret Results	101	6.12%	
	Explain results	83	5.03%	
White cell count with differential	Essential	1,471	86.07%	1709
	Routinely done	962	56.29%	
	Occasionally done	42	2.46%	
	Rarely done	28	1.64%	
	No longer used	7	0.41%	
	Interpret Results	311	18.20%	
	Explain results	215	12.58%	
X-rays	Essential	1,516	88.34%	1716
	Routinely done	974	56.76%	
	Occasionally done	24	1.40%	
	Rarely done	5	0.29%	
	No longer used	1	0.06%	
	Interpret Results	218	12.70%	
	Explain results	175	10.20%	
Other	Essential	130	60.19%	216
	Routinely done	62	28.70%	
	Occasionally done	15	6.94%	
	Rarely done	11	5.09%	
	No longer used	8	3.70%	
	Interpret Results	19	8.80%	
	Explain results	44	20.37%	
Are there other laboratory tests or procedures that are routine to your practice that are not included in this list?	Yes	116	7.53%	1540
	No	1424	92.47%	
<b>Assess And Manage Pathophysiologic States</b>				
<b>Cardiac and Pulmonary</b> - Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with cardiac and/or pulmonary disorders.				
Abnormal heart sounds	Essential	1,585	85.35%	1857
	Routinely seen	897	48.30%	
	Occasionally seen	241	12.98%	
	Rarely seen	21	1.13%	
	Never seen	2	0.11%	
	Essential	882	48.25%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Aortic stenosis	Routinely seen	280	15.32%	1828
	Occasionally seen	777	42.51%	
	Rarely seen	513	28.06%	
	Never seen	44	2.41%	
Apnea of prematurity	Essential	1,747	94.18%	1855
	Routinely seen	973	52.45%	
	Occasionally seen	48	2.59%	
	Rarely seen	5	0.27%	
	Never seen	0	0%	
Atrial septal defect	Essential	1,062	57.72%	1840
	Routinely seen	584	31.74%	
	Occasionally seen	744	40.43%	
	Rarely seen	175	9.51%	
	Never seen	14	0.76%	
Atrioventricular septal defect	Essential	965	52.65%	1833
	Routinely seen	431	23.51%	
	Occasionally seen	768	41.90%	
	Rarely seen	333	18.17%	
	Never seen	21	1.15%	
Bronchopulmonary dysplasia/chronic lung disease	Essential	1,465	79.06%	1853
	Routinely seen	798	43.07%	
	Occasionally seen	356	19.21%	
	Rarely seen	102	5.50%	
	Never seen	22	1.19%	
Coarctation of the aorta (interrupted arch)	Essential	987	53.52%	1844
	Routinely seen	273	14.80%	
	Occasionally seen	747	40.51%	
	Rarely seen	559	30.31%	
	Never seen	29	1.57%	
Congenital cardiac defects	Essential	1,130	61.25%	1845
	Routinely seen	523	28.35%	
	Occasionally seen	748	40.54%	
	Rarely seen	250	13.55%	
	Never seen	10	0.54%	
Congestive heart failure	Essential	1,052	56.93%	1848
	Routinely seen	297	16.07%	
	Occasionally seen	720	38.96%	
	Rarely seen	489	26.46%	
	Never seen	55	2.98%	
Diaphragmatic hernia	Essential	1,118	60.17%	1858
	Routinely seen	252	13.56%	
	Occasionally seen	578	31.11%	
	Rarely seen	681	36.65%	
	Never seen	65	3.50%	
	Essential	720	39.56%	
	Routinely seen	141	7.75%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Ebstein anomaly	Occasionally seen	466	25.60%	1820
	Rarely seen	776	42.64%	
	Never seen	276	15.16%	
Endocardial cushion defect	Essential	667	36.93%	1806
	Routinely seen	129	7.14%	
	Occasionally seen	422	23.37%	
	Rarely seen	750	41.53%	
	Never seen	351	19.44%	
Evaluation of cyanosis	Essential	1,618	87.32%	1853
	Routinely seen	966	52.13%	
	Occasionally seen	138	7.45%	
	Rarely seen	25	1.35%	
	Never seen	9	0.49%	
Hypertension	Essential	1,337	72.35%	1848
	Routinely seen	561	30.36%	
	Occasionally seen	553	29.92%	
	Rarely seen	208	11.26%	
	Never seen	22	1.19%	
Hypoplastic left heart syndrome	Essential	982	53.17%	1847
	Routinely seen	234	12.67%	
	Occasionally seen	525	28.42%	
	Rarely seen	753	40.77%	
	Never seen	115	6.23%	
Hypoplastic lungs	Essential	1,054	57.00%	1849
	Routinely seen	308	16.66%	
	Occasionally seen	593	32.07%	
	Rarely seen	602	32.56%	
	Never seen	67	3.62%	
Hypotension	Essential	1,485	80.27%	1850
	Routinely seen	875	47.30%	
	Occasionally seen	305	16.49%	
	Rarely seen	70	3.78%	
	Never seen	9	0.49%	
Laryngeal tracheomalacia/stenosis	Essential	1,030	55.74%	1848
	Routinely seen	378	20.45%	
	Occasionally seen	667	36.09%	
	Rarely seen	449	24.30%	
	Never seen	75	4.06%	
Meconium aspiration	Essential	1,478	79.55%	1858
	Routinely seen	812	43.70%	
	Occasionally seen	437	23.52%	
	Rarely seen	52	2.80%	
	Never seen	1	0.05%	
	Essential	1,722	92.68%	
	Routinely seen	1,022	55.01%	
	Occasionally seen	31	1.67%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Oxygen delivery	Rarely seen	6	0.32%	1858
	Never seen	5	0.27%	
Patent ductus arteriosus	Essential	1,661	89.54%	1855
	Routinely seen	1,029	55.47%	
	Occasionally seen	86	4.64%	
	Rarely seen	4	0.22%	
	Never seen	2	0.11%	
Persistent pulmonary hypertension	Essential	1,488	80.13%	1857
	Routinely seen	771	41.52%	
	Occasionally seen	432	23.26%	
	Rarely seen	71	3.82%	
	Never seen	10	0.54%	
Pneumonia	Essential	1,396	75.30%	1854
	Routinely seen	710	38.30%	
	Occasionally seen	487	26.27%	
	Rarely seen	118	6.36%	
	Never seen	7	0.38%	
Pulmonary air leaks	Essential	1,256	67.67%	1856
	Routinely seen	543	29.26%	
	Occasionally seen	649	34.97%	
	Rarely seen	220	11.85%	
	Never seen	21	1.13%	
Pulmonary hemorrhage	Essential	1,175	63.41%	1853
	Routinely seen	287	15.49%	
	Occasionally seen	671	36.21%	
	Rarely seen	505	27.25%	
	Never seen	48	2.59%	
Respiratory distress	Essential	1,716	92.61%	1853
	Routinely seen	1,035	55.86%	
	Occasionally seen	31	1.67%	
	Rarely seen	4	0.22%	
	Never seen	0	0%	
Respiratory distress syndrome	Essential	1,713	92.05%	1861
	Routinely seen	1,024	55.02%	
	Occasionally seen	53	2.85%	
	Rarely seen	8	0.43%	
	Never seen	0	0%	
Rhythm disturbances	Essential	1,016	55.22%	1840
	Routinely seen	406	22.07%	
	Occasionally seen	768	41.74%	
	Rarely seen	369	20.05%	
	Never seen	31	1.68%	
	Essential	1,222	66.20%	
	Routinely seen	436	23.62%	
	Occasionally seen	625	33.86%	
	Rarely seen	362	19.61%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Shock	Never seen	38	2.06%	1846
Tetralogy of Fallot	Essential	925	50.05%	1848
	Routinely seen	224	12.12%	
	Occasionally seen	600	32.47%	
	Rarely seen	741	40.10%	
	Never seen	83	4.49%	
Total anomalous venous return	Essential	839	45.92%	1827
	Routinely seen	165	9.03%	
	Occasionally seen	492	26.93%	
	Rarely seen	795	43.51%	
	Never seen	199	10.89%	
Transient tachypnea of the newborn	Essential	1,626	87.37%	1861
	Routinely seen	1,032	55.45%	
	Occasionally seen	108	5.80%	
	Rarely seen	13	0.70%	
	Never seen	2	0.11%	
Transition to extrauterine life	Essential	1,685	90.79%	1856
	Routinely seen	1,002	53.99%	
	Occasionally seen	50	2.69%	
	Rarely seen	21	1.13%	
	Never seen	5	0.27%	
Transposition of the great vessels	Essential	926	50.11%	1848
	Routinely seen	188	10.17%	
	Occasionally seen	530	28.68%	
	Rarely seen	805	43.56%	
	Never seen	120	6.49%	
Tricuspid atresia	Essential	829	44.98%	1843
	Routinely seen	170	9.22%	
	Occasionally seen	543	29.46%	
	Rarely seen	738	40.04%	
	Never seen	205	11.12%	
Truncus arteriosus	Essential	817	44.72%	1827
	Routinely seen	161	8.81%	
	Occasionally seen	458	25.07%	
	Rarely seen	788	43.13%	
	Never seen	234	12.81%	
Ventilator management	Essential	1,638	88.30%	1855
	Routinely seen	970	52.29%	
	Occasionally seen	96	5.18%	
	Rarely seen	37	1.99%	
	Never seen	8	0.43%	
Ventricular septal defect	Essential	1,171	63.64%	1840
	Routinely seen	691	37.55%	
	Occasionally seen	579	31.47%	
	Rarely seen	160	8.70%	
	Never seen	17	0.92%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Are there other items that are routine to your practice that are not included in this list?	Yes	64	3.73%	1717
	No	1653	96.27%	
<b>GI/Renal, Metabolic/Endocrine and Genitourinary Care</b> - Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with GI/renal, metabolic/endocrine and/or genitourinary disorders.				
Abdominal mass	Essential	778	44.13%	1763
	Routinely seen	141	8.00%	
	Occasionally seen	623	35.34%	
	Rarely seen	728	41.29%	
	Never seen	95	5.39%	
Abdominal wall defects	Essential	1,078	61.18%	1762
	Routinely seen	407	23.10%	
	Occasionally seen	590	33.48%	
	Rarely seen	442	25.09%	
	Never seen	47	2.67%	
Acute renal failure/insufficiency	Essential	986	55.99%	1761
	Routinely seen	284	16.13%	
	Occasionally seen	705	40.03%	
	Rarely seen	496	28.17%	
	Never seen	46	2.61%	
Adrenal insufficiency	Essential	759	43.42%	1748
	Routinely seen	179	10.24%	
	Occasionally seen	591	33.81%	
	Rarely seen	720	41.19%	
	Never seen	96	5.49%	
Ambiguous genitalia	Essential	838	47.72%	1756
	Routinely seen	115	6.55%	
	Occasionally seen	571	32.52%	
	Rarely seen	870	49.54%	
	Never seen	38	2.16%	
Anomalies/obstruction of the upper and/or lower GI tract	Essential	1,053	59.93%	1757
	Routinely seen	410	23.34%	
	Occasionally seen	693	39.44%	
	Rarely seen	370	21.06%	
	Never seen	13	0.74%	
Cystic fibrosis	Essential	692	39.45%	1754
	Routinely seen	92	5.25%	
	Occasionally seen	396	22.58%	
	Rarely seen	909	51.82%	
	Never seen	238	13.57%	
Diarrhea	Essential	1,046	59.70%	1752
	Routinely seen	541	30.88%	
	Occasionally seen	597	34.08%	
	Rarely seen	273	15.58%	
	Never seen	24	1.37%	
	Essential	1,087	61.90%	



<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Digestive and absorptive disorders	Routinely seen	588	33.49%	1756
	Occasionally seen	540	30.75%	
	Rarely seen	249	14.18%	
	Never seen	22	1.25%	
Disorders of suck, swallow, motility	Essential	1,294	73.48%	1761
	Routinely seen	859	48.78%	
	Occasionally seen	332	18.85%	
	Rarely seen	79	4.49%	
	Never seen	2	0.11%	
Duplications	Essential	569	33.77%	1685
	Routinely seen	126	7.48%	
	Occasionally seen	395	23.44%	
	Rarely seen	665	39.47%	
	Never seen	348	20.65%	
Exstrophy of the bladder	Essential	645	36.84%	1751
	Routinely seen	65	3.71%	
	Occasionally seen	265	15.13%	
	Rarely seen	881	50.31%	
	Never seen	430	24.56%	
Galactosemia	Essential	628	36.24%	1733
	Routinely seen	74	4.27%	
	Occasionally seen	280	16.16%	
	Rarely seen	911	52.57%	
	Never seen	347	20.02%	
GE reflux	Essential	1,413	80.06%	1765
	Routinely seen	980	55.52%	
	Occasionally seen	190	10.76%	
	Rarely seen	36	2.04%	
	Never seen	2	0.11%	
GI bleeds/peritonitis	Essential	958	54.59%	1755
	Routinely seen	330	18.80%	
	Occasionally seen	566	32.25%	
	Rarely seen	536	30.54%	
	Never seen	81	4.62%	
High output renal failure	Essential	759	43.45%	1747
	Routinely seen	172	9.85%	
	Occasionally seen	414	23.70%	
	Rarely seen	728	41.67%	
	Never seen	248	14.20%	
Hydronephrosis/ ureter	Essential	860	49.20%	1748
	Routinely seen	317	18.14%	
	Occasionally seen	607	34.73%	
	Rarely seen	517	29.58%	
	Never seen	91	5.21%	
	Essential	675	38.84%	
	Routinely seen	117	6.73%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Hyperammonemia	Occasionally seen	375	21.58%	1738
	Rarely seen	840	48.33%	
	Never seen	268	15.42%	
Hypercalcemia	Essential	883	50.57%	1746
	Routinely seen	329	18.84%	
	Occasionally seen	609	34.88%	
	Rarely seen	529	30.30%	
	Never seen	53	3.04%	
Hyperglycemia	Essential	1,187	67.60%	1756
	Routinely seen	701	39.92%	
	Occasionally seen	452	25.74%	
	Rarely seen	186	10.59%	
	Never seen	27	1.54%	
Hypermagnesemia	Essential	991	56.50%	1754
	Routinely seen	526	29.99%	
	Occasionally seen	566	32.27%	
	Rarely seen	334	19.04%	
	Never seen	45	2.57%	
Hypocalcemia	Essential	1,057	60.37%	1751
	Routinely seen	599	34.21%	
	Occasionally seen	561	32.04%	
	Rarely seen	237	13.54%	
	Never seen	15	0.86%	
Hypoglycemia	Essential	1,427	80.90%	1764
	Routinely seen	977	55.39%	
	Occasionally seen	162	9.18%	
	Rarely seen	48	2.72%	
	Never seen	5	0.28%	
Hypomagnesemia	Essential	880	50.66%	1737
	Routinely seen	334	19.23%	
	Occasionally seen	582	33.51%	
	Rarely seen	505	29.07%	
	Never seen	68	3.91%	
Hypospadias/epispadias	Essential	997	56.46%	1766
	Routinely seen	474	26.84%	
	Occasionally seen	760	43.04%	
	Rarely seen	280	15.86%	
	Never seen	6	0.34%	
Imperforate anus	Essential	1,013	57.36%	1766
	Routinely seen	253	14.33%	
	Occasionally seen	641	36.30%	
	Rarely seen	606	34.31%	
	Never seen	43	2.43%	
	Essential	841	48.11%	
	Routinely seen	160	9.15%	
	Occasionally seen	528	30.21%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Inborn error of metabolism	Rarely seen	796	45.54%	1748
	Never seen	82	4.69%	
Infant of a mother with diabetes	Essential	1,526	86.21%	1770
	Routinely seen	1,042	58.87%	
	Occasionally seen	83	4.69%	
	Rarely seen	5	0.28%	
	Never seen	1	0.06%	
Inguinal hernia	Essential	1,220	69.28%	1761
	Routinely seen	785	44.58%	
	Occasionally seen	433	24.59%	
	Rarely seen	110	6.25%	
	Never seen	6	0.34%	
Malabsorption/maldigestion	Essential	1,004	57.34%	1751
	Routinely seen	476	27.18%	
	Occasionally seen	584	33.35%	
	Rarely seen	356	20.33%	
	Never seen	36	2.06%	
Malrotation/volvulus	Essential	961	54.63%	1759
	Routinely seen	226	12.85%	
	Occasionally seen	571	32.46%	
	Rarely seen	664	37.75%	
	Never seen	76	4.32%	
Meconium syndrome/plug	Essential	1,089	61.77%	1763
	Routinely seen	448	25.41%	
	Occasionally seen	632	35.85%	
	Rarely seen	346	19.63%	
	Never seen	16	0.91%	
Necrotizing enterocolitis	Essential	1,330	74.97%	1774
	Routinely seen	612	34.50%	
	Occasionally seen	546	30.78%	
	Rarely seen	168	9.47%	
	Never seen	7	0.39%	
Obstructions	Essential	1,086	61.63%	1762
	Routinely seen	411	23.33%	
	Occasionally seen	621	35.24%	
	Rarely seen	387	21.96%	
	Never seen	24	1.36%	
Osteopenia/rickets	Essential	821	46.78%	1755
	Routinely seen	217	12.36%	
	Occasionally seen	480	27.35%	
	Rarely seen	636	36.24%	
	Never seen	233	13.28%	
	Essential	1,016	57.83%	
	Routinely seen	424	24.13%	
	Occasionally seen	432	24.59%	
	Rarely seen	414	23.56%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Ostomy care	Never seen	209	11.90%	1757
Perforations	Essential	1,083	61.57%	1759
	Routinely seen	431	24.50%	
	Occasionally seen	547	31.10%	
	Rarely seen	411	23.37%	
	Never seen	69	3.92%	
PKU	Essential	1,084	61.77%	1755
	Routinely seen	377	21.48%	
	Occasionally seen	216	12.31%	
	Rarely seen	558	31.79%	
	Never seen	221	12.59%	
Polycystic/dysplastic kidneys	Essential	806	45.93%	1755
	Routinely seen	174	9.91%	
	Occasionally seen	532	30.31%	
	Rarely seen	755	43.02%	
	Never seen	128	7.29%	
Pyloric stenosis	Essential	856	48.77%	1755
	Routinely seen	192	10.94%	
	Occasionally seen	549	31.28%	
	Rarely seen	738	42.05%	
	Never seen	95	5.41%	
Renal vein/artery thrombosis	Essential	741	42.25%	1754
	Routinely seen	101	5.76%	
	Occasionally seen	384	21.89%	
	Rarely seen	815	46.47%	
	Never seen	308	17.56%	
Short gut syndrome	Essential	910	51.79%	1757
	Routinely seen	260	14.80%	
	Occasionally seen	435	24.76%	
	Rarely seen	622	35.40%	
	Never seen	228	12.98%	
Testicular torsion	Essential	779	44.31%	1758
	Routinely seen	85	4.84%	
	Occasionally seen	293	16.67%	
	Rarely seen	902	51.31%	
	Never seen	339	19.28%	
Thyroid disease	Essential	764	43.63%	1751
	Routinely seen	190	10.85%	
	Occasionally seen	484	27.64%	
	Rarely seen	767	43.80%	
	Never seen	154	8.79%	
Tracheo-esophageal fistula	Essential	1,014	57.52%	1763
	Routinely seen	287	16.28%	
	Occasionally seen	565	32.05%	
	Rarely seen	620	35.17%	
	Never seen	57	3.23%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Urinary outflow tract obstruction	Essential	772	44.24%	1745
	Routinely seen	112	6.42%	
	Occasionally seen	404	23.15%	
	Rarely seen	802	45.96%	
	Never seen	272	15.59%	
Are there other items that are routine to your practice that are not included in this list?	Yes	41	2.52%	1628
	No	1587	97.48%	
<b>Hematopoietic/Infection</b> - Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with hematopoietic disorders and/or infections.				
Acute bilirubin encephalopathy	Essential	804	47.29%	1700
	Routinely seen	66	3.88%	
	Occasionally seen	175	10.29%	
	Rarely seen	728	42.82%	
	Never seen	581	34.18%	
Anemia	Essential	1,301	76.48%	1701
	Routinely seen	911	53.56%	
	Occasionally seen	276	16.23%	
	Rarely seen	58	3.41%	
	Never seen	2	0.12%	
Breast milk jaundice	Essential	1,165	68.33%	1705
	Routinely seen	700	41.06%	
	Occasionally seen	434	25.45%	
	Rarely seen	172	10.09%	
	Never seen	19	1.11%	
Candidiasis	Essential	970	57.16%	1697
	Routinely seen	373	21.98%	
	Occasionally seen	712	41.96%	
	Rarely seen	326	19.21%	
	Never seen	30	1.77%	
Chlamydia/gonorrhea	Essential	739	43.42%	1702
	Routinely seen	141	8.28%	
	Occasionally seen	415	24.38%	
	Rarely seen	782	45.95%	
	Never seen	213	12.51%	
CMV	Essential	882	51.88%	1700
	Routinely seen	162	9.53%	
	Occasionally seen	632	37.18%	
	Rarely seen	674	39.65%	
	Never seen	55	3.24%	
Disseminated intravascular coagulation	Essential	957	56.19%	1703
	Routinely seen	170	9.98%	
	Occasionally seen	553	32.47%	
	Rarely seen	692	40.63%	
	Never seen	95	5.58%	
	Essential	940	55.16%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
E.Coli infection	Routinely seen	249	14.61%	1704
	Occasionally seen	696	40.85%	
	Rarely seen	496	29.11%	
	Never seen	46	2.70%	
Enterococcus infection	Essential	903	53.34%	1693
	Routinely seen	263	15.53%	
	Occasionally seen	670	39.57%	
	Rarely seen	469	27.70%	
	Never seen	63	3.72%	
Group B strep infection	Essential	1,126	65.89%	1709
	Routinely seen	460	26.92%	
	Occasionally seen	717	41.95%	
	Rarely seen	226	13.22%	
	Never seen	5	0.29%	
Hematological disorders	Essential	924	54.51%	1695
	Routinely seen	320	18.88%	
	Occasionally seen	662	39.06%	
	Rarely seen	443	26.14%	
	Never seen	32	1.89%	
Hemorrhagic disease of the newborn	Essential	840	49.56%	1695
	Routinely seen	139	8.20%	
	Occasionally seen	452	26.67%	
	Rarely seen	716	42.24%	
	Never seen	197	11.62%	
Hepatitis B	Essential	901	53.06%	1698
	Routinely seen	146	8.60%	
	Occasionally seen	426	25.09%	
	Rarely seen	702	41.34%	
	Never seen	219	12.90%	
Herpes	Essential	911	53.59%	1700
	Routinely seen	181	10.65%	
	Occasionally seen	580	34.12%	
	Rarely seen	681	40.06%	
	Never seen	67	3.94%	
HIV/AIDS	Essential	839	49.38%	1699
	Routinely seen	94	5.53%	
	Occasionally seen	389	22.90%	
	Rarely seen	824	48.50%	
	Never seen	244	14.36%	
Hospital acquired infections	Essential	1,121	65.98%	1699
	Routinely seen	411	24.19%	
	Occasionally seen	649	38.20%	
	Rarely seen	299	17.60%	
	Never seen	28	1.65%	
	Essential	1,482	87.02%	
	Routinely seen	1,023	60.07%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Hyperbilirubinemia	Occasionally seen	57	3.35%	1703
	Rarely seen	8	0.47%	
	Never seen	3	0.18%	
Infection control and universal precautions	Essential	1,576	92.27%	1708
	Routinely seen	959	56.15%	
	Occasionally seen	37	2.17%	
	Rarely seen	11	0.64%	
	Never seen	3	0.18%	
Klebsiella infection	Essential	816	48%	1700
	Routinely seen	203	11.94%	
	Occasionally seen	573	33.71%	
	Rarely seen	624	36.71%	
	Never seen	121	7.12%	
Liver disease	Essential	808	47.70%	1694
	Routinely seen	196	11.57%	
	Occasionally seen	536	31.64%	
	Rarely seen	660	38.96%	
	Never seen	130	7.67%	
Meningitis	Essential	916	54.17%	1691
	Routinely seen	202	11.95%	
	Occasionally seen	563	33.29%	
	Rarely seen	664	39.27%	
	Never seen	72	4.26%	
Methicillin resistant staph infections (MRSA)	Essential	1,086	63.73%	1704
	Routinely seen	452	26.53%	
	Occasionally seen	527	30.93%	
	Rarely seen	392	23.00%	
	Never seen	47	2.76%	
Neutropenia/netrophilia	Essential	1,039	61.19%	1698
	Routinely seen	552	32.51%	
	Occasionally seen	579	34.10%	
	Rarely seen	253	14.90%	
	Never seen	22	1.30%	
Osteomyelitis	Essential	733	43.45%	1687
	Routinely seen	117	6.94%	
	Occasionally seen	347	20.57%	
	Rarely seen	789	46.77%	
	Never seen	286	16.95%	
Polycythemia	Essential	1,005	59.19%	1698
	Routinely seen	508	29.92%	
	Occasionally seen	588	34.63%	
	Rarely seen	307	18.08%	
	Never seen	21	1.24%	
	Essential	1,108	64.95%	
	Routinely seen	524	30.72%	
	Occasionally seen	641	37.57%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
RH Disease/ABO incompatibility	Rarely seen	216	12.66%	1706
	Never seen	14	0.82%	
Rubella	Essential	689	40.70%	1693
	Routinely seen	53	3.13%	
	Occasionally seen	192	11.34%	
	Rarely seen	677	39.99%	
	Never seen	653	38.57%	
Septic arthritis	Essential	505	30.24%	1670
	Routinely seen	35	2.10%	
	Occasionally seen	141	8.44%	
	Rarely seen	509	30.48%	
	Never seen	889	53.23%	
Septic shock	Essential	1,037	60.86%	1704
	Routinely seen	291	17.08%	
	Occasionally seen	509	29.87%	
	Rarely seen	556	32.63%	
	Never seen	82	4.81%	
Staphylococcal infections	Essential	1,046	61.35%	1705
	Routinely seen	446	26.16%	
	Occasionally seen	622	36.48%	
	Rarely seen	314	18.42%	
	Never seen	29	1.70%	
Syphilis	Essential	678	40.26%	1684
	Routinely seen	67	3.98%	
	Occasionally seen	227	13.48%	
	Rarely seen	755	44.83%	
	Never seen	512	30.40%	
Thrombocytopenia	Essential	1,126	66.31%	1698
	Routinely seen	588	34.63%	
	Occasionally seen	550	32.39%	
	Rarely seen	205	12.07%	
	Never seen	21	1.24%	
Thrombocytosis	Essential	827	49.34%	1676
	Routinely seen	231	13.78%	
	Occasionally seen	458	27.33%	
	Rarely seen	553	33.00%	
	Never seen	202	12.05%	
Toxoplasmosis	Essential	727	43.07%	1688
	Routinely seen	70	4.15%	
	Occasionally seen	271	16.05%	
	Rarely seen	810	47.99%	
	Never seen	399	23.64%	
	Essential	700	41.64%	
	Routinely seen	61	3.63%	
	Occasionally seen	189	11.24%	
	Rarely seen	774	46.04%	



<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Varicella	Never seen	524	31.17%	1681
Ventilator associated infections	Essential	1,106	64.98%	1702
	Routinely seen	371	21.80%	
	Occasionally seen	541	31.79%	
	Rarely seen	379	22.27%	
	Never seen	102	5.99%	
Are there other items that are routine to your practice that are not included in this list?	Yes	33	2.07%	1591
	No	1558	97.93%	
<b>Neurologic and Musculoskeletal</b> - Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with neurologic and/or musculoskeletal disorders.				
Abnormalities of the skeleton	Essential	813	49.09%	1656
	Routinely seen	181	10.93%	
	Occasionally seen	669	40.40%	
	Rarely seen	578	34.90%	
	Never seen	42	2.54%	
Achondroplasia	Essential	522	32.34%	1614
	Routinely seen	38	2.35%	
	Occasionally seen	338	20.94%	
	Rarely seen	802	49.69%	
	Never seen	336	20.82%	
Acute skin conditions, e.g contact dermatitis	Essential	919	55.76%	1648
	Routinely seen	474	28.76%	
	Occasionally seen	579	35.13%	
	Rarely seen	316	19.17%	
	Never seen	38	2.31%	
Arthrogryposis	Essential	511	31.76%	1609
	Routinely seen	60	3.73%	
	Occasionally seen	288	17.90%	
	Rarely seen	714	44.38%	
	Never seen	445	27.66%	
Auricular tags	Essential	733	44.56%	1645
	Routinely seen	291	17.69%	
	Occasionally seen	720	43.77%	
	Rarely seen	407	24.74%	
	Never seen	62	3.77%	
Birth injuries	Essential	989	59.61%	1659
	Routinely seen	370	22.30%	
	Occasionally seen	804	48.46%	
	Rarely seen	247	14.89%	
	Never seen	3	0.18%	
Clubfoot	Essential	850	51.20%	1660
	Routinely seen	229	13.80%	
	Occasionally seen	798	48.07%	
	Rarely seen	446	26.87%	
	Never seen	10	0.60%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Dislocation of the hip	Essential	835	50.64%	1649
	Routinely seen	115	6.97%	
	Occasionally seen	630	38.20%	
	Rarely seen	670	40.63%	
	Never seen	66	4.00%	
Ecchymosis	Essential	955	57.84%	1651
	Routinely seen	568	34.40%	
	Occasionally seen	520	31.50%	
	Rarely seen	251	15.20%	
	Never seen	44	2.67%	
Epidermolysis bullosa	Essential	619	37.79%	1638
	Routinely seen	66	4.03%	
	Occasionally seen	307	18.74%	
	Rarely seen	833	50.85%	
	Never seen	320	19.54%	
Erb's palsy	Essential	732	44.44%	1647
	Routinely seen	72	4.37%	
	Occasionally seen	444	26.96%	
	Rarely seen	850	51.61%	
	Never seen	144	8.74%	
Erythema toxicum	Essential	894	54.31%	1646
	Routinely seen	491	29.83%	
	Occasionally seen	432	26.25%	
	Rarely seen	371	22.54%	
	Never seen	95	5.77%	
Fetal alcohol syndrome	Essential	817	49.28%	1658
	Routinely seen	120	7.24%	
	Occasionally seen	458	27.62%	
	Rarely seen	812	48.97%	
	Never seen	116	7.00%	
Fractures	Essential	827	49.88%	1658
	Routinely seen	123	7.42%	
	Occasionally seen	622	37.52%	
	Rarely seen	730	44.03%	
	Never seen	30	1.81%	
Hemangiomas	Essential	910	54.89%	1658
	Routinely seen	422	25.45%	
	Occasionally seen	720	43.43%	
	Rarely seen	282	17.01%	
	Never seen	10	0.60%	
Holoprocencephaly	Essential	598	36.80%	1625
	Routinely seen	57	3.51%	
	Occasionally seen	279	17.17%	
	Rarely seen	795	48.92%	
	Never seen	380	23.38%	
	Essential	948	57.25%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Hydrocephalus	Routinely seen	304	18.36%	1656
	Occasionally seen	603	36.41%	
	Rarely seen	489	29.53%	
	Never seen	47	2.84%	
Hyperpigmentation	Essential	642	39.29%	1634
	Routinely seen	209	12.79%	
	Occasionally seen	421	25.76%	
	Rarely seen	666	40.76%	
	Never seen	191	11.69%	
Hypopigmentation	Essential	599	36.68%	1633
	Routinely seen	99	6.06%	
	Occasionally seen	317	19.41%	
	Rarely seen	784	48.01%	
	Never seen	296	18.13%	
Hypoxic ischemic encephalopathy	Essential	1,047	63.11%	1659
	Routinely seen	394	23.75%	
	Occasionally seen	576	34.72%	
	Rarely seen	369	22.24%	
	Never seen	35	2.11%	
Metatarsus adductus	Essential	519	32.24%	1610
	Routinely seen	61	3.79%	
	Occasionally seen	303	18.82%	
	Rarely seen	668	41.49%	
	Never seen	465	28.88%	
Milia/miliara	Essential	1,028	62.49%	1645
	Routinely seen	850	51.67%	
	Occasionally seen	262	15.93%	
	Rarely seen	124	7.54%	
	Never seen	40	2.43%	
Mongolian spots	Essential	1,115	67.21%	1659
	Routinely seen	951	57.32%	
	Occasionally seen	228	13.74%	
	Rarely seen	62	3.74%	
	Never seen	2	0.12%	
Musculoskeletal birth injuries	Essential	911	55.25%	1649
	Routinely seen	235	14.25%	
	Occasionally seen	600	36.39%	
	Rarely seen	549	33.29%	
	Never seen	32	1.94%	
Neonatal pustula melanosis	Essential	599	37.44%	1600
	Routinely seen	174	10.88%	
	Occasionally seen	346	21.63%	
	Rarely seen	557	34.81%	
	Never seen	368	23%	
	Essential	1,280	76.46%	
	Routinely seen	786	46.95%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Neonatal withdrawal	Occasionally seen	351	20.97%	1674
	Rarely seen	83	4.96%	
	Never seen	3	0.18%	
Neural tube defects	Essential	992	59.54%	1666
	Routinely seen	247	14.83%	
	Occasionally seen	511	30.67%	
	Rarely seen	609	36.55%	
	Never seen	68	4.08%	
Periventricular leukomalacia	Essential	965	58.24%	1657
	Routinely seen	292	17.62%	
	Occasionally seen	605	36.51%	
	Rarely seen	434	26.19%	
	Never seen	86	5.19%	
Periventricular/intraventricular hemorrhage	Essential	1,107	66.61%	1662
	Routinely seen	585	35.20%	
	Occasionally seen	526	31.65%	
	Rarely seen	218	13.12%	
	Never seen	31	1.87%	
Petechiae	Essential	1,043	62.38%	1672
	Routinely seen	580	34.69%	
	Occasionally seen	595	35.59%	
	Rarely seen	183	10.94%	
	Never seen	8	0.48%	
Port wine stains	Essential	814	49.04%	1660
	Routinely seen	210	12.65%	
	Occasionally seen	578	34.82%	
	Rarely seen	622	37.47%	
	Never seen	47	2.83%	
Scoliosis	Essential	581	35.41%	1641
	Routinely seen	55	3.35%	
	Occasionally seen	217	13.22%	
	Rarely seen	789	48.08%	
	Never seen	462	28.15%	
Seizures	Essential	1,089	65.37%	1666
	Routinely seen	415	24.91%	
	Occasionally seen	670	40.22%	
	Rarely seen	286	17.17%	
	Never seen	8	0.48%	
Skin disorders - chronic	Essential	682	41.43%	1646
	Routinely seen	108	6.56%	
	Occasionally seen	369	22.42%	
	Rarely seen	825	50.12%	
	Never seen	171	10.39%	
	Essential	553	33.72%	
	Routinely seen	55	3.35%	
	Occasionally seen	209	12.74%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Subcutaneous fat necrosis	Rarely seen	715	43.60%	1640
	Never seen	549	33.48%	
Subdural hemorrhage	Essential	902	54.37%	1659
	Routinely seen	203	12.24%	
	Occasionally seen	498	30.02%	
	Rarely seen	668	40.27%	
	Never seen	80	4.82%	
Subgaleal hemorrhage	Essential	896	53.91%	1662
	Routinely seen	159	9.57%	
	Occasionally seen	432	25.99%	
	Rarely seen	737	44.34%	
	Never seen	135	8.12%	
Tibial bowing	Essential	478	29.51%	1620
	Routinely seen	49	3.02%	
	Occasionally seen	169	10.43%	
	Rarely seen	683	42.16%	
	Never seen	624	38.52%	
Torticollis	Essential	706	43.08%	1639
	Routinely seen	124	7.57%	
	Occasionally seen	434	26.48%	
	Rarely seen	681	41.55%	
	Never seen	254	15.50%	
Are there other items that are routine to your practice that are not included in this list?	Yes	27	1.75%	1539
	No	1512	98.25%	
<b>Genetics and Head, Ears, Eyes, Nose and Throat - Indicate below the frequency, essentiality and nature of your practice regarding managing neonates with genetics and/or head, ears, nose and throat disorders.</b>				
Autosomal dominant disorders	Essential	629	39.51%	1592
	Routinely seen	152	9.55%	
	Occasionally seen	648	40.70%	
	Rarely seen	584	36.68%	
	Never seen	57	3.58%	
Autosomal recessive disorders	Essential	618	39.02%	1584
	Routinely seen	151	9.53%	
	Occasionally seen	623	39.33%	
	Rarely seen	600	37.88%	
	Never seen	56	3.54%	
Beckwith syndrome	Essential	487	31.24%	1559
	Routinely seen	75	4.81%	
	Occasionally seen	331	21.23%	
	Rarely seen	742	47.59%	
	Never seen	308	19.76%	
	Essential	1,101	68.00%	
	Routinely seen	777	47.99%	
	Occasionally seen	388	23.97%	
	Rarely seen	90	5.56%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Caput succedaneum	Never seen	7	0.43%	1619
Cataracts	Essential	523	33.10%	1580
	Routinely seen	59	3.73%	
	Occasionally seen	272	17.22%	
	Rarely seen	836	52.91%	
	Never seen	321	20.32%	
Cephalohematoma	Essential	1,092	67.62%	1615
	Routinely seen	730	45.20%	
	Occasionally seen	468	28.98%	
	Rarely seen	82	5.08%	
	Never seen	7	0.43%	
Choanal atresia	Essential	906	56.27%	1610
	Routinely seen	165	10.25%	
	Occasionally seen	573	35.59%	
	Rarely seen	624	38.76%	
	Never seen	65	4.04%	
Chromosomal anomalies	Essential	926	57.55%	1609
	Routinely seen	431	26.79%	
	Occasionally seen	695	43.19%	
	Rarely seen	251	15.60%	
	Never seen	9	0.56%	
Cleft lip and palate	Essential	983	60.68%	1620
	Routinely seen	321	19.81%	
	Occasionally seen	795	49.07%	
	Rarely seen	280	17.28%	
	Never seen	4	0.25%	
Coloboma	Essential	480	30.61%	1568
	Routinely seen	51	3.25%	
	Occasionally seen	276	17.60%	
	Rarely seen	697	44.45%	
	Never seen	454	28.95%	
Conjunctivitis	Essential	833	51.90%	1605
	Routinely seen	300	18.69%	
	Occasionally seen	601	37.45%	
	Rarely seen	448	27.91%	
	Never seen	60	3.74%	
Deletion/duplication	Essential	602	38.30%	1572
	Routinely seen	147	9.35%	
	Occasionally seen	470	29.90%	
	Rarely seen	642	40.84%	
	Never seen	175	11.13%	
Eye prophylaxis	Essential	1,203	74.91%	1606
	Routinely seen	788	49.07%	
	Occasionally seen	154	9.59%	
	Rarely seen	129	8.03%	
	Never seen	64	3.99%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Glaucoma	Essential	466	29.53%	1578
	Routinely seen	48	3.04%	
	Occasionally seen	190	12.04%	
	Rarely seen	711	45.06%	
	Never seen	544	34.47%	
Malformation of the ears	Essential	707	44.08%	1604
	Routinely seen	147	9.16%	
	Occasionally seen	520	32.42%	
	Rarely seen	708	44.14%	
	Never seen	73	4.55%	
Mendelian inheritance patterns	Essential	416	26.98%	1542
	Routinely seen	72	4.67%	
	Occasionally seen	230	14.92%	
	Rarely seen	590	38.26%	
	Never seen	544	35.28%	
Multifactorial inheritance	Essential	480	31.21%	1538
	Routinely seen	107	6.96%	
	Occasionally seen	299	19.44%	
	Rarely seen	633	41.16%	
	Never seen	364	23.67%	
Nasolacrimal duct obstruction	Essential	670	42.22%	1587
	Routinely seen	246	15.50%	
	Occasionally seen	482	30.37%	
	Rarely seen	495	31.19%	
	Never seen	218	13.74%	
Nondisjunction	Essential	364	24.19%	1505
	Routinely seen	49	3.26%	
	Occasionally seen	203	13.49%	
	Rarely seen	584	38.80%	
	Never seen	587	39.00%	
Osteogenesis imperfecta	Essential	648	40.42%	1603
	Routinely seen	64	3.99%	
	Occasionally seen	249	15.53%	
	Rarely seen	945	58.95%	
	Never seen	238	14.85%	
Potter syndrome	Essential	622	39.17%	1588
	Routinely seen	62	3.90%	
	Occasionally seen	245	15.43%	
	Rarely seen	944	59.45%	
	Never seen	230	14.48%	
Retinopathy of prematurity	Essential	1,157	71.46%	1619
	Routinely seen	679	41.94%	
	Occasionally seen	411	25.39%	
	Rarely seen	144	8.89%	
	Never seen	18	1.11%	
	Essential	580	37.16%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Sex linked inheritance	Routinely seen	125	8.01%	1561
	Occasionally seen	387	24.79%	
	Rarely seen	719	46.06%	
	Never seen	191	12.24%	
Strabismus	Essential	585	37.07%	1578
	Routinely seen	138	8.75%	
	Occasionally seen	384	24.33%	
	Rarely seen	717	45.44%	
	Never seen	217	13.75%	
Tracheal stenosis/atresia	Essential	810	50.47%	1605
	Routinely seen	193	12.02%	
	Occasionally seen	467	29.10%	
	Rarely seen	644	40.12%	
	Never seen	124	7.73%	
Tracheomalacia	Essential	847	52.71%	1607
	Routinely seen	246	15.31%	
	Occasionally seen	530	32.98%	
	Rarely seen	553	34.41%	
	Never seen	80	4.98%	
Tracheostomy	Essential	858	53.29%	1610
	Routinely seen	260	16.15%	
	Occasionally seen	360	22.36%	
	Rarely seen	510	31.68%	
	Never seen	277	17.20%	
Translocation	Essential	511	32.95%	1551
	Routinely seen	82	5.29%	
	Occasionally seen	313	20.18%	
	Rarely seen	729	47.00%	
	Never seen	305	19.66%	
Trisomy 13	Essential	835	51.80%	1612
	Routinely seen	120	7.44%	
	Occasionally seen	474	29.40%	
	Rarely seen	780	48.39%	
	Never seen	73	4.53%	
Trisomy 18	Essential	846	52.55%	1610
	Routinely seen	131	8.14%	
	Occasionally seen	485	30.12%	
	Rarely seen	773	48.01%	
	Never seen	52	3.23%	
Trisomy 21	Essential	954	58.89%	1620
	Routinely seen	389	24.01%	
	Occasionally seen	695	42.90%	
	Rarely seen	309	19.07%	
	Never seen	9	0.56%	
	Essential	721	45.26%	
	Routinely seen	97	6.09%	



<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Turner syndrome	Occasionally seen	395	24.80%	1593
	Rarely seen	834	52.35%	
	Never seen	116	7.28%	
VACTERL/VATER syndrome	Essential	784	49.06%	1598
	Routinely seen	128	8.01%	
	Occasionally seen	426	26.66%	
	Rarely seen	739	46.25%	
	Never seen	146	9.14%	
Are there other items that are routine to your practice that are not included in this list?	Yes	32	2.13%	1501
	No	1469	97.87%	
<b>Assess And Manage Psychosocial/Behavioral Adjustment</b>				
<b>Discharge Planning and Follow Up</b> - Indicate below the frequency, essentiality and nature of your practice regarding managing neonates through discharge planning and follow up.				
Car seat testing	Essential	1,437	88.49%	1624
	Routinely done	938	57.76%	
	Occasionally done	31	1.91%	
	Rarely done	16	0.99%	
	Never done	29	1.79%	
CPR training	Essential	1,376	84.89%	1621
	Routinely done	896	55.27%	
	Occasionally done	95	5.86%	
	Rarely done	33	2.04%	
	Never done	30	1.85%	
Developmental follow up appointment	Essential	1,225	75.80%	1616
	Routinely done	903	55.88%	
	Occasionally done	129	7.98%	
	Rarely done	44	2.72%	
	Never done	49	3.03%	
Hearing screening	Essential	1,418	87.21%	1626
	Routinely done	960	59.04%	
	Occasionally done	22	1.35%	
	Rarely done	8	0.49%	
	Never done	22	1.35%	
Immunizations	Essential	1,458	89.78%	1624
	Routinely done	965	59.42%	
	Occasionally done	30	1.85%	
	Rarely done	1	0.06%	
	Never done	1	0.06%	
Parent teaching	Essential	1,509	93.09%	1621
	Routinely done	963	59.41%	
	Occasionally done	4	0.25%	
	Rarely done	1	0.06%	
	Never done	1	0.06%	
	Essential	1,431	88.33%	
	Routinely done	917	56.60%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Pulse oximetry screening for congenital heart disease	Occasionally done	53	3.27%	1620
	Rarely done	23	1.42%	
	Never done	19	1.17%	
SIDS evaluation	Essential	1,179	73.87%	1596
	Routinely done	766	47.99%	
	Occasionally done	150	9.40%	
	Rarely done	100	6.27%	
	Never done	112	7.02%	
Special equipment training	Essential	1,143	70.91%	1612
	Routinely done	708	43.92%	
	Occasionally done	346	21.46%	
	Rarely done	106	6.58%	
	Never done	33	2.05%	
Teaching about motor, cognitive and language delays	Essential	1,023	63.62%	1608
	Routinely done	656	40.80%	
	Occasionally done	318	19.78%	
	Rarely done	173	10.76%	
	Never done	80	4.98%	
Vision screening	Essential	971	60.88%	1595
	Routinely done	680	42.63%	
	Occasionally done	184	11.54%	
	Rarely done	161	10.09%	
	Never done	202	12.66%	
Are there other items that are routine to your practice that are not included in this list?	Yes	89	5.92%	1504
	No	1415	94.08%	
<b>Pharmacology - What drug categories do you administer on a routine basis.</b>				
Analgesics/narcotics	Routinely administered	1,226	75.82%	1617
	Occasionally administered	315	19.48%	
	Rarely administered	72	4.45%	
	Never administered	4	0.25%	
Anesthetics/paralytics	Routinely administered	442	27.42%	1612
	Occasionally administered	621	38.52%	
	Rarely administered	441	27.36%	
	Never administered	108	6.70%	
Antacids/GI motility	Routinely administered	716	44.47%	1610
	Occasionally administered	588	36.52%	
	Rarely administered	273	16.96%	
	Never administered	33	2.05%	
Antibiotics/anti-microbials	Routinely administered	1,555	96.23%	1616
	Occasionally administered	54	3.34%	
	Rarely administered	6	0.37%	
	Never administered	1	0.06%	
	Routinely administered	534	33.19%	
	Occasionally administered	518	32.19%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Anticoagulants	Rarely administered	440	27.35%	1609
	Never administered	117	7.27%	
Anticonvulsants	Routinely administered	467	28.99%	1611
	Occasionally administered	803	49.84%	
	Rarely administered	325	20.17%	
	Never administered	16	0.99%	
Antidysrhythmia drugs	Routinely administered	225	13.96%	1612
	Occasionally administered	626	38.83%	
	Rarely administered	687	42.62%	
	Never administered	74	4.59%	
Antifungals	Routinely administered	495	30.75%	1610
	Occasionally administered	679	42.17%	
	Rarely administered	416	25.84%	
	Never administered	20	1.24%	
Antihypertensives	Routinely administered	324	20.12%	1610
	Occasionally administered	600	37.27%	
	Rarely administered	574	35.65%	
	Never administered	112	6.96%	
Betablockers	Routinely administered	230	14.30%	1608
	Occasionally administered	546	33.96%	
	Rarely administered	659	40.98%	
	Never administered	173	10.76%	
Bronchodilators	Routinely administered	691	42.84%	1613
	Occasionally administered	595	36.89%	
	Rarely administered	269	16.68%	
	Never administered	58	3.60%	
Calcium channel blockers	Routinely administered	205	12.79%	1603
	Occasionally administered	516	32.19%	
	Rarely administered	670	41.80%	
	Never administered	212	13.23%	
Diuretics	Routinely administered	955	59.17%	1614
	Occasionally administered	500	30.98%	
	Rarely administered	143	8.86%	
	Never administered	16	0.99%	
Hypoglycemic agents	Routinely administered	764	47.57%	1606
	Occasionally administered	478	29.76%	
	Rarely administered	306	19.05%	
	Never administered	58	3.61%	
Inotropes	Routinely administered	610	38.20%	1597
	Occasionally administered	511	32.00%	
	Rarely administered	359	22.48%	
	Never administered	117	7.33%	
Nitric oxide	Routinely administered	606	37.50%	1616
	Occasionally administered	519	32.12%	
	Rarely administered	260	16.09%	
	Never administered	231	14.29%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Prostaglandins	Routinely administered	440	27.35%	1609
	Occasionally administered	540	33.56%	
	Rarely administered	583	36.23%	
	Never administered	46	2.86%	
Respiratory stimulants	Routinely administered	1,107	68.80%	1609
	Occasionally administered	351	21.81%	
	Rarely administered	122	7.58%	
	Never administered	29	1.80%	
Sedatives/hypnotics	Routinely administered	791	49.04%	1613
	Occasionally administered	500	31.00%	
	Rarely administered	273	16.92%	
	Never administered	49	3.04%	
Steroids	Routinely administered	683	42.34%	1613
	Occasionally administered	610	37.82%	
	Rarely administered	288	17.85%	
	Never administered	32	1.98%	
Surfactant	Routinely administered	1,208	74.61%	1619
	Occasionally administered	332	20.51%	
	Rarely administered	68	4.20%	
	Never administered	11	0.68%	
Vaccinations	Routinely administered	1,380	85.34%	1617
	Occasionally administered	200	12.37%	
	Rarely administered	34	2.10%	
	Never administered	3	0.19%	
Vasodilators	Routinely administered	696	43.47%	1601
	Occasionally administered	556	34.73%	
	Rarely administered	296	18.49%	
	Never administered	53	3.31%	
Vitamins	Routinely administered	1,448	89.83%	1612
	Occasionally administered	128	7.94%	
	Rarely administered	31	1.92%	
	Never administered	5	0.31%	
Other	Routinely administered	99	46.92%	211
	Occasionally administered	32	15.17%	
	Rarely administered	18	8.53%	
	Never administered	62	29.38%	

### Specified Skills

**Skills -Maternal Factors Affecting Neonatal Outcome** - Listed below are a variety of skills used in providing care to the neonate and family. Please indicate the frequency and the knowledge and essentiality applicable to the performance of these skills as it applies to the neonates you manage.

Assess parent-infant attachment behaviors	Essential	1,526	80.27%	1901
	Routinely done	1,108	58.29%	
	Occasionally done	85	4.47%	
	Rarely done	20	1.05%	
	Never done	5	0.26%	
	Essential	1,398	74.24%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Determine gestational age	Routinely done	926	49.18%	1883
	Occasionally done	192	10.20%	
	Rarely done	107	5.68%	
	Never done	34	1.81%	
Documenting normal and abnormal findings	Essential	1,737	92.20%	1884
	Routinely done	987	52.39%	
	Occasionally done	16	0.85%	
	Rarely done	3	0.16%	
	Never done	0	0%	
Evaluate the appropriate growth of the infant at birth (AGA, SGA, LGA)	Essential	1,360	72.07%	1887
	Routinely done	1,036	54.90%	
	Occasionally done	172	9.11%	
	Rarely done	66	3.50%	
	Never done	28	1.48%	
Identify barriers to parent/infant interactions	Essential	1,441	76.28%	1889
	Routinely done	1,121	59.34%	
	Occasionally done	135	7.15%	
	Rarely done	12	0.64%	
	Never done	1	0.05%	
Maintain and apply knowledge of equipment used in practice	Essential	1,683	89.14%	1888
	Routinely done	1,023	54.18%	
	Occasionally done	40	2.12%	
	Rarely done	4	0.21%	
	Never done	0	0%	
Obtain family history and address factors affecting family integration	Essential	1,218	64.58%	1886
	Routinely done	1,006	53.34%	
	Occasionally done	284	15.06%	
	Rarely done	83	4.40%	
	Never done	15	0.80%	
Plan care to insure skin integrity is maintained	Essential	1,692	89.29%	1895
	Routinely done	1,020	53.83%	
	Occasionally done	36	1.90%	
	Rarely done	3	0.16%	
	Never done	0	0%	
Plan for risks associated with large- or small-for-gestational age infants	Essential	1,583	83.54%	1895
	Routinely done	1,041	54.93%	
	Occasionally done	98	5.17%	
	Rarely done	8	0.42%	
	Never done	0	0%	
Plan for risks associated with preterm and post-term infants	Essential	1,638	86.30%	1898
	Routinely done	1,058	55.74%	
	Occasionally done	44	2.32%	
	Rarely done	5	0.26%	
	Never done	1	0.05%	
	Essential	1,635	86.28%	
	Routinely done	1,058	55.83%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Prepare families for discharge and follow up needs	Occasionally done	49	2.59%	1895
	Rarely done	9	0.47%	
	Never done	1	0.05%	
Prepare for delivery of newborns based on maternal emergencies and type of delivery	Essential	1,598	84.51%	1891
	Routinely done	970	51.30%	
	Occasionally done	75	3.97%	
	Rarely done	39	2.06%	
	Never done	53	2.80%	
Provide culturally sensitive care	Essential	1,439	76.02%	1893
	Routinely done	1,072	56.63%	
	Occasionally done	172	9.09%	
	Rarely done	19	1.00%	
	Never done	4	0.21%	
Provide neonatal ventilation as needed	Essential	1,731	91.44%	1893
	Routinely done	976	51.56%	
	Occasionally done	49	2.59%	
	Rarely done	6	0.32%	
	Never done	1	0.05%	
Provide support systems and referrals to families as needed	Essential	1,336	70.69%	1890
	Routinely done	1,073	56.77%	
	Occasionally done	214	11.32%	
	Rarely done	37	1.96%	
	Never done	6	0.32%	
Recognize fetal heart rate patterns before and during delivery that impact the newborn	Essential	1,120	59.86%	1871
	Routinely done	765	40.89%	
	Occasionally done	280	14.97%	
	Rarely done	170	9.09%	
	Never done	170	9.09%	
Recommend parental support groups and bereavement groups	Essential	1,045	55.38%	1887
	Routinely done	815	43.19%	
	Occasionally done	494	26.18%	
	Rarely done	148	7.84%	
	Never done	43	2.28%	
Review maternal conditions, treatments and delivery room history that impact the newborn	Essential	1,457	76.97%	1893
	Routinely done	1,029	54.36%	
	Occasionally done	164	8.66%	
	Rarely done	34	1.80%	
	Never done	21	1.11%	
Review maternal labs and diagnostic procedures that impact the neonate	Essential	1,264	67.02%	1886
	Routinely done	970	51.43%	
	Occasionally done	276	14.63%	
	Rarely done	93	4.93%	
	Never done	36	1.91%	
	Essential	1,369	72.59%	
	Routinely done	1,004	53.23%	
	Occasionally done	232	12.30%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Review maternal medications and anesthesia that impact the neonate	Rarely done	54	2.86%	1886
	Never done	24	1.27%	
Review perinatal factors (antepartum and intrapartum) that affect the neonate	Essential	1,421	74.87%	1898
	Routinely done	1,035	54.53%	
	Occasionally done	192	10.12%	
	Rarely done	40	2.11%	
	Never done	7	0.37%	
Take preventive measures to insure skin integrity	Essential	1,695	89.21%	1900
	Routinely done	996	52.42%	
	Occasionally done	36	1.89%	
	Rarely done	5	0.26%	
	Never done	2	0.11%	
Utilize adult learning principles when teaching others	Essential	1,348	71.70%	1880
	Routinely done	1,042	55.43%	
	Occasionally done	185	9.84%	
	Rarely done	37	1.97%	
	Never done	9	0.48%	
Utilize your knowledge of the grieving process	Essential	1,288	68.84%	1871
	Routinely done	927	49.55%	
	Occasionally done	334	17.85%	
	Rarely done	74	3.96%	
	Never done	1	0.05%	
Are there other skills that are routine to your practice that are not included in this list?	Yes	116	6.65%	1745
	No	1629	93.35%	
<b>Skills - Management of fluid and electrolytes, nutrition and feeding, oxygenation and ventilation, thermoregulation, resuscitation and developmental care</b> - Listed below are a variety of skills used in providing care to the neonate. Please indicate the frequency and the knowledge criticality applicable to the performance of these skills as it applies to the neonates you manage.				
Alter the NICU environment to meet the infant's developmental needs	Essential	1,524	83.87%	1817
	Routinely done	973	53.55%	
	Occasionally done	128	7.04%	
	Rarely done	14	0.77%	
	Never done	6	0.33%	
Assist mothers in breast feeding	Essential	1,482	81.34%	1822
	Routinely done	1,068	58.62%	
	Occasionally done	83	4.56%	
	Rarely done	6	0.33%	
	Never done	2	0.11%	
Assist parents/family with kangaroo care	Essential	1,528	83.86%	1822
	Routinely done	1,049	57.57%	
	Occasionally done	70	3.84%	
	Rarely done	3	0.16%	
	Never done	2	0.11%	
	Essential	1,309	72.20%	
	Routinely done	982	54.16%	



<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Develop feeding plans	Occasionally done	175	9.65%	1813
	Rarely done	53	2.92%	
	Never done	32	1.77%	
Evaluate and respond to drug levels	Essential	1,327	73.23%	1812
	Routinely done	1,015	56.02%	
	Occasionally done	184	10.15%	
	Rarely done	33	1.82%	
	Never done	13	0.72%	
Evaluate calories	Essential	1,034	57.48%	1799
	Routinely done	838	46.58%	
	Occasionally done	280	15.56%	
	Rarely done	179	9.95%	
	Never done	75	4.17%	
Evaluate drug interactions	Essential	1,334	73.82%	1807
	Routinely done	947	52.41%	
	Occasionally done	180	9.96%	
	Rarely done	71	3.93%	
	Never done	16	0.89%	
Evaluate formula compositions and infant needs based on illness	Essential	943	52.48%	1797
	Routinely done	702	39.07%	
	Occasionally done	385	21.42%	
	Rarely done	217	12.08%	
	Never done	111	6.18%	
Evaluate the effects of elicit drugs on breastfeeding	Essential	1,205	66.61%	1809
	Routinely done	883	48.81%	
	Occasionally done	330	18.24%	
	Rarely done	92	5.09%	
	Never done	18	1.00%	
Evaluate the effects of maternal drugs on breastfeeding	Essential	1,198	66.33%	1806
	Routinely done	917	50.78%	
	Occasionally done	307	17.00%	
	Rarely done	83	4.60%	
	Never done	15	0.83%	
Evaluate the nutritional status of the neonate using key indicators	Essential	1,221	67.87%	1799
	Routinely done	904	50.25%	
	Occasionally done	244	13.56%	
	Rarely done	93	5.17%	
	Never done	43	2.39%	
Evaluate the oxygenation and ventilation status of the infant	Essential	1,678	92.35%	1817
	Routinely done	967	53.22%	
	Occasionally done	18	0.99%	
	Rarely done	4	0.22%	
	Never done	3	0.17%	
	Essential	1,679	92.25%	
	Routinely done	972	53.41%	
	Occasionally done	12	0.66%	



<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Gavage feed infants	Rarely done	5	0.27%	1820
	Never done	1	0.05%	
Hang and monitor drips (i.e. pressors, prostins)	Essential	1,557	85.60%	1819
	Routinely done	821	45.13%	
	Occasionally done	189	10.39%	
	Rarely done	74	4.07%	
	Never done	12	0.66%	
Implement dietary supplements and fortifiers as ordered	Essential	1,523	83.77%	1818
	Routinely done	1,030	56.66%	
	Occasionally done	47	2.59%	
	Rarely done	13	0.72%	
	Never done	5	0.28%	
Interpret blood gases	Essential	1,612	88.67%	1818
	Routinely done	949	52.20%	
	Occasionally done	81	4.46%	
	Rarely done	8	0.44%	
	Never done	3	0.17%	
Maintain current knowledge about advances in neonatal care	Essential	1,548	85.10%	1819
	Routinely done	947	52.06%	
	Occasionally done	129	7.09%	
	Rarely done	10	0.55%	
	Never done	1	0.05%	
Manage infants during transports	Essential	1,058	58.71%	1802
	Routinely done	639	35.46%	
	Occasionally done	260	14.43%	
	Rarely done	178	9.88%	
	Never done	287	15.93%	
Manage the thermoregulation of the neonate	Essential	1,727	94.89%	1820
	Routinely done	952	52.31%	
	Occasionally done	9	0.49%	
	Rarely done	1	0.05%	
	Never done	0	0%	
Monitor oxygenation and ventilation status	Essential	1,723	94.41%	1825
	Routinely done	944	51.73%	
	Occasionally done	22	1.21%	
	Rarely done	2	0.11%	
	Never done	2	0.11%	
Monitor the side-effects of drugs	Essential	1,547	85%	1820
	Routinely done	984	54.07%	
	Occasionally done	95	5.22%	
	Rarely done	14	0.77%	
	Never done	2	0.11%	
	Essential	1,673	91.92%	
	Routinely done	976	53.63%	
	Occasionally done	13	0.71%	
	Rarely done	2	0.11%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Monitor the urinary output	Never done	0	0%	1820
Participate in the diagnosis and plan of care with an inter-professional team	Essential	1,485	81.68%	1818
	Routinely done	995	54.73%	
	Occasionally done	107	5.89%	
	Rarely done	38	2.09%	
	Never done	7	0.39%	
Perform pain assessment with vital signs	Essential	1,682	92.37%	1821
	Routinely done	974	53.49%	
	Occasionally done	13	0.71%	
	Rarely done	2	0.11%	
	Never done	0	0%	
Provide education about SIDS and/or shaken baby syndrome	Essential	1,420	78.02%	1820
	Routinely done	1,033	56.76%	
	Occasionally done	144	7.91%	
	Rarely done	30	1.65%	
	Never done	5	0.27%	
Provide enteral feeds	Essential	1,647	90.79%	1814
	Routinely done	987	54.41%	
	Occasionally done	16	0.88%	
	Rarely done	3	0.17%	
	Never done	3	0.17%	
Provide neonatal resuscitation	Essential	1,638	89.70%	1826
	Routinely done	820	44.91%	
	Occasionally done	203	11.12%	
	Rarely done	39	2.14%	
	Never done	2	0.11%	
Provide neonatal stabilization	Essential	1,683	92.42%	1821
	Routinely done	940	51.62%	
	Occasionally done	53	2.91%	
	Rarely done	9	0.49%	
	Never done	3	0.16%	
Provide nonnutritive sucking	Essential	1,604	87.94%	1824
	Routinely done	1,010	55.37%	
	Occasionally done	33	1.81%	
	Rarely done	3	0.16%	
	Never done	0	0%	
Provide non-pharmacologic interventions for pain control	Essential	1,648	90.30%	1825
	Routinely done	998	54.68%	
	Occasionally done	27	1.48%	
	Rarely done	0	0%	
	Never done	0	0%	
Provide parenteral fluids	Essential	1,660	91.16%	1821
	Routinely done	973	53.43%	
	Occasionally done	23	1.26%	
	Rarely done	5	0.27%	
	Never done	2	0.11%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Provide sensory experiences to the neonate based on gestation age	Essential	1,491	81.83%	1822
	Routinely done	969	53.18%	
	Occasionally done	138	7.57%	
	Rarely done	23	1.26%	
	Never done	4	0.22%	
Recognize dehydration and overhydration	Essential	1,587	87.25%	1819
	Routinely done	945	51.95%	
	Occasionally done	103	5.66%	
	Rarely done	10	0.55%	
	Never done	2	0.11%	
Respond to blood gases	Essential	1,624	89.33%	1818
	Routinely done	958	52.70%	
	Occasionally done	65	3.58%	
	Rarely done	9	0.50%	
	Never done	3	0.17%	
Review and modify the nursing plan of care based on ongoing evaluation	Essential	1,548	85.20%	1817
	Routinely done	994	54.71%	
	Occasionally done	74	4.07%	
	Rarely done	12	0.66%	
	Never done	4	0.22%	
Review electrolytes	Essential	1,541	85.85%	1795
	Routinely done	996	55.49%	
	Occasionally done	73	4.07%	
	Rarely done	6	0.33%	
	Never done	2	0.11%	
Are there other skills that are routine to your practice that are not included in this list?	Yes	73	4.36%	1673
	No	1600	95.64%	
<b>Skills - Diagnostic Procedures, Techniques and Equipment</b> - Listed below are a variety of skills used in diagnostic procedures, techniques and equipment. Please indicate the frequency and the knowledge essentiality applicable to the performance of these skills as it applies to the neonates you manage.				
<b>Set up and assist with the following</b>				
Chest tube insertion	Essential	1,150	64.10%	1794
	Routinely done	321	17.89%	
	Occasionally done	808	45.04%	
	Rarely done	299	16.67%	
	Never done	46	2.56%	
Exchange transfusion	Essential	951	53.31%	1784
	Routinely done	110	6.17%	
	Occasionally done	439	24.61%	
	Rarely done	897	50.28%	
	Never done	130	7.29%	
	Essential	1,465	81.80%	
	Routinely done	961	53.66%	
	Occasionally done	170	9.49%	
	Rarely done	35	1.95%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Intubation	Never done	37	2.07%	1791
Lumbar puncture	Essential	1,196	66.82%	1790
	Routinely done	625	34.92%	
	Occasionally done	620	34.64%	
	Rarely done	140	7.82%	
	Never done	41	2.29%	
Needle Aspiration	Essential	1,098	61.44%	1787
	Routinely done	317	17.74%	
	Occasionally done	770	43.09%	
	Rarely done	372	20.82%	
	Never done	47	2.63%	
Peripheral arterial line	Essential	1,209	67.62%	1788
	Routinely done	606	33.89%	
	Occasionally done	475	26.57%	
	Rarely done	229	12.81%	
	Never done	79	4.42%	
Suprapubic bladder tap	Essential	714	40.29%	1772
	Routinely done	116	6.55%	
	Occasionally done	360	20.32%	
	Rarely done	738	41.65%	
	Never done	413	23.31%	
Surfactant replacement	Essential	1,454	81.37%	1787
	Routinely done	930	52.04%	
	Occasionally done	212	11.86%	
	Rarely done	43	2.41%	
	Never done	26	1.45%	
Umbilical line placement	Essential	1,468	82.43%	1781
	Routinely done	981	55.08%	
	Occasionally done	139	7.80%	
	Rarely done	31	1.74%	
	Never done	27	1.52%	
<b>Perform the following</b>				
Arterial puncture	Essential	990	55.93%	1770
	Routinely done	606	34.24%	
	Occasionally done	247	13.95%	
	Rarely done	167	9.44%	
	Never done	371	20.96%	
Bag mask ventilation	Essential	1,608	89.53%	1796
	Routinely done	936	52.12%	
	Occasionally done	129	7.18%	
	Rarely done	16	0.89%	
	Never done	1	0.06%	
	Essential	1,670	93.09%	
	Routinely done	1,010	56.30%	
	Occasionally done	2	0.11%	
	Rarely done	0	0%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Blood pressures	Never done	0	0%	1794
Blood product transfusions	Essential	1,538	85.73%	1794
	Routinely done	866	48.27%	
	Occasionally done	223	12.43%	
	Rarely done	46	2.56%	
	Never done	11	0.61%	
Chest tube removal	Essential	895	50.42%	1775
	Routinely done	331	18.65%	
	Occasionally done	488	27.49%	
	Rarely done	322	18.14%	
	Never done	383	21.58%	
Dosage calculations	Essential	1,587	88.56%	1792
	Routinely done	971	54.19%	
	Occasionally done	72	4.02%	
	Rarely done	29	1.62%	
	Never done	9	0.50%	
Heel stick	Essential	1,643	91.84%	1789
	Routinely done	1,012	56.57%	
	Occasionally done	12	0.67%	
	Rarely done	7	0.39%	
	Never done	6	0.34%	
Nasal gastric tube	Essential	1,655	92.56%	1788
	Routinely done	1,009	56.43%	
	Occasionally done	12	0.67%	
	Rarely done	3	0.17%	
	Never done	1	0.06%	
Peripheral intravenous catheter	Essential	1,640	91.47%	1793
	Routinely done	986	54.99%	
	Occasionally done	20	1.12%	
	Rarely done	6	0.33%	
	Never done	23	1.28%	
Peripherally inserted central line	Essential	1,020	57.76%	1766
	Routinely done	630	35.67%	
	Occasionally done	186	10.53%	
	Rarely done	110	6.23%	
	Never done	460	26.05%	
Suctioning	Essential	1,672	93.25%	1793
	Routinely done	988	55.10%	
	Occasionally done	23	1.28%	
	Rarely done	4	0.22%	
	Never done	0	0%	
T-piece ventilation	Essential	1,110	62.85%	1766
	Routinely done	602	34.09%	
	Occasionally done	244	13.82%	
	Rarely done	194	10.99%	
	Never done	303	17.16%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Transpyloric tube	Essential	724	41.28%	1754
	Routinely done	252	14.37%	
	Occasionally done	361	20.58%	
	Rarely done	407	23.20%	
	Never done	543	30.96%	
Urinary catheterization	Essential	1,121	62.63%	1790
	Routinely done	480	26.82%	
	Occasionally done	554	30.95%	
	Rarely done	326	18.21%	
	Never done	80	4.47%	
Venous puncture	Essential	1,465	82.67%	1772
	Routinely done	897	50.62%	
	Occasionally done	136	7.67%	
	Rarely done	54	3.05%	
	Never done	50	2.82%	
<b>Manage infants on and trouble shoot the following</b>				
CPAP	Essential	1,633	90.77%	1799
	Routinely done	976	54.25%	
	Occasionally done	51	2.83%	
	Rarely done	8	0.44%	
	Never done	13	0.72%	
ECMO	Essential	452	25.73%	1757
	Routinely done	140	7.97%	
	Occasionally done	170	9.68%	
	Rarely done	196	11.16%	
	Never done	1,141	64.94%	
End tidal CO2 monitoring	Essential	846	47.96%	1764
	Routinely done	477	27.04%	
	Occasionally done	353	20.01%	
	Rarely done	309	17.52%	
	Never done	336	19.05%	
High flow cannulae	Essential	1,557	87.08%	1788
	Routinely done	975	54.53%	
	Occasionally done	74	4.14%	
	Rarely done	20	1.12%	
	Never done	28	1.57%	
High frequency ventilators	Essential	1,391	77.58%	1793
	Routinely done	760	42.39%	
	Occasionally done	266	14.84%	
	Rarely done	91	5.08%	
	Never done	102	5.69%	
Incubators and radiant warmers	Essential	1,672	92.79%	1802
	Routinely done	1,025	56.88%	
	Occasionally done	5	0.28%	
	Rarely done	0	0%	
	Never done	1	0.06%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Indwelling lines	Essential	1,614	90.02%	1793
	Routinely done	976	54.43%	
	Occasionally done	66	3.68%	
	Rarely done	19	1.06%	
	Never done	7	0.39%	
Infants in humidified environments	Essential	1,526	85.11%	1793
	Routinely done	904	50.42%	
	Occasionally done	115	6.41%	
	Rarely done	54	3.01%	
	Never done	52	2.90%	
Invasive and noninvasive blood gas monitoring	Essential	1,577	87.86%	1795
	Routinely done	985	54.87%	
	Occasionally done	69	3.84%	
	Rarely done	22	1.23%	
	Never done	19	1.06%	
Neonatal conventional ventilators	Essential	1,577	88.05%	1791
	Routinely done	966	53.94%	
	Occasionally done	86	4.80%	
	Rarely done	30	1.68%	
	Never done	11	0.61%	
Phototherapy	Essential	1,637	91.30%	1793
	Routinely done	1,019	56.83%	
	Occasionally done	23	1.28%	
	Rarely done	0	0%	
	Never done	2	0.11%	
Set up and manage Chest tube drainage systems	Essential	1,303	72.43%	1799
	Routinely done	511	28.40%	
	Occasionally done	578	32.13%	
	Rarely done	242	13.45%	
	Never done	15	0.83%	
Tracheostomies	Essential	910	51.15%	1779
	Routinely done	281	15.80%	
	Occasionally done	368	20.69%	
	Rarely done	449	25.24%	
	Never done	426	23.95%	
<b>Evaluate and report abnormalities for the following</b>				
Blood drug levels	Essential	1,420	79.55%	1785
	Routinely done	950	53.22%	
	Occasionally done	175	9.80%	
	Rarely done	46	2.58%	
	Never done	12	0.67%	
EEG	Essential	666	37.84%	1760
	Routinely done	335	19.03%	
	Occasionally done	581	33.01%	
	Rarely done	335	19.03%	
	Never done	316	17.95%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
EKG	Essential	895	50.71%	1765
	Routinely done	539	30.54%	
	Occasionally done	583	33.03%	
	Rarely done	218	12.35%	
	Never done	136	7.71%	
Recognize acid base balance abnormalities	Essential	1,465	82.26%	1781
	Routinely done	997	55.98%	
	Occasionally done	128	7.19%	
	Rarely done	22	1.24%	
	Never done	7	0.39%	
Are there other skills that are routine to your practice that are not included in this list?	Yes	60	3.58%	1676
	No	1616	96.42%	
<b>Professional Practice</b> - Which of the following professional issues are essential to the Neonatal Intensive Care nursing practice?				
Ethical Issues	Yes	1,558	98.30%	1585
	No	27	1.70%	
Evidence-based practice	Yes	1,576	99.37%	1586
	No	10	0.63%	
Legal Issues	Yes	1,512	96.12%	1573
	No	61	3.88%	
Nursing Research	Yes	1,464	93.55%	1565
	No	101	6.45%	
Patient Safety	Yes	1,558	99.68%	1563
	No	5	0.32%	
Are there other items that are routine to your practice that are not included in this list?	Yes	54	3.72%	1451
	No	1397	96.28%	
<b>Current Certification Test Outline</b> - The current certification test outline allocates question weighting with the following percentages. Based on your personal experiences, do you believe these percentages are under-represented, over-represented or just about right?				
General Assessment and Management at 45-50%	Under- represented	156	9.97%	1565
	Over- represented	64	4.09%	
	Just about right	1,345	85.94%	
Assess & Manage Pathophysiologic States at 45-55%	Under- represented	90	5.78%	1556
	Over- represented	185	11.89%	
	Just about right	1,281	82.33%	
Assess and Manage Psychosocial/Behavioral Adjustments at 5-10%	Under- represented	302	19.38%	1558
	Over- represented	67	4.30%	
	Just about right	1,189	76.32%	
Professional Issues at less than 5%	Under- represented	271	17.53%	1546
	Over- represented	56	3.62%	
	Just about right	1,219	78.85%	
<b>General Assessment and Management</b> - Does this content adequately reflect what is applied to your daily practice?				
	Yes	1,468	93.09%	
	No	78	4.95%	



<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Maternal History and Risk Factors	Don't Know	31	1.97%	1577
	Yes	1,527	96.71%	
	No	38	2.41%	
Gestational Age (at birth)	Don't Know	14	0.89%	1579
	Yes	1,567	99.18%	
	No	6	0.38%	
Physical Assessment	Don't Know	7	0.44%	1580
	Yes	1,550	98.23%	
	No	18	1.14%	
Resuscitation and Stabilization	Don't Know	10	0.63%	1578
	Yes	1,537	97.53%	
	No	31	1.97%	
Fluids and Electrolytes	Don't Know	8	0.51%	1576
	Yes	1,547	98.10%	
	No	19	1.20%	
Nutrition and Feeding	Don't Know	11	0.70%	1577
	Yes	1,540	97.65%	
	No	25	1.59%	
Oxygenation and Acid Base Homeostasis	Don't Know	12	0.76%	1577
	Yes	1,561	99.05%	
	No	7	0.44%	
Thermoregulation	Don't Know	8	0.51%	1576
	Yes	1,503	95.61%	
	No	48	3.05%	
Pharmacology	Don't Know	21	1.34%	1572
	Yes	1,524	97.94%	
	No	22	1.41%	
Developmental Care	Don't Know	10	0.64%	1556
<b>Assess &amp; Manage Pathophysiologic States - Does this content adequately reflect what is applied to your daily practice?</b>				
	Yes	1,518	96.20%	
	No	44	2.79%	
Cardiac	Don't Know	16	1.01%	1578
	Yes	1,564	99.18%	
	No	5	0.32%	
Respiratory	Don't Know	8	0.51%	1577
	Yes	1,556	98.79%	
	No	11	0.70%	
Gastrointestinal	Don't Know	8	0.51%	1575
	Yes	1,523	96.82%	
	No	36	2.29%	
Genitourinary	Don't Know	14	0.89%	1573
	Yes	1,444	91.68%	
	No	69	4.38%	
Hematopoietic	Don't Know	62	3.94%	1575
	Yes	1,518	96.26%	

<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
Neurological/Neuromuscular	No	37	2.35%	1577
	Don't Know	22	1.40%	
Infectious Diseases	Yes	1,527	97.20%	1571
	No	29	1.85%	
	Don't Know	15	0.95%	
Metabolic/Endocrine	Yes	1,471	93.34%	1576
	No	73	4.63%	
	Don't Know	32	2.03%	
Infectious Disease	Yes	1,522	96.82%	1572
	No	29	1.84%	
	Don't Know	21	1.34%	
Genetic Disorder	Yes	1,424	90.87%	1567
	No	101	6.45%	
	Don't Know	42	2.68%	
Head, Eye, Ear, Nose and Throat	Yes	1,490	96.13%	1550
	No	36	2.32%	
	Don't Know	24	1.55%	
<b>Assess and Manage Psychosocial/Behavioral Adjustments- Does this content adequately reflect what is applied to your daily practice?</b>				
Discharge Planning and Follow-up	Yes	1,500	95.36%	1573
	No	48	3.05%	
	Don't Know	25	1.59%	
Grieving Process	Yes	1,474	93.83%	1571
	No	62	3.95%	
	Don't Know	35	2.23%	
Family Integration	Yes	1,454	94.29%	1542
	No	47	3.05%	
	Don't Know	41	2.66%	
<b>Professional Issues- Does this content adequately reflect what is applied to your daily practice?</b>				
Legal/Ethical Problems	Yes	1,469	93.51%	1571
	No	60	3.82%	
	Don't Know	42	2.67%	
Patient Safety	Yes	1,533	98.02%	1564
	No	14	0.90%	
	Don't Know	17	1.09%	
<b>Demographic Information</b>				
What best describes your practice setting?	Hospital	1520	96.26%	1579
	Follow Up Clinic	1	0.06%	
	Academic setting	21	1.33%	
	Administration	9	0.57%	
	Research	3	0.19%	
	Other (please specify)	25	1.58%	
	Level I normal newborn care	9	0.57%	
	Level II NICU	152	9.68%	
	Level III NICU	1039	66.14%	

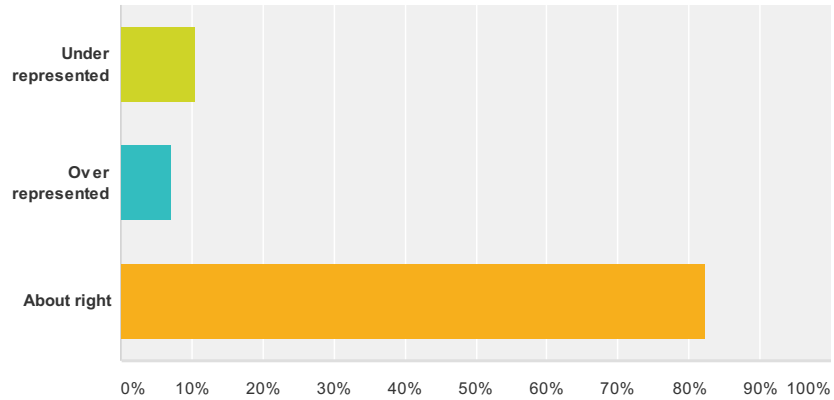
<b>Exhibit 2 Neonatal Intensive Care Nursing (NIC)</b>				
<b>Questions</b>	<b>Answer Options</b>	<b># per answer option</b>	<b>% per answer option</b>	<b>Total per item</b>
If you work in a hospital, is it designated as	Level IV NICU	329	20.94%	1571
	Not applicable	23	1.46%	
	Other (please specify)	19	1.21%	
Are you employed by a	Hospital	1496	95.77%	1562
	Government Agency	18	1.15%	
	Private company	31	1.98%	
	Other (please specify)	17	1.09%	
What is your highest level of education?	Doctorate - Ph.D	7	0.45%	1570
	Doctorate - DNP	7	0.45%	
	Post Master's	17	1.08%	
	Master's	267	17.01%	
	Baccalaureate	919	58.54%	
	Associate	241	15.35%	
	Diploma	100	6.37%	
	Other (please specify)	12	0.76%	
What is your job title?	Staff Nurse	1178	75.71%	1556
	Nurse Manager	74	4.76%	
	Nurse Educator	79	5.08%	
	Nursing Director	11	0.71%	
	Clinical Nurse Specialist	37	2.38%	
	Outreach Coordinator	4	0.26%	
	Patient Safety Nurse	2	0.13%	
	Nursing Instructor/Professor	10	0.64%	
	Researcher	4	0.26%	
	Other (Please specify)	157	10.09%	
In the last 24 months what new practice change(s) have been incorporated into your practice?	None	39	47.56%	82
	Listed below	43	52.44%	

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q1 Did you think the General Assessment and Management content tested on exam was

Answered: 209 Skipped: 4



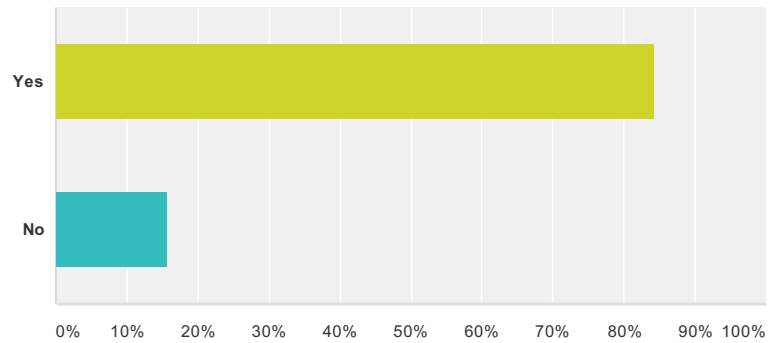
Answer Choices	Responses	Count
Under represented	10.53%	22
Over represented	7.18%	15
About right	82.30%	172
<b>Total</b>		<b>209</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

**Q2 Does this content adequately reflect what is applied to your daily practice relative to General Assessment and Management?**

Answered: 211 Skipped: 2



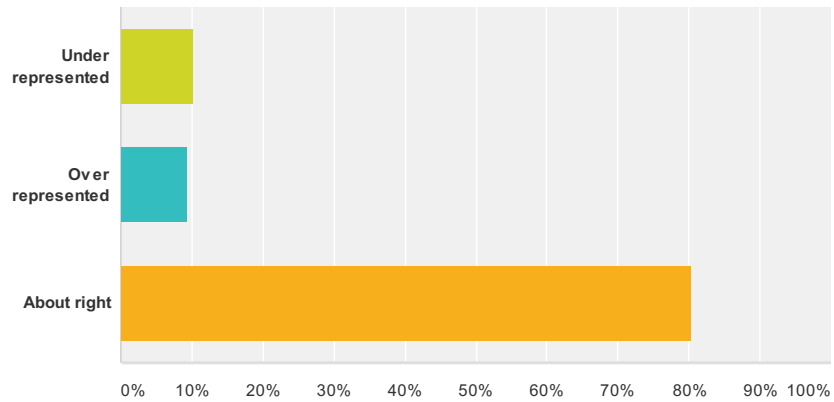
Answer Choices	Responses	
Yes	84.36%	178
No	15.64%	33
<b>Total</b>		<b>211</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q4 Did you think the Assess & Manage Pathophysiologic States content tested on the exam was

Answered: 204 Skipped: 9



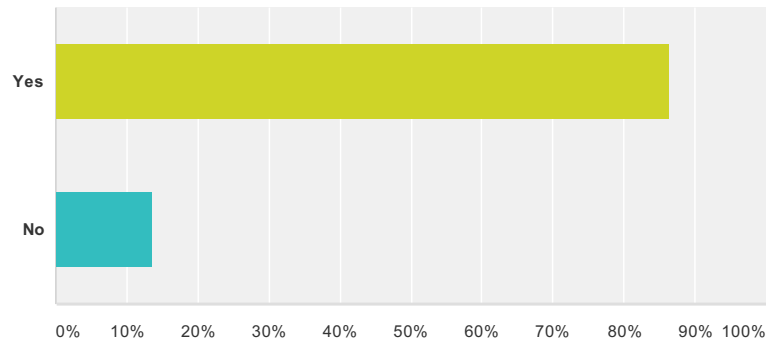
Answer Choices	Responses	Count
Under represented	10.29%	21
Over represented	9.31%	19
About right	80.39%	164
<b>Total</b>		<b>204</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

**Q5 Does this content adequately reflect what is applied to daily practice relative to Assess & Manage Pathophysiologic States?**

Answered: 200 Skipped: 13



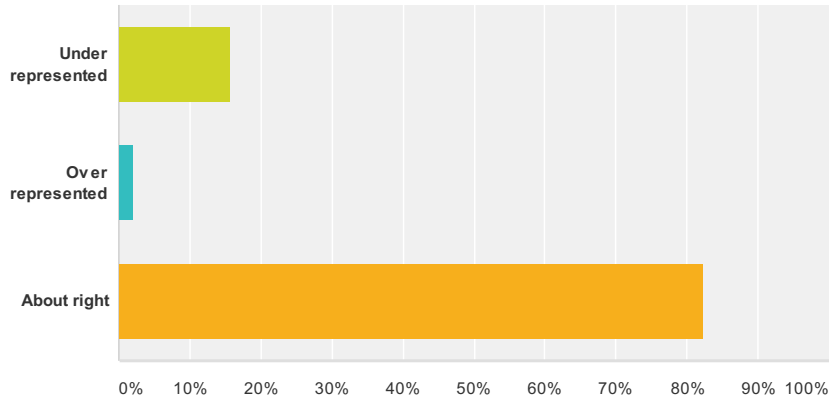
Answer Choices	Responses	
Yes	86.50%	173
No	13.50%	27
<b>Total</b>		<b>200</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q7 Did you think the Assess and Manage Psychosocial/Behavioral Adjustments content tested on the exam was

Answered: 198 Skipped: 15



Answer Choices	Responses	
Under represented	15.66%	31
Over represented	2.02%	4
About right	82.32%	163
<b>Total</b>		<b>198</b>

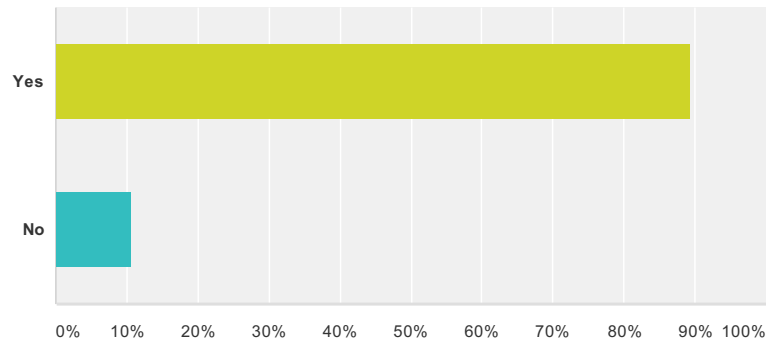


## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

**Q8 Does this content adequately reflect what is applied to daily practice relative to Assess and Manage Psychosocial/Behavioral Adjustments?**

Answered: 198 Skipped: 15



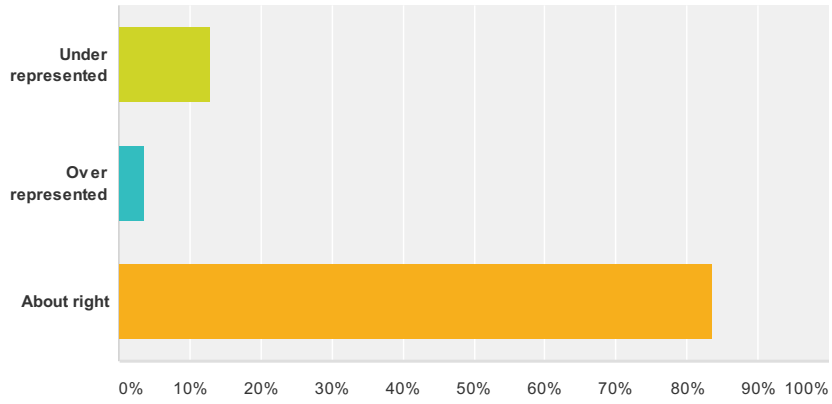
Answer Choices	Responses	
Yes	89.39%	177
No	10.61%	21
<b>Total</b>		<b>198</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q10 Did you think the Professional Issues content tested on the exam was

Answered: 200 Skipped: 13



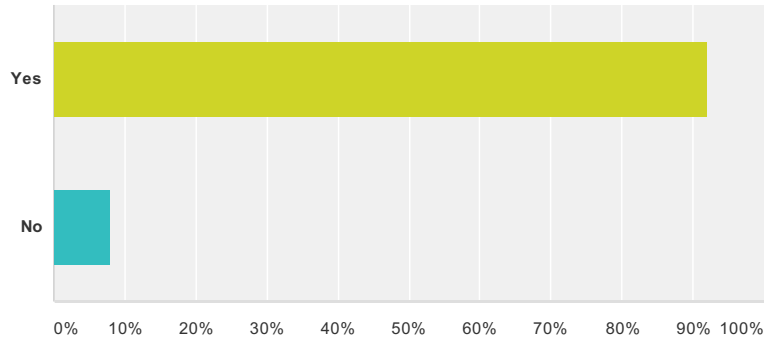
Answer Choices	Responses	
Under represented	13.00%	26
Over represented	3.50%	7
About right	83.50%	167
<b>Total</b>		<b>200</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

**Q11 Does this content adequately reflect what is applied to daily practice relative to Professional Issues care?**

Answered: 200 Skipped: 13



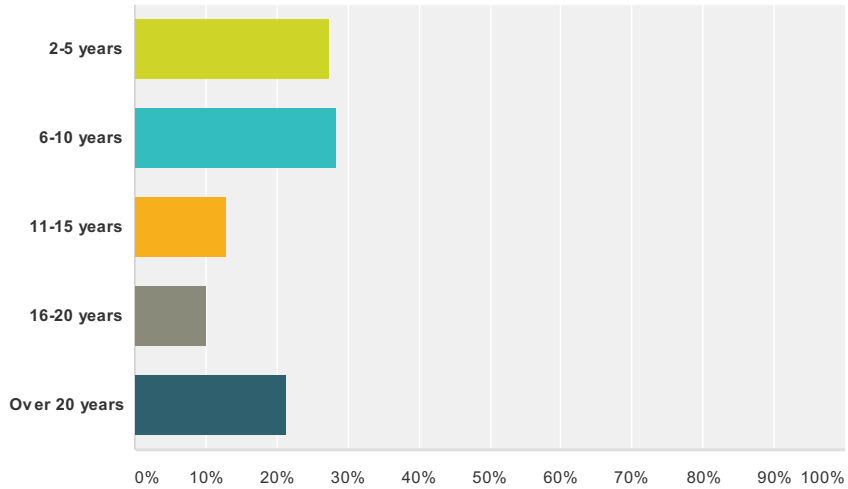
Answer Choices	Responses	
Yes	92.00%	184
No	8.00%	16
<b>Total</b>		<b>200</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q13 How long have you been practicing in the neonatal intensive care nursing specialty?

Answered: 201 Skipped: 12



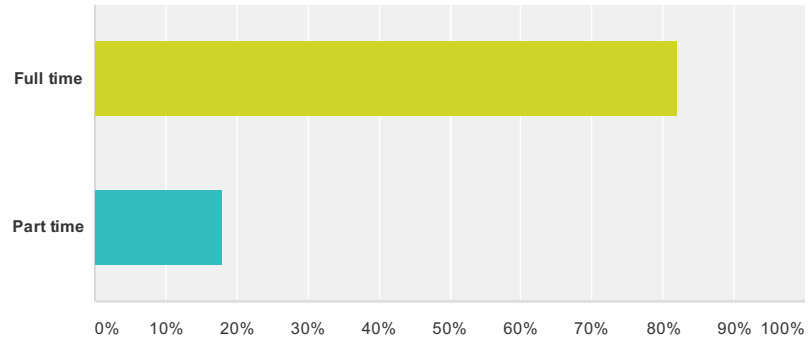
Answer Choices	Responses	
2-5 years	27.36%	55
6-10 years	28.36%	57
11-15 years	12.94%	26
16-20 years	9.95%	20
Over 20 years	21.39%	43
<b>Total</b>		<b>201</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q14 Do you work

Answered: 201 Skipped: 12



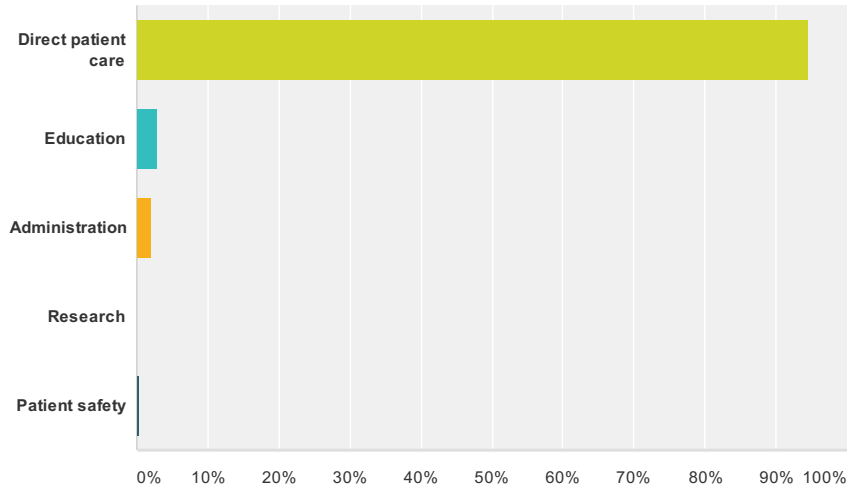
Answer Choices	Responses
Full time	82.09% 165
Part time	17.91% 36
<b>Total</b>	<b>201</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q15 What is your major focus of your practice?

Answered: 201 Skipped: 12



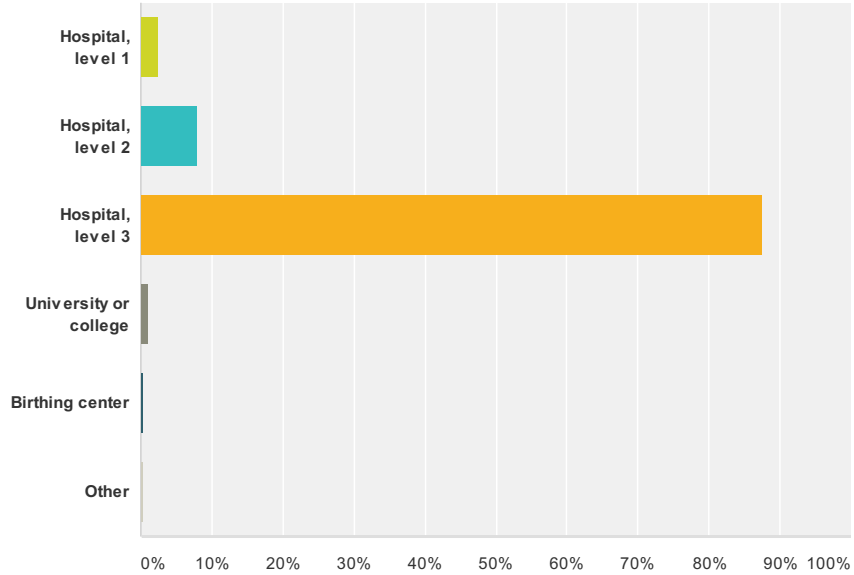
Answer Choices	Responses	Count
Direct patient care	94.53%	190
Education	2.99%	6
Administration	1.99%	4
Research	0.00%	0
Patient safety	0.50%	1
<b>Total</b>		<b>201</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q16 Where do you work?

Answered: 201 Skipped: 12



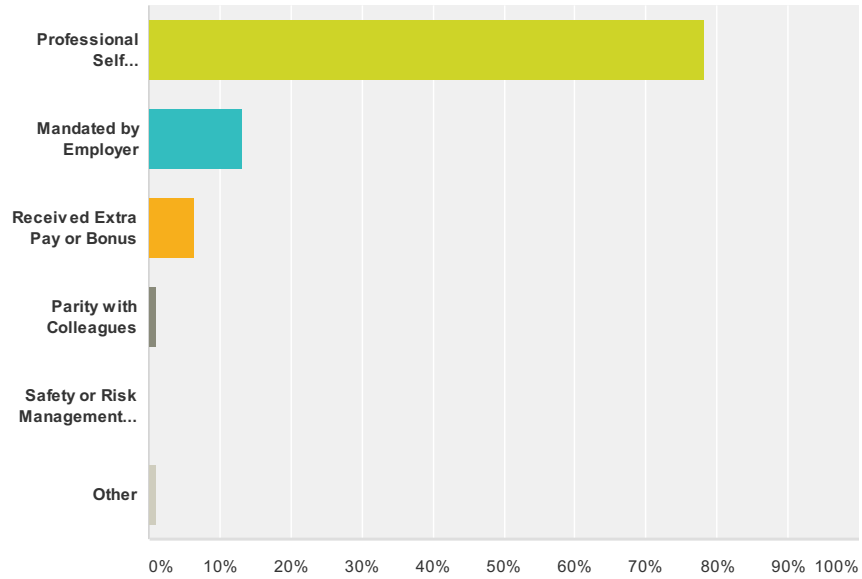
Answer Choices	Responses
Hospital, level 1	2.49% 5
Hospital, level 2	7.96% 16
Hospital, level 3	87.56% 176
University or college	1.00% 2
Birthing center	0.50% 1
Other	0.50% 1
<b>Total</b>	<b>201</b>

## Exhibit 3 Neonatal Intensive Care Nursing (NIC)

### 2013-2014 Neonatal Intensive Care Nursing - Post Exam Feedback Survey

#### Q17 Why did you primarily seek certification? (select one)

Answered: 199 Skipped: 14



Answer Choices	Responses	Count
Professional Self Development	78.39%	156
Mandated by Employer	13.07%	26
Received Extra Pay or Bonus	6.53%	13
Parity with Colleagues	1.01%	2
Safety or Risk Management Initiative	0.00%	0
Other	1.01%	2
<b>Total</b>		<b>199</b>