



JOB ANALYSIS REPORT

NATIONAL CERTIFICATION CORPORATION

INPATIENT OBSTETRIC NURSING

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PSI SERVICES

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SUBMITTED TO



EXECUTIVE SUMMARY

This report describes the methodology and procedure used to conduct a job analysis and develop the exam specifications for the National Certification Corporation (NCC) Inpatient Obstetric Nursing certification examination.

The three major activities that comprise the job analysis process described in this report are as follows:

1. **Job Analysis Committee Meeting** – A gathering of subject matter experts (SMEs) to discuss and develop a description of the scope of practice
2. **Job Analysis Survey** – A large-scale survey of practitioners not involved with the SME panel to validate the task and knowledge statements developed by the panel
3. **Development of Examination Specifications** – The development of Examination Specifications by the panel based on the results of the survey

Several practitioners were assembled by NCC to serve as SMEs. The individuals selected represent a wide variety of work-related characteristics such as years of experience, work setting, geographic location, and areas of specialty. This helps in developing a scope of practice that is reflective of the roles and responsibilities of the job role and is relatively free from bias. By analyzing the experiences and expertise of current practitioners, the results from the job analysis become the basis of a validated assessment that reflects the competencies required for competent job performance.

The job analysis process utilized in this study yields exam specifications that accurately reflect the scope of practice, allowing for the development of fair, accurate, and realistic assessments of candidates' readiness for certification. The resultant Examination Specifications document (Appendix C) indicates a 150-item examination with content distribution requirements at the competency area (content domain) level as well as topic (content subdomain) level. The five competency areas are:

1. Complications of Pregnancy
2. Fetal Assessment
3. Labor and Birth
4. Recovery, Postpartum and Newborn Care
5. Professional Practice Issues

INTRODUCTION

This report describes the methodology and procedure used to conduct a job analysis and develop the exam specifications for the National Certification Corporation (NCC) Inpatient Obstetric Nursing certification examination.

The procedure was conducted in accordance with principles and practices outlined in the *Standards for Educational and Psychological Testing*¹, which describe principles and guidelines for all aspects of test development, including content validation.

A job analysis (sometimes referred to as a practice analysis, job task analysis, or work analysis) is a scientific inquiry conducted in order to identify the tasks and work activities conducted, the context in which those tasks and activities are carried out, and the competencies (knowledge areas, skills, and abilities) required to perform a job role successfully². Different methods can be used which may differ in the levels of specificity in analyzing and describing different work elements, with the choice of method largely dependent on the intended purpose and use of the results. The methodology of the current analysis was tailored to the creation of exam specifications for test development.

When completed, the job analysis process utilized in this study yields exam specifications that accurately reflect the scope of practice, allowing for the development of fair, accurate, and realistic assessments of candidates' readiness for certification. The job analysis is typically performed every 5 to 7 years so that the content outline represents the current scope of practice. Because it serves as the primary basis for content validity evidence, as required by the aforementioned Standards, the job analysis is a primary mechanism by which a certifying body or regulatory board can ensure the accuracy and defensibility of an exam. It serves as the foundation of the certification exam and is critical to the success of the entire exam development process. All necessary documentation verifying that the validation process has been implemented in accordance with professional standards is included in this report.

This report is divided into three major activities of the job analysis process, which are:

1. **Job Analysis Committee Meeting** – A gathering of subject matter experts (SMEs) to discuss and develop a description of the scope of practice
2. **Job Analysis Survey** – A large-scale survey of practitioners not involved with the SME panel to validate the task and knowledge statements developed by the panel
3. **Development of Examination Specifications** – The development of Examination Specifications by the panel based on the results of the survey

¹ American Educational Research Association, American Psychological Association, National Council on Measurement in Education (2014). *Standards for Educational and Psychological Testing*. Washington, DC: AERA.

² Sackett, P. R. & Laczko, R. M. (2003). *Job and Work Analysis*. Handbook of Psychology. One: 2: 19–37.

JOB ANALYSIS COMMITTEE MEETING

NCC selected subject matter experts (SMEs) to represent a wide variety of work-related characteristics such as years of experience, work setting, geographic location, and areas of specialty to develop a scope of practice that is reflective of the roles and responsibilities of the job and is relatively free from bias. See Appendix A for a complete list of the SMEs and their qualifications.

PSI conducted a job analysis committee meeting on October 25, 2018 with SMEs to discuss the scope of practice and develop a list of tasks and knowledge areas that reflect the job role. PSI led the SMEs in refining task and knowledge statements and organizing them into a domain and subdomain structure. The outgoing NCC INP exam content outline and candidate handbook were used as resources when developing the knowledge areas and tasks.

The job analysis committee developed 37 task statements.

1. Administer medication
2. Assess fetal heart rate
3. Assess maternal coping
4. Assess for signs of labor
5. Perform head-to-toe assessment
6. Perform focused intrapartum assessment
7. Perform neonate assessment
8. Assess vital signs and pain
9. Circulate cesarean delivery
10. Assist with vaginal birth
11. Assist with epidural analgesia
12. Check cervical status
13. Provide patient education
14. Establish maternal IV access
15. Perform postpartum assessment
16. Assist mothers with breastfeeding
17. Interpret electronic fetal monitoring data
18. Manage induction or augmentation
19. Perform intrauterine resuscitation (fetal supportive measures)
20. Perform Leopold maneuvers
21. Perform maternal resuscitation
22. Perform neonatal resuscitation
23. Support maternal and neonatal bonding
24. Provide labor support
25. Review maternal history
26. Monitor neonate during neonatal transition
27. Weigh neonate
28. Facilitate neonatal safety and security
29. Assign APGARs
30. Obtain specimen sample
31. Perform bladder assessment
32. Perform urinary catheterization
33. Administer blood products
34. Evaluate blood loss
35. Manage individualized plan of care
36. Facilitate patient handoff
37. Facilitate interdisciplinary care coordination

The job analysis committee developed 20 knowledge statements across five content domains.

1. Complications of Pregnancy
 - A. Maternal Complications Affecting the Fetus and Newborn
 - B. Maternal Psychosocial and Environmental Factors
 - C. Preterm Labor
 - D. Multiple Gestation
 - E. Placental Disorders
2. Fetal Assessment
 - A. Antenatal Testing
 - B. Electronic Fetal Monitoring
 - C. Non-electronic Fetal Monitoring
 - D. Acid-base Interpretation
3. Labor and Birth
 - A. Physiology of Labor
 - B. Assessment and Management of Labor
 - C. Obstetric and Perioperative Procedures
 - D. Pain Management and Coping
 - E. Labor and Obstetric Complications
 - F. Induction and Augmentation
4. Recovery, Postpartum and Newborn Care
 - A. Recovery and Postpartum Physiology and Complications
 - B. Family Dynamics and Discharge Readiness
 - C. Lactation and Infant Nutrition
 - D. Newborn Physiology and Complications
5. Professional Practice Issues (e.g., legal, ethics, perinatal safety, quality improvement)

JOB ANALYSIS SURVEY

PSI developed, administered, and monitored a survey to validate the tasks and knowledge areas developed by the job analysis committee and to help determine content weighting. To this end, the survey collected respondents' ratings of the importance and frequency for each task and knowledge area. Below are the prompts for each rating scale.

What are the importance and performance frequency of each task *in your practice* as an INP nurse?
What are the importance and frequency of application of these knowledge areas *in your practice* as an INP nurse?

Importance

- 0 - N/A (Not exposed to)
- 1 - Not Important
- 2 - Minimally Important
- 3 - Moderately Important
- 4 - Very Important
- 5 - Critically Important

Frequency

- 0 - Never
- 1 - Annually
- 2 - Quarterly
- 3 - Monthly
- 4 - Weekly
- 5 - Daily

Between November 1 and 9, 2018, a pilot survey was conducted with the job analysis committee and NCC staff members to ensure that the survey was operating correctly. No modifications were made following the pilot survey.

The live survey was sent using online survey software to a list of 19,914 individuals which was obtained from NCC. The list included all individuals who currently hold the NCC Inpatient Obstetric Nursing credential. The number of individuals that provided acceptable responses (selected 'Yes' to the first two questions described below, completed at least 69% of the task ratings, and worked between 8 and 80 hours per week) was 2,398 (12%). The survey was opened on November 13, 2018 and closed on December 19, 2018. See Appendix B for the email sent to potential respondents.

The first question of the survey read: *Do you agree to take part in this survey?* The second question read: *Do you currently work as an Inpatient Obstetric Nurse?* These questions served as filters to allow only those who indicated "yes" to move forward with the rest of the survey.

Table 1 shows the mean ratings provided by the 2,398 respondents for the task statements. Table 2 shows the mean ratings provided by 2,053 respondents for the knowledge statements.

Table 1.
Task Statement Ratings.

Task Statements	Importance	Frequency
1 Administer medication	4.63	4.85
2 Assess fetal heart rate	4.88	4.88
3 Assess maternal coping	4.31	4.87
4 Assess for signs of labor	4.44	4.78
5 Perform head-to-toe assessment	4.38	4.83
6 Perform focused intrapartum assessment	4.50	4.73
7 Perform neonate assessment	4.32	4.40
8 Assess vital signs and pain	4.56	4.88
9 Circulate cesarean delivery	3.85	3.47
10 Assist with vaginal birth	4.48	4.42
11 Assist with epidural analgesia	4.15	4.29
12 Check cervical status	4.12	4.35
13 Provide patient education	4.42	4.87
14 Establish maternal IV access	4.31	4.62
15 Perform postpartum assessment	4.29	4.43
16 Assist mothers with breastfeeding	3.95	4.42
17 Interpret electronic fetal monitoring data	4.82	4.86
18 Manage induction or augmentation	4.35	4.42
19 Perform intrauterine resuscitation (fetal supportive measures)	4.82	4.38
20 Perform Leopold maneuvers	2.95	3.37
21 Perform maternal resuscitation	4.63	1.96
22 Perform neonatal resuscitation	4.74	3.05
23 Support maternal and neonatal bonding	4.19	4.66
24 Provide labor support	4.19	4.57
25 Review maternal history	4.40	4.85
26 Monitor neonate during neonatal transition	4.23	4.16
27 Weigh neonate	3.41	4.11
28 Facilitate neonatal safety and security	4.37	4.64
29 Assign APGARs	3.83	4.11
30 Obtain specimen sample	3.82	4.49
31 Perform bladder assessment	3.86	4.39
32 Perform urinary catheterization	3.91	4.32
33 Administer blood products	4.59	2.44
34 Evaluate blood loss	4.65	4.57
35 Manage individualized plan of care	3.93	4.75
36 Facilitate patient handoff	4.31	4.84
37 Facilitate interdisciplinary care coordination	4.08	4.38

Table 2.
Knowledge Statement Ratings.

Knowledge Statements	Importance	Frequency
1A Maternal Complications Affecting the Fetus and Newborn	4.62	4.51
1B Maternal Psychosocial and Environmental Factors	4.88	4.50
1C Preterm Labor	4.31	4.10
1D Multiple Gestation	4.44	3.17
1E Placental Disorders	4.38	3.45
2A Antenatal Testing	4.50	3.67
2B Electronic Fetal Monitoring	4.32	4.85
2C Non-electronic Fetal Monitoring	4.55	2.83
2D Acid-base Interpretation	3.84	3.11
3A Physiology of Labor	4.48	4.63
3B Assessment and Management of Labor	4.15	4.68
3C Obstetric and Perioperative Procedures	4.12	4.32
3D Pain Management and Coping	4.42	4.79
3E Labor and Obstetric Complications	4.30	4.47
3F Induction and Augmentation	4.28	4.49
4A Recovery and Postpartum Physiology and Complications	3.94	4.47
4B Family Dynamics and Discharge Readiness	4.82	3.65
4C Lactation and Infant Nutrition	4.35	4.14
4D Newborn Physiology and Complications	4.81	4.03
5 Professional Practice Issues (e.g., legal, ethics, perinatal safety, quality improvement)	2.95	3.94

The survey included demographic questions regarding professional characteristics relevant to the job role. See Table 3 for a summary of the demographic questions in the survey.

Table 3.
Results of the Demographic Questions in the Job Analysis Survey.

1. Do you agree to take part in this survey?	n	%
No	96	2.71
Yes	3442	97.29

2. Do you currently work as an Inpatient Obstetric Nurse (INP)?	n	%
No	462	13.33
Yes	3005	86.67

3. Which of the following best describes your PRIMARY practice setting as an INP nurse?	n	%
Hospital	2337	97.54
Academia	18	0.75
Birth Center	37	1.54
Outpatient	4	0.17

4. What is the highest level hospital/unit designation in which you practice as an INP nurse?	n	%
Birth Center (Peripartum care of low-risk women with uncomplicated singleton term pregnancies with a vertex presentation who expect an uncomplicated birth).	6	0.25
Level I (Basic Care) Uncomplicated pregnancies with ability to detect, stabilize and initiate management of unanticipated maternal-fetal or neonatal problems and transfer as needed.	372	15.53
Level II (Specialty Care) Level I facility plus care of appropriate high-risk antepartum, intrapartum or postpartum conditions both directly admitted or transferred in.	631	26.34
Level III (Subspecialty Care) Level II facility plus care of more complex maternal conditions, obstetric complications and fetal conditions. Advanced imaging.	621	25.92
Level IV (Regional Health Care Centers) Level III facility plus on-site medical and surgical care of the most complex maternal conditions and critically ill pregnant women and fetuses throughout antepartum, intrapartum and postpartum. Onsite ICU care, maternal referral and transport, outreach.	709	29.59
Do not know	52	2.17
Not applicable	5	0.21

5. What is your highest level of education?	n	%
Diploma	64	2.67
Certificate	1	0.04
Associate	421	17.59
Baccalaureate	1582	66.08
Masters	303	12.66
Post Masters	9	0.38
Doctorate - DNP	10	0.42
Doctorate - PhD	4	0.17

6. On average, how many hours per week do you work as an INP? (Clinical and nonclinical practice)
Mean = 34.12 Standard Deviation = 8.24 Minimum = 8 Maximum = 80

7. How many years of experience do you have as an INP? (Select 0 for less than 1 year)
Mean = 14.47 Standard Deviation = 9.38 Minimum = 0 Maximum = 46

8. Which of the following best describes your PRIMARY practice location?	n	%
Northeast	365	15.36
South	750	31.55
Midwest	505	21.25
West	756	31.80
Canada	1	0.04

9. What percentage of your practice as an INP is devoted to each of the following categories? (Enter whole numbers, without a percent sign, that total 100)	Mean	Standard Deviation	Minimum	Maximum
Direct Patient Care	80.44	27.50	0	100
Education	8.64	15.09	0	100
Management	7.91	18.59	0	100
Research/Quality Improvement	3.00	7.84	0	90

10. Do you currently work as an INP nurse at a Magnet designated facility?	n	%
No	1482	61.88
Yes	913	38.12

DEVELOPMENT OF EXAMINATION SPECIFICATIONS

The Job Analysis Committee met on February 22, 2019 to review the results of the survey, finalize the tasks and knowledge that would comprise the next exam content outline, establish linkages among the tasks and knowledge areas, and finalize the content weighting for the examination.

The committee reviewed the demographic results and confirmed that the results matched expectations and impressions of the practitioner population, suggesting that the respondent sample is reflective of those currently working as Inpatient Obstetric Nurses.

Thirty-four task statements were retained by the committee. Task 27 (*Weigh neonate*) was flagged due to low ratings and determined by the committee to be part of Task 7 (*Perform neonate assessment*). Task 30 (*Obtain specimen sample*) was removed after the committee discussed and determined it to be part of and resulting from other tasks, such as procedures and biopsies. Task 32 (*Perform urinary catheterization*) was removed based on the committee’s discussion and determination that it is an intervention for complications that results from Task 31 (*Perform bladder assessment*).

All of the knowledge statements were retained by the committee. They noted that the survey results conformed to their expectations.

The committee identified linkages between the task and knowledge statements to ensure that each task was covered by at least one relevant knowledge area and that each knowledge area had at least one relevant task identified. See Table 4 for a summary of the knowledge-task linkages identified.

Table 4.
Linkages Among Knowledge and Task Statements.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1																	
1A						X	X										
1B			X													X	
1C				X													
1D																	X
1E												X					
2																	
2A		X															
2B		X				X				X	X						X
2C		X				X				X							
2D																	X
3																	
3A				X	X	X		X		X		X					X
3B			X	X		X				X	X	X					
3C									X	X	X						
3D			X					X		X	X			X	X		
3E										X							
3F																	
4																	
4A					X			X							X	X	
4B			X										X				X
4C																	X
4D					X		X	X									X
5																	
5	X							X	X		X		X				

	18	19	20	21	22	23	24	25	26	28	29	31	33	34	35	36	37
1																	
1A				X				X	X				X			X	X
1B						X	X	X		X					X		X
1C					X												
1D																	
1E														X			
2																	
2A																	
2B	X	X															
2C		X															
2D					X												
3																	
3A	X	X					X					X		X			
3B	X	X	X				X										
3C		X												X			
3D	X						X										
3E	X		X	X													
3F	X																
4																	
4A				X								X		X		X	X
4B						X				X					X		X
4C																	
4D					X	X			X		X					X	X
5																	
5				X	X					X			X		X	X	X

The committee then reviewed the draft content weighting, discussing any adjustments necessary to align the number of items per content area with adequate content coverage on the examination. The draft content weighting was developed by determining a percentage weight based on the relative weight of the mean importance value for each content area.

The committee agreed to make the following adjustments at the domain level:

- I – Complications of Pregnancy was increased from 39 to 43.
- II – Fetal Assessment was decreased from 28 to 27.
- III – Labor and Birth was increased from 48 to 53.
- IV – Recovery, Postpartum and Newborn Care was decreased from 28 to 23.
- V – Professional Practice Issues was decreased from 7 to 4.

At the subdomain level, adjustments were made to reflect the range in scope of each content area. See Table 5 for a summary of the content weighting determination. The final examination specifications can be found in Appendix C.

Table 5.
Content Weighting Determination.

	Final	Survey
1 Complications of Pregnancy	43	39.48
1A Maternal Complications Affecting the Fetus and Newborn	13	8.29
1B Maternal Psychosocial and Environmental Factors	5	7.35
1C Preterm Labor	12	8.15
1D Multiple Gestation	3	7.64
1E Placental Disorders	10	8.04
2 Fetal Assessment	27	27.34
2A Antenatal Testing	6	6.92
2B Electronic Fetal Monitoring	16	8.31
2C Non-electronic Fetal Monitoring	3	5.49
2D Acid-base Interpretation	2	6.62
3 Labor and Birth	53	46.88
3A Physiology of Labor	5	7.56
3B Assessment and Management of Labor	16	7.97
3C Obstetric and Perioperative Procedures	8	7.66
3D Pain Management and Coping	8	7.67
3E Labor and Obstetric Complications	10	8.37
3F Induction and Augmentation	6	7.65
4 Recovery, Postpartum and Newborn Care	23	28.84
4A Recovery and Postpartum Physiology and Complications	8	7.85
4B Family Dynamics and Discharge Readiness	4	6.46
4C Lactation and Infant Nutrition	4	7.07
4D Newborn Physiology and Complications	7	7.45
5 Professional Practice Issues	4	7.47
5 Professional Practice Issues (e.g., legal, ethics, perinatal safety, quality improvement)	4	7.47

APPENDIX A

SUBJECT MATTER EXPERTS

Name	Job Title	Employer	Years Exp.	State
Christina Stupek	Clinical Educator - Obstetrics	St. Anthony's Medical Center	21	IL
Bonnie Flood Chez	Staff Nurse L&D	Bayfront Medical Center	30	FL
Elizabeth Sloss	Instructor	Georgetown University	9	VA
Ashley Locklear	Clinical Practice Specialist	Palmetto Health	13	SC
Melissa Kelley	Manager of L&D/Triage AP	Northwestern Memorial Hospital	30	IL
Whitney Wells	INP	St. Vincent Healthcare	8	MT
Jackie Hiner	Perinatal CNS	Sharp Chula Vista Medical Center	17	CA

APPENDIX B

SURVEY EMAIL

Date: November 13, 2018
From: info@nccnet.org via surveymonkey.com
Subject: NCC Inpatient Obstetric Nurse Job Analysis Survey

Body: The National Certification Corporation (NCC) invites you to participate in the Inpatient Obstetric Nursing (INP) Job Analysis Survey. This survey will be used to identify tasks and knowledge reflective of the professional role of an Inpatient Obstetric Nurse.

The results of the survey will help develop the specifications for the NCC INP certification exam. This is a great way to contribute to the industry and ensure that a high standard is maintained.

The survey will likely require 15 to 20 minutes to complete. Your individual responses will be kept confidential and will be combined with those of other respondents. The deadline to complete the survey is **December 19, 2018**.

Please note that participation in this survey is voluntary. At the end of the survey you can choose to provide your name and email for a chance to **win a \$100.00 Amazon gift card**.

Please read all questions carefully and select responses that best represent ***your current practice*** as an ***Inpatient Obstetric Nurse***.

Thank you for your participation. Please direct all inquiries to info@nccnet.org.

APPENDIX C

FINAL EXAMINATION SPECIFICATION

Content Area	# of Questions
1 Complications of Pregnancy	43
1A Maternal Complications Affecting the Fetus and Newborn	13
1B Maternal Psychosocial and Environmental Factors	5
1C Preterm Labor	12
1D Multiple Gestation	3
1E Placental Disorders	10
2 Fetal Assessment	27
2A Antenatal Testing	6
2B Electronic Fetal Monitoring	16
2C Non-electronic Fetal Monitoring	3
2D Acid-base Interpretation	2
3 Labor and Birth	53
3A Physiology of Labor	5
3B Assessment and Management of Labor	16
3C Obstetric and Perioperative Procedures	8
3D Pain Management and Coping	8
3E Labor and Obstetric Complications	10
3F Induction and Augmentation	6
4 Recovery, Postpartum and Newborn Care	23
4A Recovery and Postpartum Physiology and Complications	8
4B Family Dynamics and Discharge Readiness	4
4C Lactation and Infant Nutrition	4
4D Newborn Physiology and Complications	7
5 Professional Practice Issues	4
5 Professional Practice Issues (e.g., legal, ethics, perinatal safety, quality improvement)	4

Notes: Each examination form will include one set of 25 unscored pretest items in addition to the 150 scored items. Three hours of testing time. Initial base form passing point will be determined by Angoff method in Q4 of 2019. Future passing points established through pre-equating.