Student Application for Ethical Approval (NEW REVISED)

Project Info.

File No: Ref No : 11111
Project Title: Non-Radiology Nurses' Experience with Interventional Radiology
Principal Investigator: Mrs. Nursing Student (Faculty of Health Disciplines\Master of Nursing)
Start Date: 2019/04/01
End Date: 2019/12/31
Keywords: Radiology, Nursing, Interventional Radiology

Project Team Info.

Principal Investigator:
Prefix: Mrs.
Last Name: Student
First Name: Nursing
Affiliation: Faculty of Health Disciplines\Master of Nursing
Position: Graduate Student
Email: nrsgstudent@athabasca.edu
Phone1: 780.000.0000
Phone2:
Fax:
Primary Address: Anywhere, AB
Institution: Athabasca University
Country: Canada

Other Project Team Members
Prefix: Dr.
Last Name: Supervisor
First Name: Great
Affiliation: Faculty of Health Disciplines\Centre for Nursing & Health Studies
Role: Supervisor
Email: x@au.ca

Common Questions

1. Project Description

#	Question	Answer
1.1	Provide a lay summary/overview of the research project (Max 750 words).	The objective of this research is to gain a thorough understanding of the experiences' non-radiology nurses have caring for patients who have had an interventional radiology procedure. This research hopes to determine if there is a need to develop an education forum within the local undergraduate nursing curriculum and an orientation program for nurses working in the Regional Health Centre (RHC). Interventional Radiology (IR) is a medical subspecialty of radiology which provides minimally invasive image-guided diagnosis and treatment of diseases of the lymphatic, circulatory and organ systems. Procedures are performed in IR suites within acute care facilities and when possible, patient care is provided by nurses who specialize in radiology. However, patient care is also provided in other areas of the hospital by nurses who have not specialized in this unique field. Educators and employers need to understand the experiences of these non-radiology nurses to provide effective training and support. Limited existing literature indicates that non-radiology nurses have inadequate knowledge about IR. A gap exists with regards to a full description of these nurses' experiences caring for IR patients. Qualitative descriptive methodology guides this study. Qualitative description, which is rich and thick in detail and context, allows readers to understand the context of participants' experiences (Creswell, 2018; Glesne, 2016). The sample for this study will include ten non-radiology nurses employed at the RHC. Key criterion will be a Registered Nurse (RN) or a Registered Practical Nurse (RPN) who works outside the radiology department within RHC, and who has cared for at least one IR patient. I will implement general recruitment strategies using communication with colleagues, placing posters in staff lunchrooms and other common staff areas, for example, the cafeteria. The recruitment poster will include information about the research project, inclusion criteria, expectations of participants, and how the non-radiology nurses can contact the researcher if he/she is interested in learning more about the project and/or in participating (see Appendix A). On receipt of an expression of interest from a participant, I will contact the person directly to provide a Letter of Information about the project (see Appendix B) or to set up an interview date and time. Once ten participants have been recruited, the posters will be removed. To collect the data for this study I will conduct approximately one-hour long face-to-face semi-structured interviews with each participant in a quiet and convenient setting at the RHC. A consistent set of questions will guide the interviews (see Appendix C). Each interview will be audio recorded and transcribed verbatim. Participants will be invited to assist with member checking and confirmability by reviewing the transcript of their interview and verifying the accuracy of data representation and sequencing (Glesne, 2016; Sandelowski, 2000). Interviews will be conducted over a maximum four-month period with an average of two interviews per week allowing for data analysis to concur during the collection phase. I have been awarded funding to employ an experienced transcriptionist to transcribe the interviews. The transcriptionist will sign a confidentiality pledge (see Appendix D). Thematic analysis will be used to analyze the data from transcribed interviews to provide a rich description of themes that accurately reflect what Braun and Clarke (2006) describe as the 'data set in its entirety.' An inductive approach will identify themes that are "strongly linked to the data themselves" (Braun & Clarke, 2006, p. 12). The themes will be

		identified at a semantic level whereby low-inference interpretation will be conducted to maintain the surface meanings of the data (Braun & Clarke, 2006; Vaismoradi, Turunen & Bondas, 2013). Data analysis will be a flexible process that happens continuously and simultaneously from the collection of data to the writing of the findings (Creswell, 2018). NVivo software version 10 (QSR International, 2014) will be used to support data management and to facilitate thorough reading and reviewing of the transcripts. Throughout the analysis, I will use my reflexive journal to acknowledge the active role I play in ultimately determining and choosing the themes that hold the most relevance. Richards and Morse (2013) suggest documenting in first person how themes are visualized and used "to avoid passively reporting that a theme 'emerged'" (p. 179). Saldana (2009) noted a "theme is an outcome of coding, categorization and analytic reflection" (p. 12), therefore, this process of coding will be used to determine the themes. My reflexive journal entries will reflect this process as I read and re-read the interview transcripts and develop codes, group the codes into categories and ultimately determine themes. Initial coding will begin with the reading and coding of one participant's transcript before moving to the second, this will enable a cyclical process where subsequent transcripts will influence the re-coding of previous transcripts to "manage, filter, highlight, and focus the salient features of the qualitative data record for generating categories and themes" (Saldana, 2009, p. 8). This approach will also assist with the identification of similarities and differences within the data sets (Creswell, 2018). Line by line coding of each transcript will occur using action words or gerunds (words ending in ing) because they allow consideration of "processes and actions…and lead to a more useful and interesting analysis" (Glesne, 2016, p. 196). Exact words and language used by the participants will be used for in vivo codes to provide "a rich, accurate, and verifiable" illustration (Richards & Morse, 2013, p. 193). After all the initial codes have been established, 'codeweaving' will be used to create categories or groupings of codes. Codeweaving assists researchers as they consider how ideas interrelate and to generate further thinking and refinement of the data (Glesne, 2016; Saldana, 2009). The categories will be reviewed and documented for ways they are interrelated and how they connect to one another. To discover themes while coding and categorizing, the researcher must keep an abundance of reflective and detailed memos in an organized fashion (Richards & Morse, 2013). Using both the NVivo data management tools and printed copies of the transcripts, these memos will be documented along the enlarged margins of the right-hand column of the transcribed interviews.
1.2	Provide a clear statement of the purpose and objectives of the research project.	The primary purpose of this study is to investigate non-radiology nurses' knowledge and perceptions of interventional radiology (IR) and to understand their experiences caring for IR patients. Exploring these experiences will provide information for educators in pre-service and in-service nursing programs at the Regional Heath Centre (RHC) in Someplace, Canada where the research is implemented. Once an improved understanding of these nurses' knowledge has been uncovered, approaches to supporting their learning can be developed. The findings will contribute to the development of curriculum units, orientation manuals and other educational tools. They are expected to provide insights for further research.
1.3	State the research question(s) and/or any associated hypotheses or proposition(s).	The central research question is: What are non-radiology nurses' experiences with IR patients? The following are sub questions: • What do non-radiology nurses in hospitals learn about caring for IR patients in pre-service and in-service programs? • What are non-radiology nurses' perceptions of what they need to know to provide safe care to IR patients in hospitals; and • What are their experiences when providing IR patient care in hospitals?

1.4	Describe the relevant theoretical/conceptual framework(s) underlying your research project.	Qualitative descriptive methodology guides this study. Qualitative description, which is rich and thick in detail and context, allows readers to understand the context of participants' experiences (Creswell, 2018; Glesne, 2016). The sample for this study will include ten non-radiology nurses employed at the RHC. Key criterion will be a Registered Nurse (RN) or a Registered Practical Nurse (RPN) who works outside the radiology department within RHC, and who has cared for at least one IR patient.
1.5	Comment on the significance of this research project in light of the existing body of knowledge (include appropriate citations within your response).	This research project exploring non-radiology hospital nurses' experiences with IR is significant as the results will benefit educators and practitioners in both pre-service and in-service programs. The topic is highly underrepresented in the literature and what little is known suggests that nurses feel unprepared for the increasing number of IR patients they are expected to care for. A review of the literature revealed that existing knowledge of non-radiology nurses' experience with IR is limited (Farrell & Halligan, 2017; Makanjee, Bergh & Hoffmann, 2014; Powell, 2007; Shipley, Gallo & Fields, 2016). As knowledge of the field of IR continues to grow, our awareness of knowledge deficits that may be occurring among nurses is also beginning to develop. For example, Farrell and Halligan (2017) concluded that when Irish nurses in community settings were required to care for IR patients recently discharged from hospital, they felt unprepared. This lack of preparedness was attributed to knowledge deficits, inaccurate and poorly written discharge summaries from hospitals and a lack of education and training (Farrell & Halligan, 2017). Understanding what nurses already know and how they learned that information; what their perceptions are about what they still need to know to provide safe care to IR patients in hospitals; and what their experiences are when providing IR patient care will begin to address this knowledge deficit.
1.6	Describe the research design, methods and procedures that will be used to collect and analyze the data.	To collect the data for this study I will conduct approximately one-hour long face-to-face semi-structured interviews with each participant in a quiet and convenient setting at the RHC. A consistent set of questions will guide the interviews (see Appendix C). Each interview will be audio recorded and transcribed verbatim. Participants will be invited to assist with member checking and confirmability by reviewing the transcript of their interview and verifying the accuracy of data representation and sequencing (Glesne, 2016; Sandelowski, 2000). Interviews will be conducted over a maximum four-month period with an average of two interviews per week allowing for data analysis to concur during the collection phase. I have been awarded funding to employ an experienced transcriptionist to transcribe the interviews. The transcriptionist will sign a confidentiality pledge (see Appendix D). Thematic analysis will be used to analyze the data from transcribed interviews to provide a rich description of themes that accurately reflect what Braun and Clarke (2006) describe as the 'data set in its entirety.' An inductive approach will identify themes that are "strongly linked to the data themselves" (Braun & Clarke, 2006, p. 12). The themes will be identified at a semantic level whereby low-inference interpretation will be conducted to maintain the surface meanings of the data (Braun & Clarke, 2006; Vaismoradi, Turunen & Bondas, 2013). Data analysis will be a flexible process that happens continuously and simultaneously from the collection of data to the writing of the findings (Creswell, 2018). NVivo software version 10 (QSR International, 2014) will be used to support data management and to facilitate thorough reading and reviewing of the transcripts. Throughout the analysis, I will use my reflexive journal to acknowledge the active role I play in ultimately determining and choosing the themes that hold the most relevance. Richards and Morse (2013) suggest documenting in first person how themes are visualized and used "to avoid passively reporting that a theme 'emerged'" (p. 179). Saldana (2009) noted a "theme is an

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1.7	Describe the procedures, treatment or activities that are above or in addition to, standard practices in this area of research (e.g. health-related procedures, curriculum enhancements, extra follow-up, etc.). If not applicable, enter N/A.	N/A
1.8	Describe how research results will be disseminated (Check ALL that apply).	Final research report to be provided to AU|Article(s) to be submitted to academic and professional journals|Presentation(s) at academic/professional conferences|Distribution of final report to participants upon request
1.9	If 'other', list the dissemination methods that will be used.	The findings will be disseminated in publications and educational resources offered by the Association for Radiologic and Imaging Nursing (ARIN), the Canadian Association for Interventional Radiology (CAIR) and the Society of Interventional Radiology.
1.10	A complete References list is uploaded to the 'Attachments' Tab.	Yes

2. Participant Information

#	Question	Answer
2.1	Who are you studying? Describe the population that will be included in this research project.	Ten non-radiology nurses employed at the Regional Health Centre (RHC) in Someplace, Canada. Key criterion will be a Registered Nurse (RN) or Registered Practical Nurse (RPN) who works outside the

		radiology department within RHC, and who has cared for at least one interventional radiology (IR) patient.
2.2	Describe the inclusion criteria for participants (e.g. age range, health status, gender, etc.) and justify these criteria (e.g. research methodology, statistical requirement, etc.).	Key inclusion criterion will be an RPN or RN who works outside the radiology department within the RHC, and who has cared for at least one IR patient. The inclusion criteria for the participants was determined based on qualitative descriptive methodology and to best answer the research question: What are non-radiology nurses' experiences with IR patients? Requiring participants to have cared for at least one IR patients will ensure that they have at least a beginning understanding of what is involved in this specialized area.
2.3	Describe and justify the exclusion criteria for participants.	Exclusion criteria is RNs or RPNs working within the radiology department at RHC because the study is specifically focused on the experiences of nurses who do not work in radiology. Nurses working in the radiology department have extensive experience and specialized skills that those not working in the department do not have.
2.4	Will you be interacting with human participants (i.e. will there be direct contact with human participants for this research project)?	Yes
2.5	What is your proposed sample size (i.e. how many participants do you hope to recruit)?	Ten
2.6	Of these recruits, how many are being placed in a control group ("control group" is the group in an experiment or study that does not receive treatment by the researchers and is then used as a benchmark to measure how the other tested subjects do)?	None
2.7	Justify the proposed sample size.	The detailed experiences of ten participants will provide the researcher with thick, rich, personal information needed to understand the context of the participants' experiences for this qualitative descriptive study.
2.8	What is the anticipated time commitment required of participants?	Two interviews – one of about 1.5 hours in length and a second, brief meeting to review the transcript. Anticipated no more than 2 hours total.
2.9	Are Indigenous participants a specific focus of this research project?	No
2.10	Will a particular Indigenous community or other 'community' be a central focus of the research project (other general categories of 'community' might include geographic community, community of individuals with a common problem or issue, or a community	No

	of individuals with a common interest or goal)?	

3. Recruitment

#	Question	Answer
3.1	Describe how you will find potentially eligible participants).	Once ethical approval has been received, I will implement general recruitment strategies using communication with colleagues, placing posters in staff lunch rooms and other common staff areas, for example, the cafeteria. The recruitment poster will include information about the research project, inclusion criteria, expectations of participants, and how the non-radiology nurses can contact the researcher if he/she is interested in learning more about the project and/or in participating (see Appendix A). I will implement purposeful, snowball and theoretical sampling. Purposeful sampling will be undertaken to focus on participants who have experienced caring for an IR patient. Purposeful sampling can help improve the quality of the data obtained by intentionally selecting participants with more experience or greater awareness of the phenomenon under study which will better inform understanding of clinical judgment (Creswell, 2013). Snowball sampling, where participants recruit other participants with the desired attributes, can help gain access to additional study participants to ensure sufficient sample size to reach saturation (Creswell, 2013). As data collection and data analysis progress, theoretical sampling, where participants are chosen for their understanding of specific aspects of the evolving constructs, may be undertaken to help further develop understanding in those areas (Glesne, 2016).
3.2	Once identified, how will eligible participants obtain details about the research project in order to make an informed decision about participating?	Potential participants will contact researcher(s)|Contact will be made through a third party or intermediary (including snowball sampling)
3.3	Describe your recruitment procedures, including relevant locations, online strategies, direct communication, etc. If not applicable, enter N/A.	Principal investigator contact information will be provided on the recruitment poster, which will allow interested participants to contact me for further information, a Letter of Information about the project (see Appendix B) and to set a meeting date and time. For snowball sampling, principal investigator contact information will be passed from participants to other potential participants.
3.4	Should additional participants be needed, outline any other means by which they will be recruited (e.g. response to advertising such as flyers, posters, ads in newspapers, websites, email, listserves; pre-existing	If needed, additional means of recruiting participants will be communicating with colleagues and placing recruitment posters in other staff areas at the RHC.

	records or existing registries, community organization referrals; longitudinal study, etc.).	
3.5	Will participants be recruited through pre-existing relationships with researcher(s) (e.g. will an instructor recruit students from their classes; will participants be employees, acquaintances, family members, etc.)?	Yes
3.6	If Yes, identify the relationship between the researcher(s) and participants that could compromise the freedom to decline participation (e.g. professor-student).	Both the potential RNs and RPNs being recruited for the study and the primary investigator for the study work at the Regional Health Centre. Therefore, there is a possibility that I may have a collegial relationship with participants or be acquainted with them, simply because we work at the same Centre.
3.7	How will you ensure that participants do not feel any undue pressure to agree to the research project because of the pre-existing relationship?	It is important to note that I will NOT have a 'power-over' relationship with any of the participants. I am not in a teaching or supervisory position and I am not responsible for evaluating any employees at my workplace. The relationship between the researcher and potential participants is professional and equal. The interactions that occur between us would be limited to reporting on patient care with patients coming and going for procedures within the radiology department (where I work). Communication between the researcher and potential participants will be strictly to create awareness of the study and to provide a recruitment poster (see Appendix A). Potential participants will be assured participation is completely voluntary.
3.8	Will this research project involve any group(s) where non-participants are also present (e.g. classroom research where participants and non-participants will be present during the research project; online forums where not all members are participating in the research project)?	No (move to Tab 4)
3.9	If Yes, how will you ensure that non-participants and/or their data are not included in the research project?	
3.10	How will you guard against peer pressure influencing an individual's decision to participate (or not) when conducting research in a group setting?	

4. Data Collection, Privacy and Confidentiality

#	Question	Answer
4.1	During recruitment, or at ANY other time during the research project, will you be collecting any of the following (Check ALL that apply):	Surname and First Name|Telephone Number|Email Address|Full Face Photograph| Audio or Video Recording
4.2	If Other, describe.	

4.3	During recruitment, or at ANY other time during the project will you be collecting any of the following (Check ALL that apply):	None
4.4	If other, describe.	
4.5	Why is it necessary to collect the identifiable information outlined in Questions 4.1 to 4.4 above? If not applicable, enter N/A.	Voice recordings will be obtained during data collection for the purpose of transcription and data analysis. No identifiers will be included in the transcription or in the data file name. Names will be collected for completion of consent forms only. Telephone numbers are needed to contact participants and arrange interviews. E-mail addresses will be collected for follow up contact, if participants are willing to be contacted, or if participants would like a copy of the findings. E-mail address information will be optional and will be on the consent form only.
4.6	Will participants be recruited, or their data collected from Alberta Health Services, Covenant Health or a data custodian as defined by the Alberta Health Information Act?	No (continue to complete this application)
4.7	The primary/raw data to be collected during the research project will (Check ALL that apply):	Have all personal identifying information removed (anonymized)
4.8	Describe how the identity of participants will be protected both during and after the research project (Check ALL that apply).	Participant identity will be anonymized by assigning pseudonyms or codes |Data will only be reported in aggregate
4.9	If identifying information will be REMOVED at some point, describe when and how this will be done. If not applicable, enter N/A.	Identifying information will be removed at the data recording and transcription stages. Voice data files will be saved using a unique identifier. Participants will each be assigned a unique identifier, which will be kept on their consent forms and a master list in a locked filing cabinet. To reduce the risk of privacy/confidentiality breach, identifying information will only be contained on participants' consent forms.
4.10	Specify what identifiable information will be RETAINED once data collection is complete and explain why retention is necessary. Include the retention of master lists that link participant identifiers with de-identified data. If not applicable, enter N/A.	The consent forms and identifier master list will be retained in a locked filing cabinet for a period of five years, as is the policy of Athabasca University. Privacy and confidentiality will be maintained by keeping a master list of participants with a unique identifier in a locked filing cabinet, along with the signed consent forms. No other copies of this information will be created or maintained. Any data (transcriptions and coded information) that is kept outside of the locked drawer, will be tagged only with the unique identifier and will only be kept on password protected devices (computer and/or USB key). These identifiers will be removed during final drafting of the study. Keeping this identifier in place until final drafting will ensure ease of referral back to the original interviews for clarification purposes, to

		ensure accuracy of what is being derived from the data collected, and to enable removal of participant data (should it be requested). Indirectly identifying information, such as whether a participant is a Registered Nurse or a Registered Practical Nurse will only be circulated in compiled format, reducing the ability for readers to use this data to identify individuals. The only other person who will have access to the data marked with the unique identifiers will be my thesis project supervisor.
4.11	Describe any plans to link the data in this project with data associated with other studies (e.g. within a data repository or with data belonging to another organization) or to create a research database or registry for future use. (Also completed Tab 15). If not applicable, enter N/A.	N/A
4.12	In research where total anonymity and confidentiality of participants and/or their data cannot be guaranteed (e.g. within a focus group; in situations where participants could be surmised by an individual's attendance at a specific location/meeting room), describe what means will be taken to preserve confidentiality and anonymity as much as possible.	N/A
4.13	Will identifiable data be transferred or made available to persons or agencies outside the research team?	No (move to Question 4.15)
4.14	If Yes, describe in detail what identifiable information will be released, to whom, why they need access, under what conditions, and what safeguards will be used to protect the identity of participants and the privacy of their data? If not applicable, enter N/A.	
4.15	Will identifiable data be shared with research team members who reside outside of the institution?	No (move to Question 4.17)
4.16	If Yes, describe how this will be done and what safeguards will be used to protect the data during transmission.	
4.17	How will the principal investigator ensure that all project personnel are aware of their responsibilities concerning participants' privacy and the confidentiality of their information?	A confidentiality pledge will be signed by the transcriptionist (see Appendix D).
4.18	Does this research project involve secondary use of data?	No (move to Tab 5)
4.19	If Yes, list all original data sources.	

5. Data Storage, Retention and Disposal

#	Question	Answer
5.1	Describe in detail how all types/forms of research data will be stored (e.g. digital files, hard copies, audio recordings, other). Specify the physical location and what means will be used to secure the data and protect confidentiality and privacy. If not applicable, enter N/A.	Audio recordings and signed consent forms will be stored in a secured, locked filing cabinet. The primary investigator will be the only person to hold the key for access. All transcribed interviews will be encrypted, and password protected. Any data (transcriptions and coded information) that is kept outside of the locked cabinet, will be tagged only with the unique identifier and will be kept on password protected devices (computer and/or USB key). The principal investigator will have the only access to the data.
5.2	If you plan to destroy your data after the obligatory 5 year retention period, describe when and how this will be done. Indicate your plans for the destruction of the identifiers at the earliest opportunity consistent with the conduct of the research. If not applicable, enter N/A.	The audio recordings will be physically destroyed in December 2024, five years after the completion of the Master of Nursing thesis. All transcribed interview files will be encrypted and kept on a USB stick stored in a secured, locked filing cabinet. These files will be retained for five years after completion of the Master of Nursing thesis then physically destroyed in December 2024. All hard copy files will be shredded at this time as well.

6. Research Methods and Procedures

#	Question	Answer
6.1	What methods of data collection will be used in the research project? (Check ALL that apply):	Interviews (e.g., in-person, telephone, email, chat rooms, etc.).
6.2	If other, describe.	
6.3	Will you be using audio/video recording equipment and/or other capture of sound or images for the research project?	Yes
6.4	If Yes, provide details.	Audio equipment will be used to record the interviews with the participants. The audio recordings will be transcribed verbatim.
6.5	Explain whether consent obtained at the beginning of the research project will be sufficient to cover the use of sound or image data collected during the course of the research project, or if it will be necessary to obtain consent at different times and/or for different stages of the research project. If not applicable, enter N/A.	The audio recordings of the initial interviews will be transcribed to written data. The original consent form will cover audio recording of the interview. The recordings themselves will not become part of the completed study.
6.6	If you or your participants' audio or video records, photographs or other materials artistically represent participants or others, what steps will you take to protect the dignity of those that may be represented or identified, at all stages of the research project	N/A

	(e.g. when sharing sounds, images or materials for verification; when publicly reporting data or disseminating results)? If not applicable, enter N/A.	
6.7	What opportunities, if any, will be provided to participants to choose to be identified as the author/creator of the materials created in situations where it makes sense to do so? If not applicable, enter N/A.	N/A
6.8	If necessary, what arrangements will you make to return original materials to participants? If not applicable, enter N/A.	N/A
6.9	Is your research project internet-based?	No
6.10	Internet-based research: Will your interaction with participants occur in private spaces (e.g. members' only chat rooms, social networking sites, email discussions, etc.)?	
6.11	Internet-based research: Will your interactions with participants occur in public space(s) where you will post questions initiating and/or maintaining interaction with participants?	
6.12	Internet-based research: Describe how permission to use the site(s) will be obtained. If not applicable, enter N/A.	
6.13	Internet-based research: How will you protect the privacy and confidentiality of participants who may be identified by email addresses, IP addresses, and/or other identifying information that may be captured by the system(s) during your interactions with the participants? If not applicable, enter N/A.	

7. Informed Consent Determination

#	Question	Answer
7.1	Describe who will provide informed consent for this project (Check ALL that apply):	All participants have capacity to give free and informed consent
7.2	Indicate how consent will be documented for each distinct component of the research project (Check ALL that apply):	Signed consent form
7.3	If a signed consent form will NOT be used, justify your decision for not doing so. If not applicable, enter N/A.	N/A
7.4	Describe the procedures you will use to obtain informed consent for each distinct component of the research project (e.g. for interviews, questionnaires, focus groups, participant observation, etc.). If not applicable, enter N/A.	At the start of the face to face interview, participants will be asked to read/review the consent form and sign. A copy of the consent form will be provided to participants to keep for their records.

7.5	If consent will be sought from an authorized representative (i.e. Third Party consent), explain why participants lack capacity to give informed consent for themselves and indicate whether or not these participants will be asked to Assent to participate. If not applicable, enter N/A.	N/A
7.6	In cases where participants may (re)gain capacity to give informed consent during the research project, describe how their consent to participate will be sought. If not applicable, enter N/A.	N/A
7.7	Will any assistance be provided to participants, or those consenting on their behalf, who may have special needs (e.g. non-English speakers, visually impaired, etc.)? If Yes, outline what assistance will be provided. If No, explain why assistance is not being offered.	No. It is not anticipated that participants will have special needs, given the population being studied.
7.8	If at any time a participant wishes to withdraw, end or modify their participation in the research project (or in certain aspects of the research), describe how their participation will be ended or changed.	Participants will be able to discontinue an interview at any time. They may withdraw from the study without providing a reason. They may request removal of their data from the study at any point in time prior to the conclusion of data collection.
7.9	What is the last point at which data can be withdrawn (removed) from the research project (e.g. once a transcript has been verified; once an anonymous survey has been submitted).	Once the final data has been collected, participants will be able to request removal of their data up to one week after the final interview. After that point, the data will be integrated, and individual removal will no longer be possible.

8. Use of Deception or Partial Disclosure

#	Question	Answer
8.1	Will deception or partial disclosure be employed in recruiting participants or any other aspect of this research project?	No (move to Tab 9)
8.2	Describe the information that will be withheld from, or the misinformation that will be provided to, participants.	
8.3	Provide a rationale for withholding information or misleading participants.	
8.4	Indicate how and when participants will be informed of the concealment and/or deception. Describe when the participants will be debriefed and what the nature and extent of the debriefing will be.	

9. Conflict of Interest

#	Question	Answer
9.1	It is expected you will read the "Conflict of Interest in Research" Policy and related Procedures. Please indicate you have done so.	I have read the Conflict of Interest in Research Policy and Procedures
9.2	How will you ensure that all research team members are apprised of the above-noted policy and procedures?	I am the sole researcher involved with this project. My thesis project supervisor is apprised of the "conflict of interest in research policy" and related procedures.
9.3	If there is a real, potential, or perceived conflict of interest to be disclosed to the REB, describe the conflict and how you will manage it.	

10. Risk Assessment and Benefit Analysis

#	Question	Answer
10.1	Provide your assessment of the risks that may be associated with this research project.	Minimal Risk - research in which the probability and magnitude of possible harms implied by participation is no greater than those encountered by participants in those aspects of their everyday life that relate to the research (TCPS2)
10.2	Describe potential physical risks and discomforts (Check ALL that apply):	- The physical risks WILL NOT be greater than those encountered by the participants in everyday life
10.3	Describe other potential risks or discomforts (e.g. health, cognitive, socio-economic) (Check ALL that apply).	- Participants might feel psychologically or emotionally stressed, demeaned, embarrassed, worried, anxious, scared or distressed, e.g. description of painful or traumatic events
10.4	Are any of the questions being posed to participants of a particularly sensitive nature (e.g. questioning about topic areas such as childhood abuse)or seeking information that may put participants at legal risk (e.g. questioning about illicit activity or domestic violence)?	No
10.5	If yes, provide details.	
10.6	Describe how you will manage, minimize and/or mitigate any risks and discomforts.	I will observe participants carefully for any signs of emotional distress. Participants will be invited to discontinue discussing a particular question and to end the interview if they wish.
10.7	If your project has the potential to identify individuals that are significantly upset, distressed, or disturbed (enough to require assistance), or individual warranting medical attention, describe the arrangements made to assist these individuals. If not applicable, enter N/A.	N/A

10.8	Describe any potential benefits of the proposed research for/to participants. If there are none, state this.	No direct benefits are anticipated. One indirect benefit of the proposed research to the participants is contributing personal knowledge to influence the nursing profession. Another indirect benefit for participants is to reflect on and think critically about the kinds of support and training that non-radiology nurses need to care for their IR patients.
10.9	Describe the scientific and/or scholarly benefits of the proposed research.	Benefits include improving the future education of RNs and RPNs to improve patient outcomes.
10.10	If the Study is GREATER than minimal risk, describe the relationship of benefits to risk of participation in the research. If minimal-risk, enter N/A.	Discussing their experiences provides both a potential risk (emotional distress) and potential benefit (opportunity to contribute to nursing knowledge and to reflect on practice) for participants. Given the limited existing knowledge in the area of IR nursing, and the decreased likelihood that the interviews will cause significant emotional distress, the benefits outweigh the risks.

11. Research Locations and Other Approvals

#	Question	Answer
11.1	List the locations of the proposed research project(including recruitment activities). Provide the name of institutions, organizations, towns, or provinces, as applicable.	Recruitment will occur at the Regional Health Centre in Someplace, Canada.
11.2	Are you using AU resources or wanting to access participants from AU?	No (move to Question 11.4)
11.3	If Yes, provide details.	
11.4	Has this research project received ethical approval from another REB, or is approval pending from another REB?	Yes
11.5	Has this research project received organizational approval/permission from the locations where the research will take place, or is approval/permission pending?	N/A
11.6	List the institution(s)/organization(s) where approvals have been, or are being, obtained. If not applicable, enter N/A.	This project requires ethical approval from the Regional Health Centre REB. This application is in-progress.

12. Funding

#	Question	Answer
12.1	Will some organization or person other than the researcher be providing cash funding or in-kind support to this research project?	Yes

12.2	If funding is approved or is pending, specify source(s).	International
12.3	Describe any expectations, expressed or implicit, that arise (or will arise) from the funder-researcher relationship. (Consider any potential, actual or perceived conflict of interest that may result from the relationship).	N/A there are no express or implicit expectations other than the provision of a final report to the funder.

13. Reimbursements and Incentives

#	Question	Answer
13.1	Will you be providing expense reimbursements or offering an incentive or gift/cultural protocol for participating in this research project?	Yes
13.2	If you are providing expense reimbursements, describe in detail the expenses for which participants will be reimbursed, the value of the reimbursements and the process (e.g. participants will receive a cash reimbursement for parking, at the rate of $x per visit for up to # of visits for a total value of $x).	N/A
13.3	If participants will receive any incentives or gift/cultural protocol for participating in this research project, indicate what type of incentive or gift will be provided (Check ALL that apply).	Gift Card
13.4	If Other, provide details.	
13.5	Provide details of the value, including the likelihood (odds) of winning for prize draws and lotteries.	
13.6	Excluding prize draws, what is the maximum value of the incentives or gift/cultural protocol offered to an individual throughout the research project?	$11 to $25
13.7	Justify the value of the incentives you are offering relative to your project population.	A $20 gift card is substantial enough to signify an appreciation of time without being large enough to constitute coercion. I believe the RNs and RPNs who are willing to give up their time to participate in this study when working shifts warrants recognition.
13.8	If you will be collecting personal information to reimburse participants or provide incentives to them, describe the information to be collected, to whom it may be shared and how privacy will be maintained.	

14. Research Focusing on Indigenous Peoples and Co ...

#	Question	Answer
14.1	Does your research specifically involve Indigenous individuals as participants, or focus on a particular	No (move to Tab 15)

	Indigenous community or other 'community' or 'group'?	
14.2	Have you consulted with the community during the design of this study?	
14.3	If Yes, describe the process of consultation undertaken (e.g. whom have you contacted, their position within the community, the process taken or which you will follow in consultation with the community).	
14.4	If No, explain why you have not engaged in consultation.	
14.5	Will you be seeking, or have you sought, consent from Elders, leaders or other community representatives, provide details.	
14.6	If you have not sought consent, explain your decision not to do so.	
14.7	If leaders of the group will be involved in the identification of potential participants, provide details. If not applicable, enter N/A.	
14.8	Provide details if: (a) property or private information belonging to the group as a whole is studied or used; (b) the research is designed to analyze or describe characteristics of the group or community; or (c) individuals are selected to speak on behalf of, or otherwise represent, the group or community. If not applicable, enter N/A.	
14.9	Is there a research agreement with the group or community with respect to consent, access, ownership and the sharing/return of data?	
14.10	If Yes, provide details about the agreement. If No, explain why an agreement is not in place.	
14.11	How will the final results of the research project be shared with and/or returned to the participating community (e.g. band office, special presentation, deposit in community school, etc.)?	

15. Registries and Databases (including Biobanks)

#	Question	Answer
15.1	Does your research project involve a registry or database?	No (move to Tab 16)
15.2	Where will the database be located? Specify if the database will be under Canadian or foreign jurisdiction.	
15.3	Who will have access to the database or registry and how is that access determined?	

15.4	Will identifying information be stored within the database or registry?	
15.5	If yes, specify what identifying information will be stored.	
15.6	Will identifying information be forwarded to non-local registries or databases?	
15.7	If yes, specify what identifying information will be forwarded.	
15.8	What steps have been taken to ensure the privacy and security of the database or registry will be upheld?	
15.9	Who is responsible for the database or registry? Explain standard operating procedures for the database/registry management, use and access. Append any documentation in the Attachments tab.	

16. Hazard Safety

#	Question	Answer
16.1	Does the proposed research project involve human or animal pathogens or toxins or involve environmental impacts?	No (move to Tab 17)
16.2	What is the risk group (as defined by the Public Health Agency of Canada)?	
16.3	What is the containment level (as defined by the Public Health Agency of Canada)?	
16.4	Will you be importing/exporting or transferring any infectious materials into the laboratory at Athabasca University?	
16.5	If not working with these materials at Athabasca University, where will you be working with these materials?	
16.6	I have appended any and all copies of Biosafety Permits and/or Certifications in the Attachments Tab.	

17. Health and Biological Specimen Collection

#	Question	Answer
17.1	Does your research project involve health and biological specimens?	No (move to Tab 18)
17.2	This research project will involve the following (Check ALL that apply):	
17.3	If Other, describe.	

17.4	Indicate health or biological specimen(s) that will be collected (for example, body tissues or fluids, be specific).	
17.5	How will the specimen(s) be collected?	
17.6	Explain where, how and for what length of time the specimen(s) will be stored.	
17.7	Specify all intended uses of collected specimen(s).	

18. Checklist

#	Question	Answer
18.1	Indicate all documentation that is uploaded to your application in the Attachments Tab (Check ALL that apply):	CORE Tutorial Certificate of Completion (mandatory|All Recruitment Materials|Informed Consent / Information Document(s)|Questionnaires, Cover Letters, Surveys, Tests, Interview Scripts etc|Confidentiality Agreement

19. Support for Ethics Application

#	Question	Answer
19.1	I have added my supervisor as a signing authority in the APPROVALS Tab.	Yes

Appendix A

Recruitment Poster

PARTICIPANTS NEEDED FOR RESEARCH IN

NURSING AND INTERVENTIONAL RADIOLOGY

We are looking for volunteers to take part in a study that will explore the experiences non-radiology nurses have with interventional radiology patients.

We want you if you are an RN or RPN who is employed at RHC anywhere other than the Diagnostic Imaging department; and has cared for at least one patient who has had a procedure in interventional radiology.

As a participant in this study, you would be asked to participate in a face-to-face interview with the primary investigator of this research project at a time that is convenient for you.

Your participation is **entirely voluntary** and would take approximately one to one and a half hours of your time. By participating in this study, you will help us to understand the experiences, perceptions and knowledge you have about interventional radiology; and to determine the needs to develop undergraduate nursing curriculum units, orientation manuals and other educational tools.

In appreciation for your time, you will receive a $20 gift certificate for Indigo.

To learn more about this study, or to participate in this study, please contact:

Nursing Student

780 000 0000

nrsgstudent@athabascau.edu

This study is supervised by:

Dr. Great Supervisor

drgreatsup@athabascau.ca

This study has been reviewed by the Athabasca University Research Ethics Board.

Appendix B

Letter of Information

Project Title: Non-Radiology Nurses Experiences with Interventional Radiology

Research Institution: Athabasca University

Researcher:

Nursing Student

Ph. (780) 000-0000

Email: nrsgstudent@athabasca.edu

Supervisors:

Dr. Great Supervisor

Email: drgreat@athabascau.ca

You are invited to take part in a research project entitled *Non-radiology nurses experiences with interventional radiology.* This form is part of the process of informed consent. The information presented should give you the basic idea of what this research is about and what your participation will involve, should you choose to participate. It also describes your right to withdraw from the project. In order to decide whether you wish to participate in this research project, you should understand enough about its risks, benefits and what it requires of you to be able to make an informed decision. This is the informed consent process. Take time to read this carefully as it is important that you understand the information given to you. Please contact the principal investigator, Andra Carley if you have any questions about the project or would like more information before you consent to participate.

It is entirely up to you whether you take part in this research. If you choose not to take part, or if you decide to withdraw from the research once it has started, there will be no negative consequences for you now, or in the future.

Introduction

My name is Nursing Student and I am a Master of Nursing student at Athabasca University. As a requirement to complete my degree, I am conducting a research project about the experiences nurses who do not work in radiology have caring for patients who are having or have had interventional radiology procedures. I am conducting this project under the supervision of Dr. Great Supervisor.

Why are you being asked to take part in this research project?

You are being invited to participate in this project because you are an RN or RPN working at the Regional Health Centre outside the diagnostic imaging department who has cared for a patient(s) that has had an interventional radiology procedure.

What is the purpose of this research project?

The purpose of this research is to gain a thorough understanding of the experience's non-radiology nurses have caring for patients who have had an interventional radiology procedure. This research hopes

to determine if there is a need to develop an education forum within the local undergraduate nursing curriculum and an orientation program for nurses working in the Regional Health Centre.

What will you be asked to do?

If you choose to participate in this study, a one to one and a half-hour, face-to-face interview that will be audio recorded will be scheduled between April 1, 2019 and May 1, 2019 at a time and place that is convenient to your schedule.

A second brief meeting will be scheduled once the interview has been transcribed word for word, for you to review the information to ensure the information you provided is accurate.

What are the risks and benefits?

Participation in this research does not pose any risks to you. Benefits include improving the future education of nurses to improve patient outcomes. You will receive a $20 gift card for Indigo following the interview as a thank you for your participation.

Do you have to take part in this project?

As stated earlier in this letter, involvement in this project is entirely voluntary. You can stop participating at any time during the research study. If you choose to withdraw from the study before the interview is completed, you will not be awarded the $20 gift certificate from Indigo and all data will be confidentially disposed of. If you decide to withdraw after the data has been transcribed and verified for accuracy you will receive the $20 gift card from Indigo, but data cannot be removed because the data is anonymous.

How will your privacy and confidentiality be protected?

The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use or disclosure.

Your privacy and confidentiality will always be maintained during this study. All participants will be anonymous. Hard data, such as audio recordings, will be kept secured and all transcripts will be encrypted with password protection. A confidentiality pledge will be signed by the transcriptionist.

How will my anonymity be protected?

Anonymity refers to protecting participants' identifying characteristics, such as name or description of physical appearance.

Data codes will be used instead of participant names. There will be no personal identifiers such as personal descriptions or demographic information included in this study. Direct quotes will be included in the study with your explicit permission and without identifiers to reduce researcher bias. Every reasonable effort will be made to ensure your anonymity; you will not be identified in publications without your explicit permission.

How will the data collected be stored and protected?

Hard copy audio recordings will be stored in a secured, locked filing cabinet. The primary investigator will be the only person to hold the key for access.

All transcribed interviews will be encrypted, and password protected. All files will be properly destroyed within five years after completion of the Master of Nursing thesis.

Data codes will be used in lieu of participants' names to protect the privacy of participants. There will be no personal identifiers such as personal descriptions or demographic information included in this study.

The principal investigator will have the only access to the data. The data will be shared with her supervisor, Dr. Great Supervisor. The final report will be available to the Athabasca University and the Regional Health Centre.

Who will receive the results of the research project?

There is no anticipated future secondary use of the data. Publication of findings from the final thesis in at least two peer-reviewed professional journals will be pursued. The existence of the research will be listed in an abstract posted online at the Athabasca University Library's Digital Thesis and Project Room Upon request, participants will be sent an electronic version of the final thesis.

Who can you contact for more information or to indicate your interest in participating in the research project?

Thank you for considering this invitation. If you have any questions or would like more information, please contact me, (the principal investigator) by e-mail nrsgstudent@athabsacu.ca or by phone at 780-000-0000 or my supervisor drgreat@athabascau.ca. If you are ready to participate in this project, please proceed to review the following consent.

Thank you.

Nursing Student

This project has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns regarding your treatment as a participant in this project, please contact the Research Ethics Office by e-mail at rebsec@athabascau.ca or by telephone at 1-800-788-9041, ext. 6718.

Appendix C

Semi-Structured Interview Guide-Audio Recorded

Research Question: What are non-radiology nurses' experiences with IR patients?

Interview Questions:

- Tell me about your experience providing care to IR patients?
- Can you describe the situation in which you cared for an IR patient?
- Can you tell me more about…?
- Can you describe a little more?
- Can you tell me what and where you learned about IR?
- From your experience(s), what do you need to know about IR to provide safe patient care?
- If you could change anything what would that be?
- Can you think of anything else you would like to add?

Interview guide. Adapted from "Office of faculty excellence presentation: Formulating in-depth interview questions", by S. Knight, 2013. ECU College of Health and Human Performance, Department of Health Education and Promotion. Retrieved from http://core.ecu.edu/ofe/statisticsresearch/KNIGHT%20Preparing%20Interview%20Guide.pdf

Appendix D

Confidentiality Pledge

Non-Radiology Nurses Experiences with Interventional Radiology

As a secretary doing the transcriptions for the study non-radiology nurses experiences with interventional radiology, I understand that I will be typing audio recorded interview data of persons who are participating in the study. I understand that all possible precautions have been taken to protect the identity of the research participants. Further, I pledge to keep all information strictly confidential and agree not to discuss the information other than with the researcher. My signature indicates that I understand the importance of and agree to maintain confidentiality.

_____ _____

Secretary Researcher

_____ _____

Date Date

Appendix E

Informed Consent

Your signature on this form means that:

You have read the information about the research project.

You have been able to ask questions about this project.

You are satisfied with the answers to any questions you may have had.

You understand what the research project is about and what you will be asked to do.

You understand that you are free to withdraw your participation in the research project without having to give a reason, and that doing so will not affect you now, or in the future.

You understand that if you choose to end your participation during data collection, any data collected from you up to that point will be destroyed.

You understand that your data is being collected anonymously, and therefore cannot be removed once the data collection has ended.

	YES	NO
I agree to be audio-recorded		
I agree to the use of direct quotations		
I allow data collected from me to be archived on an encrypted and password protected USB stick entitled Master of Nursing thesis that will be secured with lock and key for five-years post completion.		
I am willing to be contacted following the interview to verify that my comments are accurately reflected in the transcript.		

Your signature confirms:

You have read what this research project is about and understood the risks and benefits. You have had time to think about participating in the project and had the opportunity to ask questions and have those questions answered to your satisfaction.

You understand that participating in the project is entirely voluntary and that you may end your participation at any time without any penalty or negative consequences.

You have been given a copy of this Informed Consent form for your records; and

You agree to participate in this research project.

_____ _____

Signature of Participant Date

Principal Investigator's Signature:

I have explained this project to the best of my ability. I invited questions and responded to any that were asked. I believe that the participant fully understands what is involved in participating in the research project, any potential risks and that he or she has freely chosen to participate.

_____ _____

Signature of Principal Investigator Date

Appendix F

TCPS Certificate

PANEL ON
RESEARCH ETHICS

TCPS 2: CORE

Navigating the ethics of human research

Certificate of Completion

This document certifies that

Nursing Student

Has completed the Tri-Council Policy Statement:

Ethical Conduct for Research Involving Humans

Course on Research Ethics (TCPS 2: CORE)

Date of Issue: October 15, 2018

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