

Collaborative Care Guidelines
for Perioperative Nurses

RN & LPN



These guidelines were adapted with permission from Capital Health and the IWK by the Model of Care Initiative in Nova Scotia (MOCINS), a partnership of the Department of Health & Wellness, District Health Authorities and IWK in collaboration with the College of Registered Nurses of Nova Scotia and the College of Licensed Practical Nurses of Nova Scotia.

ii

Document Accountability: Nova Scotia Perioperative Directors and Managers
Version 18 – Final Draft, Jan 10, 2013

CONTENTS

Overview	1
Purpose of the Document	3
General Assumptions	4
Guiding Principles for Interprofessional Practice	5
Scope of Practice	7
Phases of the Perioperative Experience	9
The Preoperative Phase	10
The Intraoperative Phase	12
The Postoperative Phase	17
Definitions / Glossary	19
References	23
Appendix A • Circulating Role Psychomotor Skills	25
Appendix B • Scrub Role Psychomotor Skills	40
Appendix C • Effect of Types and Techniques of Sedation and General Anesthesia	53
Appendix D • Post Anaesthesia Care Unit RN Competency Skills Checklist ..	54

Acknowledgements

The Model of Care Initiative would like to acknowledge the sub group of the MOCINS Peri-operative Project Working Group and the College of Registered Nurses of Nova Scotia and the College of Licensed Practical Nurses of Nova Scotia for their contributions to the development of these guidelines.

DHA 3 Cheryl Ernst
Sharlene Van Roessel

DHA 6 Priscilla Sharkey

DHA 7 Cathy Ferguson

DHA 8 Shaunna Snow

DHA 9 Cathy Saunders
Cindy Fulmore
Karen Strickland

IWK Cathy Shea
Heather Simmons

CLPNNS Doug Bungay

CRNNS Julie Gregg

Department of Health & Wellness Cindy Cruickshank

OVERVIEW

Across Canada the practice of both registered nurses (RN) and licensed practical nurses (LPN) continues to evolve in order to meet the health needs of Canadians. In Nova Scotia, with the introduction of the Model of Care Initiative in Nova Scotia (MOCINS), all nurses (RNs and LPNs) have been encouraged to optimize their roles and practice to the full extent of their individual level of competency, based on their education and experience. This evolution requires not only RNs and LPNs, but also health care managers, and the health care team to better understand the roles and responsibilities of each type of health care provider so that they are more effectively utilized in an ever-changing health care environment.

One of the objectives of the Model of Care Initiative in 2012/13 is to expand the provincial implementation of the Collaborative Care Model to perioperative settings. The Collaborative Care Model is a conceptual framework that is used to guide local implementation of new care delivery models. The goal of the model is to provide high quality, safe client care in hospitals more efficiently by making the best use of staff knowledge, skills, and competencies, improving processes, and better supporting access to information and modern technology. Within the discipline of nursing, in the perioperative setting, optimization of the LPN role, when appropriate, will assist in meeting this goal.

The decision to optimize the role of the LPN as part of a collaborative team in the perioperative setting is based on a clear understanding of the differences in educational preparation, competencies, and scope of practice of both types of nurses. The perioperative services area can be a complex and unpredictable environment. The more complex and unpredictable the environment the higher the category of care provider needed to provide the full range of potential care requirements, assess changes, and re-establish priorities. While RNs and LPNs may be educated similarly in terms of performing specific tasks and functions, the depth and breadth of education with respect to knowledge and clinical judgment is very different.

According to the *Guidelines: Effective Utilization of RNs and LPNs in a Collaborative Practice Environment (2012)*, Registered Nurses, Licensed Practical Nurses and managers must be aware that effective decisions to match client needs with either a registered nurse or a licensed practical nurse, should be based on the following equally important factors: client acuity, scope of practice of the nursing role, nurses' own individual competence, scope of employment and practice environment (e.g. number of nursing resources, allied health team members and organizational policies).

Increasingly there is a need to demonstrate how nurses provide care, the interventions or actions used by nurses to influence client health outcomes, and the appropriate mix of nursing staff necessary to provide safe competent care (White & Pringle, 2005). Nursing-outcomes research attempts to establish which nursing interventions contribute to desired outcomes and are cost effective; and make nursing interventions understandable to other professions, administrators and clients (Schreb, 2001). Such research helps answer the question “is the right person providing the right care at the right time?”

Current nursing literature supports the fact that the practice of registered nurses increases positive health outcomes in the form of decreased complications and an increase in client safety. At present there is a lack of research devoted to the contributions made by licensed practical nurses to health outcomes.

Based on the best available current evidence, decision makers need to consider the key differences in the fundamental values of the professions, knowledge base, critical thinking skills, and the inherent qualities of RNs and LPNs to ensure the appropriate utilization of each of their services in the practice setting.

PURPOSE

The purpose of this document is to provide guidance for the effective utilization of RNs and LPNs within a collaborative practice team across the client's perioperative experience in Nova Scotia. The three phases of the perioperative experience are as follows:

- preoperative
- intra operative
- post-operative.

This document has been organized starting with an overview of assumptions and principles that span all three phases after which each phase is highlighted, denoting any phase specific considerations and guidelines for the effective utilization of RNs and LPNs in perioperative settings.

ASSUMPTIONS

In health care, all health professionals are expected to work collaboratively with each other and in partnership with the person receiving care. Effective inter-professional collaborative practice is centered on the needs of clients as they partner with the most appropriate health professionals in order to meet their healthcare needs (Health Professions Regulatory Network, 2008).

The College of Registered Nurses of Nova Scotia (CRNNS) & College of Licensed Practical Nurses of Nova Scotia (CLPNNS) Guidelines: *Effective Utilization of RNs and LPNs in a Collaborative Practice Environment (2012)* outline a number of assumptions to guide the decision making required for the most effective utilization of RNs and LPNs in any collaborative practice setting. They are as follows:

- 1** Staff mix decisions are based on the results of an assessment of the client population served, and their overall health needs. A care delivery model is designed so that the right staff mix is in place to meet the health outcomes of the client population served.
- 2** There are two categories of nurses in Nova Scotia—registered nurses (RNs), which include nurse practitioners (NPs), and licensed practical nurses (LPNs).
- 3** All nurses practice in a manner that is consistent with legislation, their standards for practice, codes of ethics, and scopes of practice.
- 4** All nurses are accountable for their decisions, actions and the consequences of those actions. Nurses are not accountable for the actions and decisions of other nurses or care providers in situations in which they have no way of knowing about those actions.
- 5** RNs and LPNs study from the same body of nursing knowledge. LPNs have core-nursing knowledge. The knowledge base of the RN is broader, in-depth, and more comprehensive. As a result, the level of autonomous practice of the RN differs from that of the LPN.
- 6** Licensed practical nurses are educated to practice independently and manage predictable clients who have less complex care needs via an established plan of care. When LPNs provide care to clients with more complex needs and unpredictable health outcomes, they must consult with an RN (or other appropriate health care provider).
- 7** RNs are educated to provide all levels of nursing care whether caring for stable clients with predictable outcomes or working with clients with unpredictable outcomes and whose health needs are acute, complex and rapidly changing.
- 8** All nurses, throughout their careers, are expected to continually enhance their learning by adding to their foundational knowledge base and becoming expert in a particular area of practice. A continuing competence program (CCP) is one strategy that can be used to integrate learning into nursing practice.

Guiding Principles for Interprofessional Practice

PRINCIPLES

Within the interprofessional perioperative collaborative care team, the following principles apply. (CRNNS & CLPNNS, 2012)

Focus On and Engagement of Clients

Clients are integral members of a collaborative practice health care team and when actively engaged in managing their own health become part of the decision-making team rather than passive recipients of healthcare. Effective communication between team members and clients leads to improved client satisfaction and better client outcomes.

Population Health

A population health approach uses the determinants of health to address client needs. Clients and health professionals work together in determining how clients can effectively promote their health and/or manage their illnesses.

Trust and Respect

Members of a collaborative practice health care team must have a basic understanding and respect for each other's roles and trust that all team members will consult and collaborate appropriately when clients' needs are beyond their scope of practice.

Effective Communications

Effective communication is an essential component of collaborative practice and central to a common philosophy of care and knowledge exchange. The team must not only understand the concerns, perspectives, and experiences of the client and family, but also their environment and combine this understanding with the capacity to communicate this to others, so that positive client outcomes can emerge.

Consultation

Intra-professional collaboration most often occurs in the clinical setting and requires both time and resources for efficient and effective consultation, as often as necessary, to meet client needs. Consultation involves seeking advice or information from a more experienced or knowledgeable nurse or another health care professional. The complexity of client care needs, the nurse's competence and resources available in the practice setting, influence the amount of consultation required. During a consultation, nurses clarify their reasons for consulting and determine an appropriate course of action. Unless care is transferred, the nurse who sought consultation is still accountable for the client's care.

Consultation results in one of the following actions:

- a** the nurse receives advice and continues to care for the client;
- b** the nurse transfers an aspect of care to the consultant and,
- c** the nurse transfers all care to the consultant. When any care is transferred from one nurse to another, the accountability for that care is also transferred.

When an assignment involves the expectation of consultation, nurses must assess that the required consultative resources are available. This means managers have an accountability to ensure resources such as policies, procedures and well-understood role descriptions are in place to support staff utilization decisions and the time and resources (standardized assessment tools, established plan of care and appropriate staff-mix) needed for consultation, as often as necessary, to meet client needs.

SCOPE

The overall scope of practice for the profession of nursing and the profession of practical nursing sets the outer limits of practice for all members. The scope of practice of an individual RN or LPN may be limited by education, experience, and the authority given to that particular nurse to perform all of the functions outlined within the definition of the practice of nursing and the practice of practical nursing. Scope of practice for the perioperative LPN can be found in section Z: Perioperative Specialty of *Competency Profile CLPNNs (2012)*.

The decision to match client needs with either a registered nurse or a licensed practical nurse focuses on three factors of equal importance—the client, the scope of practice of the nurse, and the environment. A description of these three factors is located within the model described in the document *Guidelines: Effective Utilization of RNs and LPNs in a Collaborative Practice Environment, 2012*.

The following areas are being optimized within the **RN scope** of practice:

- The RN completes an initial plan of care based on a comprehensive nursing assessment (including the determinants of health that influence client health outcomes) and establishes the complexity of client condition.
- The RN ensures each client has a nursing plan of care that identifies priority problems, targets outcomes and specifies nursing interventions.
- The RN determines the appropriate care provider by analyzing the overall plan of care and taking into consideration the client, nurse and environmental factors.
- The RN must be available to collaborate with the LPN when the LPN is providing care to a client whose health outcome is less stable and/or less predictable.
- The RN serves as the coordinator of care ensuring that the client care experience is coordinated and integrated within an inter professional model of care.

The following areas are being optimized within the **LPN scope** of practice:

- The LPN participates in the development of the initial plan of care.
- The LPN performs ongoing nursing assessment of clients to ensure they respond to interventions as expected.
- The LPN implements client specific interventions that are both entry-level and beyond entry-level competencies.
- The LPN can enact interventions that they are competent to perform - whether the care decision is autonomous, collaborative or solely made by the RN.
- The LPN works in collaboration with the RN to make clinical decisions as client needs increase in intensity.
- The LPN adds or deletes nursing actions / interventions as long as the client is achieving expected outcomes.

Phases of the Perioperative Experience

3 PHASES

This section provides phase specific guidance to support effective utilization of nursing roles.

The three phases of the perioperative experience are

Preoperative ... 10

Intraoperative ... 12

Post-operative ... 17

PREOPERATIVE

The preoperative phase includes: Pre-admission Day of surgery Non-elective Admissions

For the purposes of this document the preoperative phase will include all areas where perioperative data is collected prior to surgery. The surgical experience begins in the physician/surgeon's office or clinic. Depending on the facility the modes of data collection and the availability of supports may vary but the principles remain constant. Data collection may be, but is not limited to the following hospital documents: consults, consents, client health assessment questionnaires, admission data bases, history and physicals, pharmacy medication reconciliation, and any relevant laboratory results. The RN completes an initial nursing plan of care based on a comprehensive nursing assessment (including the determinants of health that influence client health outcomes) and establishes the complexity of client condition.

Pre-admission

Pre-admission occurs prior to the client receiving surgery, sedation/analgesia and anesthetic agents/techniques. Pre-operative assessments are to be completed and the plan of care is initiated.

Day of Surgery

The day of surgery admission occurs prior to the client receiving surgery, sedation/analgesia and anesthetic agents/techniques. The nurse (RN/LPN) in this phase focuses on validating the established plan of care to continue to prepare the client for surgery.

Non-elective Admissions

For admissions that are urgent (surgery required in 72 hrs.), the admission information may be gathered by the RN, or the LPN in collaboration with the RN. The RN must develop the plan of care, having reviewed the data gathered before the client is admitted to the operative area.

Considerations

- 1** The data collected in the pre-operative phase is used to develop the plan of care for surgical clients and must be initiated or reviewed by an RN prior to admission to the intra operative phase.
- 2** The information obtained during this phase may span a lengthy period of time (one week up to one year); therefore it is important to review all the data that has been gathered prior to the day of surgery admission and to confirm there are no health history changes. If changes are noted, all information should be verified and reviewed by an RN or RN/ LPN collaboration.
- 3** The RN will determine what category of nurse cares for the client (client assignment) which is dependent on clients care needs. Factors to consider are the client acuity (ASA classification) [Appendix A], the scope of practice of the nurse, the nurses' own individual competence, the scope of employment and the practice environment (e.g. number of nursing resources, allied health team members and policies available).
- 4** Admission on the day of surgery (Day Surgery), if the data collected prior to this visit has been reviewed in its entirety by an RN then the admission can be initiated by either an LPN or an RN. If the information has not been reviewed, then an RN must be involved in this admission, either by completing the admission assessment themselves or validating the admission assessment completed by the LPN.

The Intraoperative Phase

INTRAOPERATIVE

The intraoperative phase includes:

Immediate preoperative
Intraoperative
Immediate postoperative

The intraoperative phase of care occurs in a team directed environment. Practitioners work collaboratively to ensure a safe surgical experience for clients. The settings and the availability of resources may vary, depending on the facility.

Immediate preoperative

Immediate preoperative consists of the period where the OR nurse receives the client to the placement of the client on the OR table. During this period the RN/LPN and the surgical team validate and contribute to the established plan of care. The RN/LPN is responsible to implement and evolve the plan of care that has been initiated in the preoperative phase. In order to ensure optimal client outcomes, communication between team members is essential so that all are aware of the individualized plan of care for each client.

Intraoperative

Intraoperative consists of the period when the client is transferred to the operating table to when the client is admitted to the post anesthesia area. There are two primary roles for nurses within the operating theaters, the scrub role and the circulating role. The circulating role can be subcategorized as a primary circulator, and secondary circulator. (RN/LPN circulating role psychomotor skills can be found in Appendix B. RN/LPN scrub role psychomotor skills can be found in Appendix C).

Scrub Role

The role of the scrub nurse is to assist the scrubbed personnel in the operating theater. Responsibilities include but are not limited to; setting up the surgical field, maintaining sterility of the surgical field, prepping, draping, and surgical counts. This surgical team member remains in the sterile field for the duration of the procedure, anticipating and providing the required instruments, supplies, and equipment to perform the surgery. Both RN's and LPN's who possess the knowledge and the competency to do so, may assume this role.

Primary Circulating Role

The role of primary circulator is to provide leadership and coordinate the individual care and needs of the client and surgical team by: disseminating information, planning, organizing, delegating, implementing, coordinating and evaluating perioperative activities (ORNAC, 2011)

This role is filled in nursing by the RN. In this role the RN completes and interprets an in-depth situational assessment and is responsible for coordinating activities within an operating room, directs the work of unlicensed personnel and the nursing team in a collaborative manner within each theater, and responds independently or in collaboration with other healthcare providers to unstable, unpredictable and emergency situations. The development of a plan of care (if not already developed or if no standard plan) is the responsibility of the primary circulator.

Secondary Circulating Role

The secondary circulating role within the Perioperative Services program may be filled with a Perioperative RN or LPN. It is a collaborative role which makes adjustments to existing nursing care plans, as long as the client is achieving the outcomes anticipated. In this role, the nurse performs ongoing assessments of the client and their response to interventions and compares their assessment findings to expected findings. When client outcomes are not as anticipated, changed or new, or if the client is not achieving intended outcomes or client status is becoming less predictable the second circulator consults the appropriate care provider.

Immediate postoperative

Immediate postoperative is the period in which there is emergence and transfer of client care to the appropriate health care provider (ORNAC, 2011).

Considerations

- 1 The LPN uses the established plan of care to guide their decisions and practice. The LPN is expected to perform ongoing assessments of the client and their response to the interventions and compare their assessment findings to expected findings. They independently make the appropriate adjustments to the nursing care plan as long as the client is achieving the outcomes as anticipated. LPNs must consult the appropriate care provider when assessment findings:
 - are not as anticipated, changed or new
 - client is not achieving intended outcomes
 - status is becoming variable or less predictable
- 2 When preoperative procedural rooms require a sterile set up only, with no further scrub responsibilities, such as some ENT, Urology and Gynecology procedures then staffing may be two nurses only, one of which must be an RN. Measures must be in place to ensure extra resources are available and will respond in an emergency situation e.g. emergency buzzers systems alerting any available staff in adjacent area to respond, code response teams, and or rapid response teams. Procedural rooms are most often staffed during day shifts when extra resources are available.

- 3** The RN or LPN are responsible to implement and evolve the plan of care that has been initiated or developed by a preoperative RN. In order to ensure positive client outcomes, communication between team members is essential so that all are aware of the individualized plan of care of each client.
- 4** The intraoperative assessment may need to be completed by the primary circulator if:

 - the complexity of the client condition is above ASA 1 or 2;
 - the client has not been previously assessed by an RN in the preoperative phase and,
 - clients undergoing procedures that do not have an established plan of care.
- 5** The LPN may assume the role of secondary circulator as long as:

 - a) There is an agency policy in place to support this practice.
 - b) The scrub role is being filled by a RN. (The intent of this recommendation is to support the practice of having an RN in the room at all times. This recommendation does not imply that RNs, who are in the scrub role, will be expected to break the scrub role to deal with an unanticipated event.)
 - c) She /he have the knowledge, skill and judgment to perform the role;
 - d) There is immediate access to and a rapid communication plan for the LPN to connect with the RN (or other appropriate care provider) if there are unanticipated changes in the clinical situation.
- 6** The current clinical situation supports the LPN to assume this role when the primary circulating nurse is absent from the OR theatre, as evidenced by:

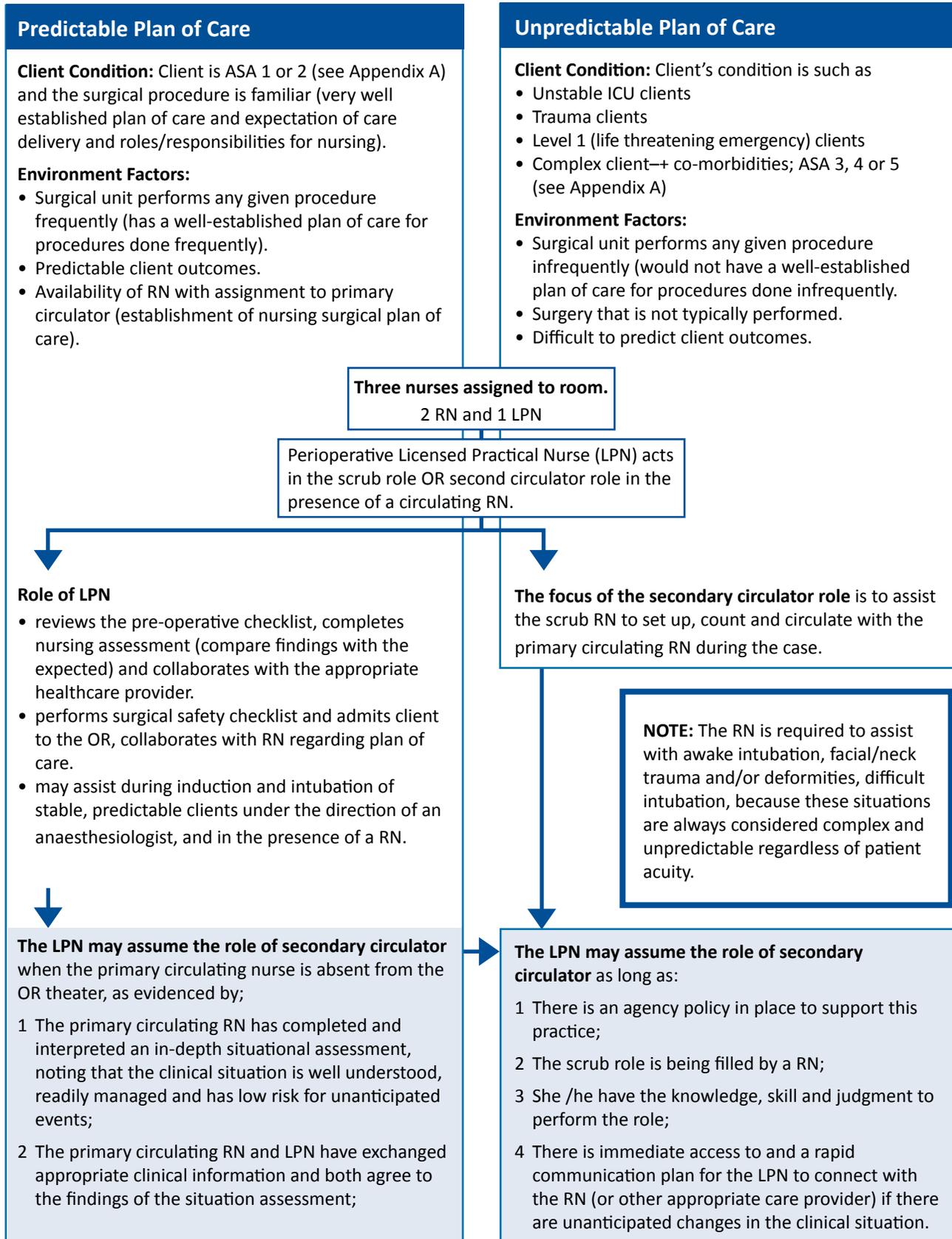
 - a) The primary circulating RN has completed and interpreted an in-depth situational assessment, noting that the clinical situation is well understood, readily managed and has low risk for unanticipated events;
 - b) The primary circulating RN and LPN have exchanged appropriate clinical information and both agree to the findings of the situation assessment.
- 7** In the absence of an anesthesiologist or anesthesiologist assistant, the RN can administer or assist other team members in the administration of sedation/analgesia and/or anesthetic agents/techniques to the client and monitor the client for immediate or delayed responses to such pharmacological agents by objective assessment, data collection and constant monitoring. If the anesthesia phase of sedation/analgesia occurs in the OR environment, the primary role of the RN administering the sedation/analgesia is to provide constant monitoring of the client's needs and to provide immediate interventions when the client's health status changes.
- 8** If there are only two nurses assigned to a room, and one is an LPN, the scrub role will be filled by the LPN and the circulating role will be assigned to the RN. This may occur when the determination of patient care needs and environmental conditions identify that only two nurses will be caring for the intraoperative patient, with no additional RN supports available or when on call schedules identify that only two nurses are scheduled

Intraoperative Decision Making Algorithm

The algorithm, on the following page, is intended to support RNs effective decision making that matches intraoperative client needs with either a RN or a LPN. For each decision one must consider the following equally important factors: the client acuity, the scope of practice of the nursing role, the nurses' own individual competence, the scope of employment and the practice environment (e.g. number of nursing resources, allied health team members and organizational policies).

Intraoperative decision making algorithm (adapted from the IWK Adult Surgical Perioperative Collaborative Care Guidelines, 2010)

Intraoperative Nursing Assignment (RN) Decision Making Framework for the role of the Perioperative Licensed Practice Nurse (LPN)



POST-OPERATIVE

The Postoperative phase includes: Post Anesthesia Phase I Post Anesthesia Phase II Extended Observation Phase

The postoperative phase is divided into Post Anesthesia Phase I, Post Anesthesia Phase II, and Extended Observation Phase. (*National Association of Perianesthesia Nurses of Canada: Standards of Practice, 2011*)

Post Anesthesia Phase I

This phase occurs directly after the surgery and the administration of sedation/analgesia and/or anesthetic agents/techniques. The perianesthesia clients' needs are of highest priority and constant monitoring of these life-sustaining needs is neither minimal nor episodic (NAPAN©, 2011). Therefore, the RN is the most appropriate nursing care provider at this phase. When the client obtains optimal health in this phase, the client can be transitioned to post anesthesia phase II.

Discharge Scoring Systems which have evidenced-based discharge criteria are utilized to allow the Perianesthesia RN to determine individual client readiness for transfer between Post Anesthesia Phases. These discharge criteria are utilized in accordance with the health care institution's policies and crite-

ria endorsed by Departments of Anesthesia. i.e. Aldrete Scoring System & Post Anesthetic Scoring System (PADDS) (NAPAN©, 2011)

Levels of sedation include: minimal, moderate, deep, and general anesthesia. (*National Association of Perianesthesia Nurses of Canada: Standards of Practice, 2011*). The table Effects of Types of Sedation and General Anesthesia (Odom –Forren & J, Watson, D., 2005) is included in Appendix D.

Post Anesthesia Phase II

Phase II occurs directly after Phase I. The perianesthesia client's potential requirement for life-sustaining interventions is monitored and immediate interventions are provided when the client's immediate physical/comfort needs are not being met. The client participates in providing the nurse data related to the current state of health. The RN is the most appropriate nursing care provider at this phase. When the client obtains optimal health in this phase, the client can be transitioned to the extended observation phase.

Extended Observation Phase

The extended observation phase occurs directly after post anesthesia phase II. The role of the nurse in the observation phase is to monitor the client's progress towards recovery and ultimately discharge. The perianesthesia nursing interventions are focused on

preparing the client for self-care in the home, an inpatient setting, nursing homes, rehab centers etc. In this phase an RN & LPN are appropriate care providers working collaboratively to their individual scopes of practice.

Considerations

- 1** Post Anesthesia Phase I- the care required is of a **high acuity**, with constant monitoring required of life sustaining client needs which may require independent, immediate interventions to manage a client with changing health status. In these situations, as well as situations where the client cannot maintain their own airway without intervention (such as deep or general anesthesia) the RN is the appropriate nursing care provider. NAPAN© supports the position that this first phase of nursing care is a critical care unit. Clients may be unconscious, unstable and critically ill with complex physiologic or/pyschologic requirements. Overall general competencies are those of a critical care nurse (Appendix E). (NAPAN©,2011)
- 2** Post Anesthesia Phase II- the care is **acute**. Potential client need for life sustaining measures is monitored and immediate interventions are provided when the client's immediate physical/comfort needs are not being met. The RN is the appropriate nursing care provider. Critical Care competencies are required in this area.
- 3** Extended Observation Phase- the care is **ongoing** while monitoring the client's progress towards recovery and ultimately discharge, thus is within scope of both nursing roles, providing the LPN works in collaboration with the RN. In this phase where the client has received moderate sedation, the LPN, in collaboration with the RN, may care for clients who have and can maintain their airways with no interventions.
- 4** If an LPN is caring for a client and the predictability of the condition changes then the LPN must collaborate with the appropriate care provider. Where possible, the LPNs first collaborator is the RN.

GLOSSARY

Accountability: a moral concept; it infers acceptance of consequences for decisions and/or actions, and is a liability (legal responsibility) for task performance. Accountability cannot be delegated. RNs and LPNs are accountable to practice in a manner consistent with their professional responsibilities, their respective Code of Ethics and legal guidelines, and their standards of practice (*College of Licensed Practical Nurses of Nova Scotia (CLPNNS), 2002*).

Acuity: the degree of severity of a client's condition and /or situation.

ASA (American Society of Anaesthesiologist) Classification: a system used by anaesthesiologists to stratify severity of clients' underlying disease and potential for suffering complications from general anaesthesia (*McGraw-Hill Concise Dictionary of Modern Medicine*. © 2002 by the McGraw-Hill Companies, Inc.)

Assessment by Nurses: the gathering of information about a client's physiological, psychological, sociological, and spiritual status. Assessment is the first stage in the nursing process in which the nurse carries out a completed and holistic nursing assessment. The nursing process includes assessment, planning, implementation and evaluation (*CRNNS, 2012*).

Collaboration: working together as a health-care team by respecting and acknowledging the roles of all those within the healthcare system in contributing to safe, compassionate, competent and ethical care. (Adapted from RN Act, 2006).

Collaborative Practice: *a process of active participation, communication and decision-making of two or more healthcare providers, in partnership with a person receiving care. The health care providers use their separate and shared knowledge and skills during the planning, implementation and evaluation phases of person-centered care.* Interprofessional collaborative practice is centered on the needs of clients; enabling them to be partners in their care, with the most appropriate health professionals providing the services required to meet their healthcare needs" (Health Professions Regulatory Network, 2008).

Competence: the ability to integrate and apply the knowledge, skills and judgment required to practice safely and ethically in a designated role and practice setting and includes both entry-level and continuing competencies (RN Act, 2006).

Competency: the integrated knowledge, skills, judgment and attributes required of a nurse to practice safely and ethically in a designated role and setting (Attributes include, but are not limited to, attitudes, value and beliefs.) (CNA, 2008).

Operating Room: a room in a health care facility in which surgical procedures are performed which may or may not require anesthesia.

Optimal Postoperative Condition: is the most desirable or satisfactory condition factoring in the anticipated and unanticipated effects of all preceding surgical or anesthetic interventions (*National Association of Peri-anesthesia Nurses of Canada (NAPAC) Standards of Practice, 2011*).

Primary Circulating Role: the role of primary circulator is to provide leadership and coordinate the individual care and needs of the client and surgical team by: disseminating information, planning, organizing, delegating, implementing, coordinating and evaluating perioperative activities (ORNAC, 2011). This role is filled in nursing by the RN. This role completes and interprets an in-depth situational assessment and is responsible for coordinating activities within an operating room, directs the work of unlicensed personnel and the nursing team in a collaborative manner within each theater, and responds independently or in collaboration with other healthcare providers to unstable, unpredictable and emergency situations.

This role plans, collaborates, coordinates, implements and evaluates the functioning of the room and makes adjustments as required based on clients' need. The development of a plan of care (if not already developed or if no standard plan) is the responsibility of the primary circulator.

Secondary Circulating Role: the secondary circulating role within the Perioperative Services program may be filled by a Perioperative RN or LPN. It is a collaborative role which makes adjustments to existing nursing care plans, as long as the client is achieving the outcomes anticipated. This role plans, collaborates, implements and evaluates the functioning of the room and makes adjustments as required based on clients' need. The secondary circulating nurse position performs ongoing assessments of the client and their response to interventions and compares their assessment findings to expected findings. When client outcomes are not as anticipated, changed or new, the client is not achieving intended outcomes or client status is becoming less predictable the second circulator consults the appropriate care provider.

The LPN may assume the role of secondary circulator as long as:

- a) There is an agency policy in place to support this practice.
- b) The scrub role is being filled by a RN. (The intent of this recommendation is to support the practice of having an RN in the room at all times. This recommendation does not imply that RNs, who are in the scrub role, will be expected to break the scrub role to deal with an unanticipated event.)
- c) She /he have the knowledge, skill and judgment to perform the role;
- d) There is immediate access to and a rapid communication plan for the LPN to connect with the RN (or other appropriate care provider) if there are unanticipated changes in the clinical situation.

The current clinical situation supports the LPN to assume this role when the primary circulating nurse is absent from the OR theatre, as evidenced by:

- a) The primary circulating RN has completed and interpreted an in-depth situational assessment, noting that the clinical situation is well understood, readily managed and has low risk for unanticipated events;
- b) The primary circulating RN and LPN have exchanged appropriate clinical information and both agree to the findings of the situation assessment

Nursing Plan of Care: the nursing plan of care is an outline of the nursing interventions that are to be provided to an individual and/or family. It is a set of actions the team will implement to resolve/support nursing diagnoses identified by nursing assessment. It guides in the ongoing provision of nursing care and assists in the evaluation of that care.

Surgical Plan of Care: for each client coming to the OR, there is an established plan of care in place, based on surgical procedures. The role of the assessment and plan of care evolution is for the perioperative nurse to assess the client in the context of the surgical plan of care and adjust the nursing Plan of Care (POC) accordingly. For each surgical procedure there are standard nursing assessment areas (ORNAC standards pages 163,164, 286-294) in addition to surgery specific areas to be assessed to ensure safe, quality, client care outcomes.

Practice of Nursing: the application of specialized and evidence based knowledge of nursing theory, health and human sciences, inclusive of principles of primary health care, in the provision of professional services to a broad array of clients ranging from stable or predictable to unstable or unpredictable, and includes:

- i. assessing the client to establish their state of health and wellness;
- ii. identifying the nursing diagnosis based on the client assessment and analysis of all relevant data/information;
- iii. developing and implementing the nursing component of the client's plan of care;
- iv. coordinating client care in collaboration with other health care disciplines;
- v. monitoring and adjusting the plan of care based on client responses;
- vi. evaluating the client's outcomes;
- vii. such other roles, functions and accountabilities within the scope of practice of the profession, which support client safety and quality care, in order to:
 - A. promote, maintain or restore health;
 - B. prevent illness and disease;
 - C. manage acute illness;
 - D. manage chronic disease;
 - E. provide palliative care;
 - F. provide rehabilitative care;
 - G. provide guidance and counseling; and
 - H. make referrals to other health care providers and community resources, also includes research, education, consultation, management, administration, regulation, and policy or system development relevant to the above. (RN Act 2006)

Practice of Practical Nursing: the provision of nursing services independently, for clients considered stable with predictable outcomes, and under the guidance or direction of a registered nurse, medical practitioner or other health care professional authorized to provide such consultation, guidance or direction, for clients considered unstable with unpredictable outcomes (LPN Act, 2006).

Predictable: the extent to which one can identify in advance a client's response on the basis of observation, experience or scientific reason (LPN Act, 2006, RN Act, 2006).

Scope of Employment: a range of responsibilities defined by an employer through job / position descriptions and policies.

Scope of Practice: encompasses the roles, functions, and accountabilities which registered nurses and licensed practical nurses are educated and authorized to perform (RN Act, 2006 LPN Act, 2006).

Stable in the Operating Room setting: the clients' health status can be anticipated (ASA Physical classification 1 or 2), the plan of care is readily established, and is managed with interventions that have predictable outcomes. The surgery planned is routinely done in the particular perioperative setting, with an established plan of care. (*The RN Exam Competency Project, CNA, 2003; CLPNNS Standards of Practice, 2011; Capital Health Interdisciplinary Clinical Manual*)

Standard: an authoritative statement that sets out the legal and professional basis for one's professional practice. The primary reason for having standards is to promote, guide, direct and regulate practice within one's profession. (*CRNNS, 2012*)

Surgical Suite: the floor or area where the operating rooms are located, including the OR lounges and change rooms.

Unstable in the Operating Room Setting: a situation in which a client's health status is fluctuating, with atypical responses (ASA classification 3, 4, 5). An unstable case is complex, requiring frequent assessment of the client and modification of the care plan, and may include interventions that may have unpredictable outcomes and/or risks. Examples of Unstable/Unpredictable perioperative clients would be Level 1 (life threatening emergency cases), unstable ICU clients and trauma clients as well as surgeries that are complex/infrequently done in the perioperative area, and do not have an established plan of care.

Unpredictable: that a client's health outcome cannot reasonably be expected to follow an anticipated path (LPN Act, 2006, RN Act, 2006).

REFERENCES

- Capital Health District: Halifax, Nova Scotia (2008). Interdisciplinary clinical manual: Policy number CC02-008.
- Canadian Nurses Association. (2008). Code of ethics for registered nurses. Ottawa, Ontario: Author.
- Canadian Nurses Association. (2003, July). RN exam competency project. Ottawa, Ontario: Author.
- College of Licensed Practical Nurses of Nova Scotia. (2005). Entry level competencies for licensed practical Nurses. Halifax, Nova Scotia: Author.
- College of Licensed Practical Nurses of Nova Scotia. (2011). Scope of Practice, Standards of Practice, Code of Ethics for LPNs. Halifax, Nova Scotia: Author.
- College of Licensed Practical Nurses of Nova Scotia (2002). Position statement: Use of protected title Licensed Practical Nurse in Nova Scotia. Halifax, Nova Scotia: Author.
- College of Licensed Practical Nurses of Nova Scotia (2012). Scope of Practice: Section Z: Perioperative Specialty of Competency Profile. Halifax, Nova Scotia: Author.
- College of Registered Nurses of Nova Scotia (2009). Entry-level competencies for registered nurses in Nova Scotia. Halifax, Nova Scotia: Author.
- College of Registered Nurses of Nova Scotia (2011). Standards of practice for registered nurses. Halifax, Nova Scotia: Author.
- Canadian Council for Practical Nurse Regulators (CCPNR)/ Conseil Canadien de Réglementation des soins infirmiers auxiliaires (CCRSIA) (2010). Standards of Practice and Competencies for Perioperative Licensed/Registered Practical Nurses.
- College of Registered Nurses of Nova Scotia and College of Licensed Practical Nurses of Nova Scotia (2012). Effective Utilization of RNs and LPNs in a Collaborative Practice Environment. Halifax, Nova Scotia: Author.
- College of Registered Nurses of Nova Scotia (2009). Scope of Nursing Practice for Registered Nurses in Nova Scotia. Halifax, Nova Scotia: Author.
- College of Registered Nurses of British Columbia and College of Licensed Practical Nurses of British Columbia (December 2006). Operating Room LPNs in BC: Utilization, Role, Scope, Competencies and Qualifications.
- Capital Health District: Halifax, Nova Scotia (2010). LPN Circulating Role Competencies.
- Drain, C.B. & Odum-Forrean, J. (2009) Perianesthesia Nursing a Critical Care Approach (5th edition). St. Louis: Saunders.

- Goodman, B. MHS, RN, CPAN, CAPA (2009). ASPAN Competency Based Orientation & Credentialing for RN's in Perianesthesia Settings.
- Health Professions Regulatory Network. (2008). Position Statement on interprofessional collaborative practice. Halifax, NS: Author.
- Interior Health Surgical Services (October 2011). Operating Room Licensed Practical Nurse (LPN)- Competencies.
- Izaak Walton Killam Health Center (2010). Adult Surgical Perioperative Licensed Practical Nurse (LPN): Collaborative Care Guidelines. Halifax, Nova Scotia.
- LeClerc, C. M., Doyon, J., Gravelle, D., Hall, B., & Roussel, J. (2008). The autonomous-collaborative care model: Meeting the future head on. *Nursing Research*, 21(2), 63-75.
- Licensed Practical Nurses Act, c.17. (2006) Statues of Nova Scotia. Halifax, NS: Government of Nova Scotia.
- McGraw-Hill Company (2002). *Concise Dictionary of Modern Medicine*. Columbus, OH: The McGraw-Hill Companies, Inc.
- National Association of PeriAnesthesia Nurses of Canada. (2011). *Standards of Practice*, 2nd Edition. Oakville, Ontario: Author
- Odom-Forren, J & Watson, D. (2005). *Practical guide to moderate sedation/analgesia*, 2nd Ed. Washington: Elsevier Mosby in National Association of PeriAnesthesia Nurses of Canada: *Standards of Practice* (2011), p.230.
- Operating Room Nurses Association of Canada (2011). *Standards, Guidelines and Position Statements for Perioperative Registered Nursing Practice*.
- Registered Nurses Act, c.21. (2006) Statues of Nova Scotia. Halifax, NS: Government of Nova Scotia.
- Schreb, C. (2001). *Describing nursing effectiveness through standardized nursing languages and computerized clinical data*. Digital Dissertatives (AAT 3034148).
- The Cleveland Clinic Foundation. (2009). Retrieved from http://my.clevelandclinic.org/services/anesthesia/hic_asa_physical_classification_system.aspx
- White, P. & Pringle, D. (2005). Collecting patient outcomes for real: The nursing and health outcomes project. *Nursing Leadership*, 18(1), 26-33.

APPENDIX A

According to the *Guidelines: Effective Utilization of RNs and LPNs in a Collaborative Practice Environment (2012)*, Registered Nurses, Licensed Practical Nurses and managers must be aware that effective decisions to match client needs with either a registered nurse or a licensed practical nurse, should be based on the following equally important factors: the client acuity, the scope of practice of the nursing role, the nurses' own individual competence, the scope of employment and the practice environment (e.g. number of nursing resources and allied health team members).

Professional Conduct	RN	LPN
Identifies learning needs and seeks opportunities for improvement.	X	X
Accountable for actions and decisions at all times.	X	X
Practices according to applicable Standards for Nursing Practice, Code of Ethics and Perioperative standards.	X	X
Maintains knowledge of current DHA/IWKs policies and procedures.	X	X
Practices according to CRNNS Standards.	X	-
Practices according to CLPNNS Standards.	-	X
Accepts and gives feedback in a positive and respectful manner.	X	X
Act as a role model.	X	X
Arrives on time to assigned OR suite and appears mentally prepared for shift.	X	X
Takes breaks appropriately and within the scheduled times.	X	X
Completes applicable forms for any adverse event.	X	X
Aware of methods of communication (i.e. paging system, phone, intercoms, etc.).	X	X

Room Set Up	RN	LPN
Adheres to Operating Room Dress Code.	X	X
Collaborates with nurses in the room to determine scrub and circulating opportunities.	X	X
Documents applicable times and any delay codes	X	X
Ensures that suction, lights, electrosurgical units are functioning and communicates any concerns to team members.	X	X
Remove and report any malfunctioning equipment	X	X
Ensures any required furniture and equipment are available as well as IV solutions and anesthesia equipment.	X	X
Checks case carts and ensures appropriate instrumentation and supplies are available.	X	X
Notifies other disciplines if and when they are required (i.e. radiology, pathology, etc.).	X	X
Ensures availability of implants or special equipment if possible in collaboration with the surgeon(s).	X	X
Participates in Phase 1 “Check In” of the Surgical Safety Checklist	X	X
Creating a Sterile Field	RN	LPN
Checks table surfaces for wetness or dust before placing sterile bundles on them.	X	X
Ensures integrity of sterile containers/packages and sterilization indicators prior to and after opening them.	X	X
Opens all types of sterile supplies (containers, peel pouches, bundles) according to principles of asepsis.	X	X
Does not leave opened sterile supplies unattended.	X	X
Takes corrective action when breaks in aseptic technique occur.	X	X
Opens and adds solutions and medications to the sterile field	X	X
Remains at least one foot from the sterile field.	X	X
Fiscally and environmentally responsible - Only opens items known to be used consistently (determined through collaboration between scrub and circulating nurses).	X	X

Focused Assessment	RN	LPN
Introduces self to client in pre-op area or outside OR suite for focused assessment.	X	X
Determines client's level of consciousness/ability to effectively communicate.	X	X
Review and implement plan of care	X	X
Refer to plan of care and compare actual findings to expected findings	X	X
Develop plan of care based on assessment findings and proposed surgery	X	-
Consult appropriate care provider when assessment findings: 1) Are not anticipated, changed or new 2) Client is not achieving intended outcomes 3) Status is becoming variable or less predictable	X	X
Provides emotional support and information to the client and family. Determines clients coping mechanisms including support systems.	X	X
Verifies pre-operative checklist is complete with the following (but is not limited to): valid consent, history and physical, test results, requirements and availability for blood products, NPO status, etc.	X	X
Retrieve/view test results, x-rays, old charts, etc.	X	X
With the client confirm identity, procedure, operative site marked (if applicable), allergies, presence of prosthesis/implants, jewellery, dentures, cultural concerns and any other pertinent information.	X	X
Communicates with nurses in the room pertinent information collected during the focused assessment (i.e. allergies, operative site, psychological state/anxiety level, mobility, etc.).	X	X
Collaborates with the client and interprofessional team to develop healthcare goals and outcomes.	X	X
Document relevant assessment information in client chart.	X	X
Participates in Phase 2 "Time Out" of the Surgical Safety Checklist, when applicable	X	X

Surgical Count	RN	LPN
Performs count according to DHA/IWK Operating Room Count and Incorrect Count policies.	X	X
Performs extent of surgical counts in accordance with DHA/IWK policy	X	X
Performs surgical counts	X	X
When a sponge or suture package contains an incorrect number, circulator bags and removes from OR suite.	X	X
Counts off, bags and retains sponges in units as issued (i.e. 5 or 10).	X	X
Circulating nurse directs the flow of closing count(s) following the order of items on count record.	X	X
Legibly records all counted items.	X	X
Completes applicable forms for any adverse event, if applicable	X	X
Assisting Anesthesia	RN	LPN
Assist anesthesiologists with:		
• Clients have an awake intubations	X	-
• Clients with difficult airways	X	-
• Clients with facial/neck trauma; deformities	X	-
Stable /predictable clients - undergoing:		
• General anesthetic	X	X
• Local anesthetic	X	X
• Conscious sedation	X	X
• Spinal	X	X
• Epidural	X	X
• Blocks	X	X
Unstable/unpredictable clients	X	-

Document Anesthesia in and start times	X	X
Ensures clean IV, endotracheal tube (ET), 20cc syringe, functioning laryngoscope and other equipment/lines as required.	X	X
Safe transfer of client to OR table or make comfortable on stretcher/bed. Untie gown, ensure client is not lying on gown/blankets, provide warm blankets, etc.	X	X
Apply the safety strap and/or remains at the bedside until client fully anaesthetized.	X	X
Stays with client and provides emotional support.	X	X
Apply monitoring equipment.	X	X
Communicates all actions to the client at all times.	X	X
Assists anesthesia with IV initiation (passes tape, starts flow, etc.).	X	X
Provides a quiet environment during intubation.	X	X
Assist with head tilt/burp/cricoid pressure as requested by anesthesia.	X	X
Passes ET tube/LMA to anesthetist and firmly holds in place until secured. Under direction of anesthetist instills air into ET tube.	X	X
If tube placement is not correct, prepares for re-intubation or assists with ventilation as directed by anesthesia.	X	X
Inserts urinary catheter as required and documents same.	X	X
Documents type of anesthetic used.	X	X
Notes physiological status and reports changes to anesthetist.	X	X
Gets additional assistance as necessary, if client condition changes.	X	X

Supine	RN	LPN
Identifies appropriate table and/or table attachments and ensures are available.	X	X
Demonstrates ability to apply table attachments.	X	X
Ensures safe transfer of client (i.e. locking table and stretcher/bed, use of transfer device, appropriate number of staff, etc.).	X	X
Apply the safety strap and/or remains at the bedside until client fully anaesthetized.	X	X
Safely positions arms at client's sides or on padded arm boards.	X	X
Familiar with controls (i.e. raise/lower bed, trendelenburg, tilting right/left, etc.).	X	X
Recognizes and implements action to address problem areas such as bony prominences (i.e. elbows, heels, coccyx, hips, etc.).	X	X
Checks that arms and legs are not over extended >90°, unless required and pads and secures them.	X	X
Ensures height of arm is the same as bed mattress	X	X
Completes head to toe check ensuring appropriate positioning measures fully achieved.	X	X
Maintains client warmth and dignity.	X	X
Communicates and appropriately documents client positioning.	X	X

Prone	RN	LPN
Identifies appropriate table and/or table attachments and/or frames and ensures are available.	X	X
Demonstrates ability to apply table attachments.	X	X
Apply the safety strap and/or remains at the bedside/stretchers until client fully anaesthetized.	X	X
Familiar with controls (i.e. raise/lower bed, trendelenburg, tilting right/left, etc.).	X	X
Collaborate with anesthesia regarding airway, venous/arterial access and physiological changes due to position.	X	X
Ensures safe transfer of client (i.e. locking table and stretcher/bed, use of transfer device, appropriate number of staff, devices in place, etc.).	X	X
Ensures arms are safely secured at the client's sides or rolled in a natural arc and placed on padded arm boards at the side of the head.	X	X
Recognizes and implements action to address problem areas such as bony prominences (i.e. elbows, toes, hips, etc.), breasts, genitalia, external lines/bags/tubes.	X	X
Checks that arms and legs are not over extended, unless required and pads and secures them.	X	X
Completes head to toe check ensuring appropriate positioning measures fully achieved.	X	X
Maintains client warmth and dignity.	X	X
Communicates and appropriately documents client positioning.	X	X

Lithotomy	RN	LPN
Identifies appropriate table and/or table attachments and ensures are available.	X	X
Demonstrates ability to apply table attachments.	X	X
Ensures safe transfer of client (i.e. locking table and stretcher/bed, use of transfer device, appropriate number of staff, etc.).	X	X
Safely positions arms at client's sides or on padded arm boards.	X	X
Apply the safety strap and/or remains at the bedside until client fully anaesthetized.	X	X
Familiar with controls (i.e. raise/lower bed and foot of bed, trendelenburg, tilting right/left, etc.).	X	X
Ensures legs are raised and positioned simultaneously. At end of case lowers legs simultaneously.	X	X
Collaborate with anesthesia regarding airway, venous/arterial access and physiological changes due to position.	X	X
Recognizes and implements action to address problem areas such as bony prominences (i.e. elbows, heels, coccyx, hips, etc.).	X	X
Checks that arms and legs are not over extended, unless required and pads and secures them.	X	X
Completes head to toe check ensuring appropriate positioning measures fully achieved.	X	X
Maintains client warmth and dignity.	X	X
Communicates and appropriately documents client positioning.	X	X
When raising foot of bed at the end of the case ensures fingers are protected from potential crush injury (if arms are positioned at client's side).	X	X

Lateral	RN	LPN
Identifies appropriate table and/or table attachments and/or frames and ensures are available.	X	X
Demonstrates ability to apply table attachments.	X	X
Ensures safe transfer of client (i.e. locking table and stretcher/bed, use of transfer device, appropriate number of staff, devices in place, etc.).	X	X
Apply the safety strap and/or remains at the bedside/stretcher until client fully anaesthetized.	X	X
Collaborate with anesthesia regarding airway, venous/arterial access and physiological changes due to position.	X	X
Familiar with controls (i.e. raise/lower bed, trendelenburg, tilting right/left, etc.).	X	X
Ensures arms are safely positioned and padded.	X	X
Recognizes and implements action to address problem areas such as bony prominences (i.e. elbows, knees, ankles, hips, etc.) and genitalia.	X	X
Completes head to toe check ensuring appropriate positioning measures fully achieved.	X	X
Maintains client warmth and dignity.	X	X
Communicates and appropriately documents client positioning.	X	X

Park Bench	RN	LPN
Identifies appropriate table and/or table attachments and ensures are available.	X	X
Demonstrates ability to apply table attachments.	X	X
Ensures safe transfer of client (i.e. locking table and stretcher/bed, use of transfer device, appropriate number of staff, etc.).	X	X
Apply the safety strap and/or remains at the bedside until client fully anaesthetized.	X	X
Safely positions arms at client's sides or on padded arm boards.	X	X
Familiar with controls (i.e. raise/lower bed, trendelenburg, tilting right/left, etc.).	X	X
Collaborate with anesthesia regarding airway, venous/arterial access and physiological changes due to position.	X	X
Recognizes and implements action to address problem areas such as bony prominences (i.e. elbows, heels, coccyx, hips, etc.).	X	X
Completes head to toe check ensuring appropriate positioning measures fully achieved.	X	X
Maintains client warmth and dignity.	X	X
Communicates and appropriately documents client positioning.	X	X

Skin Preparation (Prep)	RN	LPN
Confirms correct surgical site with consent and site marking prior to prepping.	X	X
Selects appropriate skin prep solution while considering client allergies and solution action/mechanism.	X	X
Consults the surgeon's pick sheet for skin prep preferences.	X	X
Documents client skin condition prior to prepping and/or hair removal.	X	X
Confirms with anesthesia that prepping may proceed.	X	X
If client awake, informs the client of steps involved.	X	X
Places drip sheets under prep area to absorb excess prep solution.	X	X
If holding the limb, ensure safe movement of client limb.	X	X
Removes drip sheets once prep complete without contaminating the prepped area.	X	X
If required, performs hair removal using electric clippers.	X	X
Follows principles of asepsis during skin prep (as per ORNAC standards).	X	X
Documents skin prep solution, who prepped and skin condition post-procedure.	X	X
Pneumatic Tourniquet	RN	LPN
Ensures unit is functioning prior to case.	X	X
Collects supplies – correct cuff size (sterile/unsterile), webril and/or eschmark.	X	X
Confirm with the surgeon pressure setting required for the case.	X	X
Ensures prep solution is not pooled around cuff.	X	X
Announces tourniquet time audibly to the surgeon at the following intervals: one hour, 1.5 hours, and 2 hours (very rare).	X	X
Document tourniquet site(s), pressure settings, time of inflation/deflation, BME number, and notification to surgeon of elapsed time and skin condition following cuff removal.	X	X

Electrocautery (ESU)	RN	LPN
Ensures unit is functioning prior to case.	X	X
Collects supplies – foot pedals, grounding pads, adaptors, smoke evacuator filters/tubing, accessories, etc.	X	X
Confirm settings with the surgeon prior to case.	X	X
Aware of client safety concerns related to this equipment.	X	X
If Megapad is not being used, applies grounding pad after client is positioned and prior to prepping and draping. Ensures grounding pad is well adhered to skin surface.	X	X
Applies grounding pad to well-muscled area as close to operative site as possible. Avoids bony prominences, skin folds, scar tissue, prostheses, skin rashes and areas of impaired circulation.	X	X
Places foot pedal for use in endoscopic, or with bipolar cautery.	X	X
Documents skin condition prior to placement of grounding pad.	X	X
Document skin condition after removal of grounding pad.	X	X
Documents BME # and setting on client health care record.	X	X
If Megapad is being used, ensure proper positioning (not under VAC pack, positioning devices) and that Megapad is connected to the ESU.	X	X

Circulating Role (During Procedure)	RN	LPN
Immediately prior to incision, participates in phase 2 “Time Out” of the Surgical; Safety checklist	X	X
Documents Procedure Start time	X	X
Effectively communicates and collaborates with interdisciplinary team throughout the case.	X	X
Notes/monitors physiological status and reports changes to anesthetist.	X	X
Ability to prioritize multiple requests from members of the interdisciplinary team.	X	X
Ability to anticipate the needs of the surgical team.	X	X
Responds to and prioritizes requests/needs of the surgical team.	X	X
Takes action to prevent and/or respond to potential or adverse event or emergency situation. Recognizes the need to seek assistance.	X	X
Documents any and all unusual incidents with appropriate follow up action.	X	X
Implements routine precautions and monitors aseptic techniques and infection control practices.	X	X
Ensures bed/stretchers available prior to end of case.	X	X
Demonstrates ability to trouble shoot during equipment malfunctions and seeks assistance if needed.	X	X
Calls for and checks blood products with RN, LPN or anesthesiologist according to DHA/IWK policy.	X	X

Specimens	RN	LPN
Ensures proper labeling and container type for specimens. Confirms with surgeon the identity and testing required.	X	X
Ensures appropriate requisitions are available and completed. Ensures specimen labels and requisition information match.	X	X
Ensures multiple specimen containers are labeled and numbered sequentially. Ensures specimen name and number are identified on requisition(s).	X	X
Adds appropriate preservative, if needed.	X	X
Confirms with lab or current reference when unsure of processing requirements.	X	X
Prevents specimen from drying.	X	X
Assures necessary consent and other protocol are followed during special testing or research projects.	X	X
Ensures explants are not released to clients.	X	X
Follows routine precautions when handling specimens.	X	X
Documents type and number of specimens on client health care record and log book.	X	X
Participates in Phase 3 “Sign out” phase of the Surgical Safety Checklist	X	X

Circulating Role (Post Procedure)	RN	LPN
Notes procedure stop time.	X	X
Collaborates with RN to determine roles during emergence/post-surgery.	X	X
Ability to assist during emergence with a stable, predictable adult client. Remains with client.	X	X
Ability to recognize airway difficulties and anticipate needs for re-intubation is necessary.	X	X
Removes unnecessary equipment away from OR table.	X	X
Recognizes the need to seek assistance.	X	X
Assists scrub nurse with instruments and supplies.	X	X
Assists surgical team with removal of drapes and gowns.	X	X
Remove grounding pad, if applicable, and note skin condition, document.	X	X
Clean prep solution/blood from client's skin.	X	X
Assists with application of dressings/casts.	X	X
Maintains client dignity and warmth.	X	X
Coordinating support staff/equipment for safe client transfer. Ensure soiled sheets are not transferred with client.	X	X
During transfer and repositioning assess skin condition.	X	X
Ensures side rails/bedrails are raised and secured.	X	X
Assist with transferring client to designated unit.	X	X

APPENDIX B

The scrub role in the operating room focuses on all the aspects of the sterile field. The scrub nurse creates his/her sterile work space and the sterile field in which all sterile members of the team function. This is done in collaboration with the surgeon, and consideration of the type of surgery. Knowledge of aseptic technique as well as good communication skills are necessary to develop the surgical conscience required for the scrub role.

The scrub nurse must also be knowledgeable in the use and function of surgical instruments as well as the basic techniques of surgical procedures. This knowledge enables the scrub nurse to anticipate the needs of the surgical team as well as respond to any unexpected events or complications.

Familiarization with the ORNAC Standards, CCPNR and provincial competencies for registered Nurses and licensed practical nurses as well as institutional policy and procedures related to the scrub role assists the learner in clinical decision making thus promoting the goal of becoming an efficient scrub nurse.

Surgical Hand Scrub	RN	LPN
Surgical Hand Scrub with Brush		
Secures all head and facial hair, jewelry, and clothing	X	X
Applies mask and protective eye wear	X	X
Dampens hands and forearms under running water, then applies soap/detergent	X	X
Washes hands and forearms and rinses prior to beginning surgical scrub	X	X
Opens sponge, uses nail stick to clean under nails, under running water, then discards stick	X	X
Scrub nail tips with bristle side of scrub brush. Using sponge side of scrub brush proceeds to fingers (all sides of each digit) including web spaces. Then scrub palm and back of hand in circular motion	X	X
Scrubs, in circular motion, each forearm to elbow. Discards sponge. Rinses from the hands to the forearms	X	X
Holds hands above elbows at all times	X	X
Keeps scrub attire dry. Hands and arms held in front of body with elbows flexed while proceeding to theatre	X	X
Drying scrubbed hands		
Only if using a surgical scrub with a brush	X	X
Removes towel from the sterile field with one hand without contaminating the gown with water dripping from hands	X	X
Step away from the sterile field	X	X
Leans slightly forward and holds the towel and hands away from the body and clothing	X	X
Dries one hand, and then advances up the forearm to elbow	X	X
Reverses towel and dries opposite hand and forearm	X	X
Discards towel in appropriate receptacle keeping hands above waist level	X	X

Brushless Surgical Hand Scrub

Secures all head and facial hair, jewelry and clothing	X	X
Applies mask and protective eye wear	X	X
Washes hands one minute with soap, concentrates on nails, fingers and forearms	X	X
Uses nail stick to clean under nails	X	X
Rinses well	X	X
Completely dries hands and arms with paper towel	X	X
Cups one hand under the dispenser and uses opposite elbow to dispense a measure of cleaning solution	X	X
Soaks the tips of the fingers in the solution, transfers solution to the other hand and soaks fingertips	X	X
Uses remaining cleaning solution to rub all areas of the hands, to the wrist (1 – 1½ minutes)	X	X
Cups hand under the dispenser and dispense a measure of cleaning solution	X	X
Washes arms up to the elbow, wets all surfaces (1½ minutes)	X	X
Dispenses cleaning solution third time and rubs on hands while moving into the OR	X	X
Allows cleaning solution to dry completely before proceeding to gown and glove	X	X

Gowning	RN	LPN
Holds the gown at the shoulders and away from body, allowing the gown to unfold. Do not allow the outside of the sterile exterior to touch your clothing or body	X	X
Slips both hands into armholes at the same time, keeping the hands at shoulder level and away from body	X	X
Grasps gown with both hands and removes it from the sterile wrap by lifting straight up and stepping away from the wrapper. The inside of the gown should face the wearer	X	X
Pushes hands and arms into gown sleeves until the hands reach the proximal end of the cuff	X	X
The circulating nurse pulls the gown over the shoulders and ties the back of the gown	X	X
After gloving, hands the tab (or paper glove cover) attached to the side tie of the gown to the circulating nurse	X	X
Turns 360°	X	X
Retrieves the side tie from the circulating nurse and completes tying the ends together	X	X

Gloving	RN	LPN
Keeps hands inside sleeves at proximal cuffs	X	X
The scrub nurse grasps the sterile gloves from the circulator and opens the glove wrapper on the sterile field created from the gown's outer wrapper	X	X
The glove for your non-dominant hand should be donned first. Pick the glove up using the thumb and index finger of your hand which is still inside the sleeve of the gown	X	X
Place the glove on the forearm of the hand to be gloved. The glove should be palm down with the thumb aligned with your thumb and the fingers pointing toward the elbow. The inside cuff of the glove should be parallel to the cuff of the gown	X	X
Secure the glove by grasping the ridged edge of the <i>inner side of the cuff</i> with the thumb and forefinger of the hand to be gloved. Grasp the ridged edge of the <i>outer side of the cuff</i> of the glove with the thumb and fingers of your dominant hand, which also is still inside the sleeve of the gown	X	X
Stretch the cuff away from your forearm to create a pocket to push your hand into	X	X
As the glove is pulled over your hand move your hand up through the gown cuff and into the glove	X	X
If your hand has not completely entered the glove, use your non-gloved hand (still in the gown cuff) to push your hand through into the glove by pulling on the cuff	X	X
Now repeat the procedure for the other hand	X	X
Use the gloved hand to grasp the second glove and lay it onto the forearm with thumb facing the floor and fingers pointed to the elbow. Secure the glove by grasping the ridged edge of the <i>inner side of the cuff</i> with the thumb and forefinger of the hand to be gloved. Grasp the ridged edge of the <i>outer side of the cuff</i> of the glove with the thumb and fingers of the hand which is already gloved	X	X
Stretch the cuff away from your forearm to create a pocket to push your hand into	X	X
As the glove is pulled over your hand move your hand up through the gown cuff and into the glove. Adjust the fingers after both gloves are on	X	X
If your hand has not completely entered the glove, use your non-gloved hand (still in the gown cuff) to push your hand through into the glove by pulling on the cuff	X	X

Gowning and Gloving Others	RN	LPN
----------------------------	----	-----

Gowning: Team Members

Turns the inside of gown toward the person to be gowned	X	X
Grasps gown so that both hands hold the gown several inches below neckline and that the gown covers gloved hands by forming a cuff	X	X
Holds the gown until the person to be gowned has placed his/her forearms into gown sleeves and then step away	X	X
Circulating nurse ties the back of the gown	X	X

Assisting gloving

Holds glove under cuff with palm of glove pointing toward the team member	X	X
Stretches the cuff open and keeps thumbs outward	X	X
Pulls glove upwards onto the arm above the wrist	X	X
Repeats the process with the opposite hand. The scrub nurse may allow the team member to assist with the gloving of the second hand	X	X

Correcting a Break in Asepsis	RN	LPN
-------------------------------	----	-----

Initial Set Up

Circulator removes the scrubbed person's gown and then their gloves without touching the scrubbed person's hands	X	X
The circulator opens a new gown and gloves and the scrubbed person re-gowns and close gloves	X	X

During the Surgical Procedure

Option #1: Assisted-gloving

The circulator removes the scrubbed person's gloves, ensuring the cuff of the gown remains at the wrist level	X	X
Circulator opens a new pair of gloves and presents them to the sterile field. Another scrubbed team member assist gloves the scrub nurse	X	X

Option # 2: If it is not possible for another scrubbed team member to assist glove the scrub nurse, then the scrub nurse has two other options

Circulator removes the scrubbed person's gown and then both glove(s). The circulator opens a new gown and gloves to another table (other than the back table). The scrubbed person re-gowns and close gloves	X	X
--	---	---

Removing Soiled Gown, Glove and Mask	RN	LPN
Wipes gross bioburden from gloves with a clean wet sponge/towel	X	X
Unties external side waist tie	X	X
After back closures untied by circulator, scrub nurse grasps gown by shoulders. Pulls gown forward and off over gloved hands (This may vary from clinical sites depending on whether disposable or reusable gowns are used)	X	X
Scrub nurse keeps arms and soiled gown away from the body while the gown is folded inside out	X	X
Discards gown in appropriate receptacle	X	X
Removes remaining glove by hooking thumb on inner side of glove and pulls it off (<i>Glove to glove and skin to skin.</i>)	X	X
Discards gloves	X	X
Removes mask by untying the strings. Do not touch the mask itself. Discards mask	X	X
Washes hands	X	X
Creates and Maintains a Sterile Field	RN	LPN
Checks indicators/ integrators in/outside of sterile packs, sterile bundles, and instruments to ensure sterilization	X	X
Keeps hands and sterile items at table level	X	X
Moves tables with hands at table level or asks circulator for assistance	X	X
Moves ring stand, with hands inside the basin	X	X
Moves only from sterile to sterile areas	X	X
Changes positions with gowned persons by passing front-to-front or back-to-back	X	X
Does not change levels; either sits or stands	X	X
Does not reach over unsterile areas	X	X
Maintains (30 cm) from unsterile areas/persons	X	X
Places sterile items where they will be used with minimal handling	X	X

Instrument Preparation, Passing, and Care During Surgery	RN	LPN
Identifies the name and function of common abdominal surgical instruments	X	X
Keeps instruments together in preparation of initial count	X	X
After count complete, attaches scalpel blade to handle with needle holder	X	X
Passes scalpel handle with blade down to surgeon with scrub person's fingers grasping blade/handle attachment site and hand above blade	X	X
Maintains eye contact with scalpel when passing and announces to the surgeon that the scalpel is ready, or uses a safe zone to pass	X	X
One-handed needle recapping technique should be used to recap hypodermic needles if necessary	X	X
Hands needles to the surgeon on an exchange basis when possible	X	X
Arranges on the Mayo stand the instruments and accessory items required for starting the case	X	X
Passes ring handles of instrument, grasped at box lock by thumb and forefinger firmly into surgeon's outstretched hand and repeats name of the instrument	X	X
Passes forceps to surgeon with closed end up and tips down ready to use	X	X
Passes handle of retractors in ready-to-use position	X	X
Places peanut/pusher/cherry at end of Kelly or hemostat with small portion above tip	X	X
Folds 4x4 sponge, and places on a sponge stick	X	X
Demonstrates loading a suture by clamping needle holder on needle approximately 1/3 the distance from swage point	X	X
Works over the instrument table and contains the end of the suture material to avoid strands dropping over the edge of the table	X	X
Demonstrates proper loading of a suture for a right- and left-handed surgeon	X	X
Demonstrates passing of needle holder for a right- and left-handed surgeon	X	X
Places ligatures across surgeon's outstretched hand	X	X
Repeats the size of the suture or ligature when handing it to the surgeon	X	X

Loads hemoclips by aligning the jaws of the clip appliers to clips	X	X
Holds and passes clip appliers at the box lock to avoid losing clips	X	X
Passes instruments suitable for the depth at which the surgeon is working (long instruments for deep cavities and shorter instruments for superficial work)	X	X
Keeps instruments as clean as possible with water, not saline	X	X
Keeps the working area neat during the surgical procedure	X	X
During closure, clears unnecessary instrumentation from the Mayo stand and places like instruments together	X	X
Laparoscopic Instruments	RN	LPN
Checks that all irrigation/cleaning ports are open to ensure contact during sterilization	X	X
Closes all irrigation/cleaning ports	X	X
Checks instrument function (open, close)	X	X
Identifies the name and function of common laparoscopic instruments	X	X
Correctly assembles instruments (i.e., cautery, suction, valves) if applicable	X	X
Correctly assembles cannulas	X	X
Checks that the rubber seals are the correct size (5 mm or 10 mm) and are applied appropriately.	X	X
Assists circulating nurse to drape telescope and camera	X	X
Loads clips on clip applier (if applicable)	X	X
Passes instruments with handle to surgeon's hand and instruments closed, ready to access cannulas	X	X

Draping	RN	LPN
Organizes the client drapes in sequential order	X	X
Handles sterile drapes minimally	X	X
Drapes the frame and tray of the Mayo stand	X	X
Carries drapes to operative site above waist level	X	X
Protects the sterile gloved hands by forming a cuff from the drapes	X	X
Drapes from sterile to unsterile area	X	X
Places drapes on the side closest to self first	X	X
Places drapes allowing adequate exposure of the incision site	X	X
Places drapes with a minimum of three inches of the prepped area under drape	X	X
Places the folded edge of the drape towards the line of the incision	X	X
Proceeds around the table to drape the opposite side of the client. Does not reach across the unsterile OR bed	X	X
Completes draping procedure with a barrier drape, if indicated	X	X
Does not adjust drapes once applied	X	X
Does not remove perforating towel clip once it has been fastened through a drape. (The use of perforating towel clips may vary from clinical sites)	X	X
Places sterile drapes over soiled areas as required	X	X
Replaces drape that is torn or ripped with a new drape, or covers the hole, tear, or rip with an appropriate drape, towel, or op-site when available	X	X
After draping is complete, Mayo stand is positioned, making sure it does not rest on the client	X	X
Assists surgeon with light handles and positioning of lights	X	X
Assists surgeon with securing cords to drapes	X	X
Applies initial dressing before removing the drapes	X	X

Surgical Counts	RN	LPN
Completes a full surgical count: sponges, instruments, needles, suture reels, blades, and miscellaneous items when the following body cavities are entered (peritoneal, pelvic, retroperitoneal, and thoracic)	X	X
Completes counts:		
- prior to commencement of surgery	X	X
- at the first level of closure, depending on the cavity entered at skin closure	X	X
Performs an additional count for procedures involving a cavity within cavity, e.g., closure of bladder, stomach	X	X
Performs a full surgical count at the time of permanent relief of the scrub nurse or the circulating nurse, if appropriate to the case	X	X
Visualizes all items counted	X	X
Separates all items completely to assure full visibility by both nurses, and handles only with an instrument or gloves	X	X
Places like items together to facilitate the count	X	X
Completes count once it is started. Does not allow interruptions	X	X
Sponges	X	X
Counts all sponges used in the sterile field	X	X
Counts all types of sponges separately	X	X
Separates each sponge individually for counting	X	X
Checks for a radiopaque marker on each sponge	X	X
Pulls radiopaque marker tab on laparoscopy sponge to ensure security	X	X
Removes entire package of sponges containing an incorrect number from sterile field	X	X
Adds dressings to the table only after final count is complete	X	X
Discards medium and large sponges off the sterile field into a plastic-lined bucket for final counting, bagging and possibly weighing for blood loss	X	X

Places drapes with a minimum of three inches of the prepped area under drape	X	X
Places the folded edge of the drape towards the line of the incision	X	X
Proceeds around the table to drape the opposite side of the client. Does not reach across the unsterile OR bed	X	X
Keeps small sponges (raytex, peanuts) in containers on the sterile field to reduce chance of loss and cross contamination	X	X
Ensures small sponges such as peanuts have an instrument attached when used in a body cavity	X	X
Ensures sponges being used as packing have an instrument attached (where possible)	X	X
Sharps		
Counts all types of needles on the surgical set up, separately	X	X
Opens multi-packed needles for counts so scrub and circulating nurse can view the actual number of needles in the package. (Exposure to these multi-packed needles may vary by clinical site and surgical service)	X	X
All needles are mounted on a needle driver, sealed in packages, or placed on a magnetic pad	X	X
Accounts for all segments of a broken needle	X	X
Counts all types of needles on the surgical set up, separately	X	X
Opens multi-packed needles for counts so scrub and circulating nurse can view the actual number of needles in the package. (Exposure to these multi-packed needles may vary by clinical site and surgical service)	X	X
All needles are mounted on a needle driver, sealed in packages, or placed on a magnetic pad	X	X
Accounts for all segments of a broken needle	X	X
Used sharps are contained in a disposable, puncture-resistant container (magnetic pad)	X	X
Contains and keeps sharps available for the final count	X	X
Hands off to the circulator any contaminated sharps	X	X
Safely disposes of all sharps after completion of the case	X	X

Instruments

Keeps instruments together in preparation of initial count	X	X
Counts instruments if a body cavity is entered	X	X
Counts instruments prior to start of surgery and at the first layer of closure	X	X
Counts all instruments having component parts (screws, bolts or nuts) in a consistent manner (facility specific)	X	X
Keeps contaminated items contained and visibly arranged for counting purposes	X	X
Keeps table and Mayo stand neat to organize for closing instrument count	X	X
Keeps like instruments together, if possible, for closing count	X	X
Alerts the circulating nurse of any instruments that fall from the sterile field	X	X

Effect of Types and Techniques of Sedation and General Anesthesia

APPENDIX C

	Minimal Sedation <i>Anxiolysis</i>	Moderate Sedation <i>Analgesia</i>	Deep Sedation <i>Analgesia</i>	General Anesthesia
Responsiveness	Normal response to verbal stimulation	Purposeful response to verbal or tactile stimulation	Purposeful response following repeated or painful stimulation	Unroutable even with painful stimulus
Airway	Unaffected	No intervention required	Intervention may be required	Intervention often required
Spontaneous Ventilation	Unaffected	Adequate	May be inadequate	Frequently inadequate
Cardiovascular Function	Unaffected	Usually maintained	Usually maintained	May be repaired

Odom-Forren, J. & Watson, D (2005). *Practical guide to moderate sedation/analgesia*, 2nd ed., Washington: Elsevier Mosby in National Association of Perianesthesia Nurses of Canada: Standards of Practice, 2011, p.230.

Post Anaesthesia Care Unit RN Competency Skills Checklist

APPENDIX D

All of these competencies may not be applicable to each district health authority or the IWK. It is the responsibility of each DHA/IWK to determine the level of competencies required by the RN staff in the PACU, based on patient population and the types of surgical/anesthetic procedures performed.

Clinical Competencies

Pale blue items identify minimal skill competencies for phase 1 & 11 Perianesthesia Nursing

Good communication (Transfer of Accountability - TOA) & understanding of perioperative team

Understand the different perioperative phases of pt care: intraoperative, PeriAnesthesia -PAC, pre, post I, 11 & extended observation

Continuous, prompt & accurate communication (TOA) with primary anaesthesia care giver

High degree of critical thinking due to unpredictable nature of pts recovering from anaesthetics & independent RN action

PACU specific documentation

Assessment: Initial ABC's

Neurological Assessment: Level of Consciousness, Glasgow coma scale

Respiratory Assessment: initiate treatment for airway emergencies (apnoeas, airway obstruction, laryngospasm, bronchospasm, aspiration)

Cardio -Vascular Assessment: initiate treatment of hypotension, hypovolemia, dysrhythmias

Cardiac Monitoring: rhythm analysis, interpretation & treatment

Critical Knowledge of other Systems assessments: GI, Urological, Ortho, Gyne etc.

Sedation Assessment: somulence score

Aesthetic knowledge & review: Techniques/stages/agents

Post op scoring: i.e. Aldrete, assessment & documentation

Airway Management:

Oropharyngeal Airway Insertion & removal

Nasal Airway

Insertion & removal

Ventilation Using Bag Valve Mask (Two Person)

Ventilator management: knowledge different modes, assessment & assist RT to wean pt

Ventilation of Endotracheal Tube Using Manual Resuscitation Bag (MRB)

Open/closed Endotracheal or Tracheotomy Tube Suctioning

Endotracheal Tube Tie and Position Change

ETT Extubation

Laryngeal mask airway (LMA) assess & removal

Pain/Analgesic Assessment:

Pain scales and documentation

Pain Control / APS Modalities:

PCA

Epidural infusion

Initiate SQ butterfly: narcotics

Continuous peripheral nerve block (CPNB)

Direct IV Medications Administration & titration: reversal agents, narcotics, antiemetics, sedatives, steroids, neuromuscular blockers**Pain assessment** & treatment of opioid tolerant patients**Post spinal:** assessment, dermatome levels & management of spinal complications**Post Op Nausea & Vomiting** perioperative assessment & treatment with different techniques & medication modalities**Critical Care medication** infusions titration & administration i.e. dopamine, phenylephrine

Knowledge of current

1. **BLS**2. **ACLS** protocols & treatments. Certification if no code team available

Administer 12 lead EKG

Arterial Line: calibrating, monitoring & Withdrawal of specimens

ABGs: interpretation & reporting

Arterial puncture for ABG gases

Various Central lines /CVP: admin meds & continuous infusions. Calibrating, monitoring & withdrawal of specimens

Fluid volume status & prompt treatment i.e. hypovolemia

Blood Collection by Venipuncture

Assessment & management of **Post op haemorrhage & shock**

Blood transfusions: initiate & monitor for reactions/treatments

Drains assessment & management of various post op i.e. jpratt, hemovac, stints etc...

Chest tube drainage systems assessments, monitoring & reporting

Surgical specialty knowledge: postop care of incisions & dressings
Prompt & accurate communication with different surgical services

Includes family & significant others post op progress. Visitation allowed

Department of Anaesthesia PACU Discharge Scoring Assessment Criteria completed by RN/
independent of physician on pt discharge i.e. mod Aldrete –PACU, PADDs -DS

Good communication (TOA) to next level of care team & /or responsible care giver

Adapted from CDHA PACU Competency Skills Checklist (developed by Simone Towle, RN, BScN, Clinical Nurse Educator, Capital District Health Authority. (Drain & Odam-Forren, 2009; Gooden, 2009) and ASPAN Competency Based Orientation & Credentialing for RN's in Perianesthesia Settings, Barbara Godden MHS,RN,CPAN,CAPA (2009).