



THE  
COLLEGE  
OF  
PHYSICIANS  
AND  
SURGEONS  
OF  
ONTARIO

# INDEPENDENT HEALTH FACILITIES

## Clinical Practice Parameters and Facility Standards



Hemodialysis – June 2018

# The College of Physicians and Surgeons of Ontario

## Vision Statement

Quality Professionals, Healthy System, Public Trust

## Our Mandate

Build and maintain an effective system of self-governance.

The profession, through and with the College, has a duty to serve and protect the public interest by regulating the practice of the profession and governing in accordance with the Regulated Health Professions Act.

## Our Vision Defined

***Quality Professionals, Healthy System, Public Trust.***

Our new vision is the framework by which we organize ourselves.

It guides our thinking and actions into the future. It defines not only who we are, but what we stand for, the role we see for ourselves, our critical relationships, in what system we work, and the outcomes we seek.

Each component of our vision is defined below:

**Quality Professionals** – as a profession and as professionals, we recognize and acknowledge our role and responsibility in attaining at a personal, professional, and at a system-level, the best possible patient outcomes.

We are committed to developing and maintaining professional competencies, taking a leadership position on critical issues that impact the performance of the system, and actively partner to provide tools, resources, measurement, to ensure the optimal performance at all levels of the system.

**Healthy System** – the trust and confidence of the public and our effectiveness as professionals is influenced by the system within which we operate. Therefore, we, as caring professionals, are actively involved in the design and function of an effective system including:

- accessibility
- the interdependence of all involved
- measurements and outcomes
- continued sustainability

**Public Trust** – as individual doctors garner the trust of their patients, as a profession we must aim to have the trust of the public by:

- building positive relationships with individuals
- acting in the interests of patients and communities
- advocating for our patients and a quality system

## **Our Guiding Principles**

Integrity, accountability, leadership and cooperation

The public, through legislation, has empowered the profession to regulate itself through the College.

Central to the practice of medicine is the physician-patient relationship and the support of healthy communities. As the physician has responsibility to the patient, the profession has the responsibility to serve the public through the health-care system.

To fulfill our vision of quality professionals, healthy system, public trust we will work to enhance the health of the public guided by professional competence and the following principles:

**Integrity** – in what we do and how we go about fulfilling our core mandate:

- Coherent alignment of goals, behaviours and outcomes;
- Steadfast adherence to a high ethical standard.

Accountability to the public and profession – we will achieve this through:

- An attitude of service;
- Accepting responsibility;
- Transparency of process;
- Dedicated to improvement.

**Leadership** – leading by proactively regulating our profession, managing risk and serving the public.

**Cooperation** – seeking out and working with our partners – other health-care institutions, associations and medical schools, etc. – to ensure collaborative commitment, focus and shared resources for the common good of the profession and public.



# Independent Health Facilities

---

## *Clinical Practice Parameters and Facility Standards*

---

*Hemodialysis – June 2018*

Members of the IHF Hemodialysis Task Force:

Dr. Steven Nadler, Chair	Ottawa
Mr. Rick Badzioch	Hamilton
Dr. Eliot Beaubien	Peterborough
Ms Janet Graham	Ottawa
Dr. William McCready	Thunder Bay
Dr. Paul Y.W. Tam	Scarborough

Published and distributed by The College of Physicians and Surgeons of Ontario. For more information about the Independent Health Facilities program, contact:

Christine Grusys  
Supervisor, Practice Assessment and Enhancement  
The College of Physicians and Surgeons of Ontario  
80 College Street, Toronto, ON M5G 2E2

Toll free: 1-800-268-7096 ext. 261  
[IHF@CPSO.on.ca](mailto:IHF@CPSO.on.ca)

Wade Hillier  
Director, Quality Management Division  
The College of Physicians and Surgeons of Ontario  
80 College Street, Toronto, ON M5G 2E2

Toll free: 1-800-268-7096 ext. 636  
[IHF@CPSO.on.ca](mailto:IHF@CPSO.on.ca)

## Table of Contents

<b>Preface</b> .....	<b>i</b>
Purpose of Clinical Practice Parameters .....	i
Role of the College of Physicians and Surgeons .....	ii
Responsibilities of the College .....	ii
Updating this Document.....	iii
<b>VOLUME 1 FACILITY STANDARDS</b>	<b>2</b>
<b>Chapter 1 Introduction</b> .....	<b>3</b>
1.1 Overview.....	3
<b>Chapter 2 Staffing a Facility</b> .....	<b>5</b>
2.1 Overview.....	5
2.2 Qualifications of Physicians providing Hemodialysis services .....	6
2.2.1 Duties and Responsibilities of Physicians providing Hemodialysis Services	6
2.3 Medical Director .....	7
2.3.1 Duties and Responsibilities	7
2.4 Quality Advisor .....	8
2.4.1 Role of the Quality Advisor .....	8
2.4.2 Duties and Responsibilities of a Quality Advisor .....	9
2.5 Medical Lead(s) for IHFs licensed by the MOHLTC for more than one service .....	10
2.6 Unit Manager .....	11
2.6.1 Duties and Responsibilities .....	11
2.7 Registered Nurse (RN).....	12
2.7.1 Duties and Responsibilities .....	12
2.8 Registered Practical Nurse (RPN).....	13
2.8.1 Duties and Responsibilities .....	13
2.9 Administrative Support Personnel.....	13
2.10 Hemodialysis Technologist .....	13
2.10.1 Duties and Responsibilities	14
2.11 Hemodialysis Aide.....	15
2.11.1 Duties and Responsibilities .....	15
2.12 Dietitian.....	15
2.12.1 Duties and Responsibilities .....	15
2.13 Pharmacist .....	16
2.13.1 Duties and Responsibilities .....	16

2.14 Social Worker .....	17
2.14.1 Duties and Responsibilities .....	17
<b>Chapter 3 Facilities, Equipment and Supplies .....</b>	<b>18</b>
3.1 Overview .....	18
3.2 Facilities, Equipment and Supplies .....	18
3.2.1 Infection Prevention and Control .....	18
3.2.2 Nursing Station.....	19
3.2.3 Hemodialysis Machines.....	19
3.2.4 All Ancillary Equipment.....	19
3.2.5 Hemodialysis Treatment Area .....	19
3.2.6 Eye Wash Stations.....	19
3.2.7 Additional Space Requirements.....	20
3.2.8 Electrical Supply .....	20
3.2.9 Building and Fire Codes.....	20
3.2.10 Water Quality.....	20
3.2.11 Additional Services/Supplies.....	20
3.3 Aging Equipment.....	22
<b>Chapter 4 Policies and Procedures .....</b>	<b>23</b>
4.1 Overview .....	23
4.2 Developing Policies and Procedures.....	23
4.2.1 Facility .....	23
4.2.2 Facility Staff.....	23
4.2.3 General Procedures .....	25
4.2.4 Hemodialysis Services .....	25
4.2.5 Regional Renal Programs .....	26
4.2.6 Records and Communication/Reporting & Privacy Principles.....	26
4.2.7 Medication Storage and Handling Policies .....	27
4.2.8 Equipment Maintenance .....	27
4.2.9 Emergency Procedures and Safety Policies .....	27
4.2.10 Quality Management (See Chapter 6) .....	27
4.2.11 Infection Prevention and Control .....	27
4.2.12 Personal Protective Equipment .....	28
4.2.13 Disposal of Sharps.....	29



<b>Chapter 5 Procedure Standards .....</b>	<b>30</b>
5.1 Overview .....	30
5.2 Pre and Post-Hemodialysis Assessment .....	30
5.3 During Hemodialysis .....	30
<b>Chapter 6 Quality Management.....</b>	<b>32</b>
6.1 Overview .....	32
6.2 Quality Management Program Goals .....	33
6.3 Providing Quality Care .....	33
6.4 Components of a Quality Management Program.....	33
6.5 Monitoring the Program .....	34
<b>VOLUME 2 CLINICAL PRACTICE PARAMETERS</b>	<b>35</b>
<b>Chapter 7 Analyzing Patient Outcomes .....</b>	<b>37</b>
7.1 Overview .....	37
7.2 Patient Outcome Measures .....	37
7.2.1 Anemia .....	37
7.2.2 Infection .....	37
7.2.3 Blood Pressure Control .....	38
7.2.4 Patient Nutrition .....	39
7.3 Adequacy of Hemodialysis .....	40
7.3.1 Mineral Metabolism.....	40
7.4 Analyzing Treatment Options .....	41
7.4.1 Kidney Transplantation .....	42
7.4.2 Home Hemodialysis .....	42
7.5 Analyzing Aggregate Patient Outcomes .....	42
<b>APPENDICES</b>	<b>45</b>
<b>Appendix I Independent Health Facilities Act - Ontario Regulation 57/92 .....</b>	<b>47</b>
Quality Advisor and Advisory Committee.....	47
Standards .....	48
Records of Employees.....	48
Patient Records.....	49
Books and Accounts .....	51
Notices .....	52
Miscellaneous .....	52

**Appendix II Infection Prevention and Control (IPAC) Position Statement on Medical Gels –  
December 2017 .....53**

**Appendix III Sample Patient Satisfaction Surveys .....57**

# Preface

The Independent Health Facilities Act (IHFA), proclaimed in April 1990, last amended in 2011, gives the College of Physicians and Surgeons of Ontario the primary responsibility for carrying out quality assessments in Independent Health Facilities. These non-hospital facilities may provide some of the following insured services:

- in diagnostic facilities: radiology, ultrasound, magnetic resonance imaging (MRI), computed tomography (CT), nuclear medicine, positron emission tomography (PET), pulmonary function, and sleep studies
- in treatment or surgical facilities: one or more of a variety of procedures in peripheral vascular disease, plastic surgery, obstetrics and gynaecology, dermatology, nephrology, ophthalmology, and their related anaesthetic services and perhaps other specialties.

The College of Physicians and Surgeons of Ontario has a legislative mandate under the Act to perform quality assessment and inspection functions. This responsibility, and others set out by agreement with the Ministry of Health and Long-Term Care (MOHLTC, Ministry), contribute to the College achieving its goals as stated in the College’s Mission Statement. An important goal of the College is to promote activities which will improve the level of quality of care by the majority of physicians. The Independent Health Facilities (IHF) program helps reach this goal by developing and implementing explicit clinical practice parameters and facility standards for the delivery of medical services in Ontario, assessing the quality of care provided to patients, and as a result, promotes continuous quality improvement.

## Purpose of Clinical Practice Parameters

---

The Independent Health Facilities Clinical Practice Parameters and Facility Standards are designed to assist physicians in their clinical decision-making by providing a framework for assessing and treating clinical conditions commonly cared for by a variety of specialties. The primary purpose of this document is to assist physicians in developing their own quality management program and act as a guide for assessing the quality of patient care provided in the facilities.

---

***Note: The parameters and standards are not intended to either replace a physician’s clinical judgment or to establish a protocol for all patients with a particular condition. It is understood that some patients will not fit the clinical conditions contemplated by certain parameters and that a particular parameter will rarely be the only appropriate approach to a patient’s condition.***

---

In developing these Clinical Practice Parameters, the objective is to create a range of appropriate options for given clinical situations, based on the available research data and the best professional consensus. The product, therefore, should not be thought of as being “cast in stone”, but rather subject to individual, clinically significant patient differences.

The IHF Clinical Practice Parameters and Facility Standards, including any referenced guidelines, protocols, standards, and Acts, e.g. Canadian Standards Association (CSA), *Healing Arts Radiation Protection (HARP) Act*, Provincial Infectious Diseases Advisory Committee (PIDAC),

are used by the CPSO to inform its assessments processes, as well as decisions by the CPSO Facility Review Panels.

## **Role of the College of Physicians and Surgeons**

---

The College adopted the role of a facilitator for the development of these Clinical Practice Parameters and Facility Standards. Representatives of national specialty societies and sections of the Ontario Medical Association, and individuals with acknowledged skill, experience and expertise formed specialty-specific Task Forces.

All Clinical Practice Parameters and Facility Standards undergo an external review process.

**External Reviewers include:** Registrars of other regulatory colleges, department heads at relevant academic institutions, relevant national and provincial organizations, independent health facilities, IHF assessors and other stakeholders as determined by the relevant Task Force.

Task Force members ensure that:

- clinical practice parameters are based on the appropriate mix of current, scientifically-reliable information from research literature, clinical experience and professional consensus
- any parameter-setting exercises are done exclusively from the quality perspective. That may well mean that some of the conclusions reached could add to medical care costs
- parameters are flexible enough to allow for a range of appropriate options and need to take into account the variations in practice realities from urban to rural areas
- parameters are developed by consensus and consultation with the profession at large
- parameters provide support and assistance to physicians without boxing them in with “cookbook formulas”
- parameters are regularly updated based on appropriate research studies
- parameters help to reduce uncertainty for physicians and improve their clinical decision-making
- information on practice parameters is widely distributed to ensure that all physicians benefit from this knowledge

## **Responsibilities of the College**

---

Responsibilities of the College include:

- assessing the quality of care when requested by the Ministry. The College will maintain a roster of physicians, nurses, technologists and others to serve as inspectors and assessors as required
- inspecting the illegal charging of facility fees by unlicensed facilities when requested by the Ministry
- monitoring service results in facilities. The College’s information system will monitor individual and facility outcome performance. This is a unique feature of the IHFA, which for the first time in North America, requires facility operators to establish and maintain a system to ensure the monitoring of the results of the service or services provided in a facility

- providing education and assisting facilities so that they may continually improve the services they provide to patients. The College will work with and assist physicians in these facilities so that they can develop their own Quality Management Programs based on the parameters and standards, monitor facility performance by conducting quality assessments, work with facilities to continually improve patient services, assist in resolving issues and conducting reassessments as necessary

## Updating this Document

---

These parameters and standards are subject to periodic review, and amendments may be issued from time to time. Notifications of such updates will be mailed automatically to all relevant Independent Health Facilities. A comprehensive review and update of the parameters and standards will be undertaken at intervals not greater than five years. The external review process will be repeated to validate the new parameters as they are developed.

---

***Note: Facilities must remain up-to-date with all information contained in this document, including externally-sourced material, such as content from outside organizations, as well as information made available via hyperlinks. In addition, while the CPSO reviews and updates externally sourced materials and hyperlinks in this document at regular intervals, it is possible that links may become broken or invalid over time. If that occurs, facilities are encouraged to source the updated links on their own.***

---



# **Independent Health Facilities: Clinical Practice Parameters and Facility Standards**

## *Hemodialysis*

---

**VOLUME 1   FACILITY STANDARDS**

---





# Chapter 1 Introduction

## 1.1 Overview

---

Chronic Kidney Disease (CKD), kidney dysfunction prior to the need for renal replacement therapy) has become increasingly prevalent as the population ages and people survive with other significant illnesses, with a consequent increase in the number of patients requiring care for end-stage kidney disease (ESKD), kidney dysfunction at the level that requires renal replacement therapy to maintain life). Some patients may choose comprehensive conservative renal management, but for those people who choose to undergo renal replacement therapy, this includes dialysis and/or transplantation. While kidney transplantation is considered the treatment of choice for all suitable patients, not every person with ESKD can receive a transplant: the number of kidneys available annually is less than the number of new patients entering dialysis programs, and many patients are not candidates for transplantation due to severity of comorbid illnesses. Also, an increasing number of patients with a transplant return to dialysis when their transplanted kidney no longer functions well enough. Thus, most patients with ESKD depend on dialysis, at some point in their disease process, to maintain life.

Despite efforts at the provincial, regional, and local renal program level, to encourage patients and provide resources for them to do independent dialysis (i.e. dialysis at their place of residence), many patients are not able to do this type of dialysis. Thus, hemodialysis outside one's place of residence remains a major form of dialysis for patients in Ontario. Providing this therapy outside of a hospital setting has potential for improving patients' sense of well-being, by not having them in a hospital setting. Other patient-centred advantages may also derive from such therapy. These include being able to receive their hemodialysis closer to home, and providing them more choice in terms of where and how to receive their therapy. In addition, use of hospital-based hemodialysis units should, when possible, be reserved for patients with multiple complicating illnesses that require closer attention and more frequent changes to therapy. Thus, the existence of IHFs to deliver chronic hemodialysis in a non-hospital setting continues to provide benefits to many patients.

This document outlines the Clinical Practice Parameters and Facility Standards for Independent Health Facilities that deliver hemodialysis to patients with ESKD.

Despite advances in therapy, both medically and technologically, mortality rates are high for patients on hemodialysis. While the reasons for this high mortality rate have not been elucidated completely, certainly various factors associated with hemodialysis have been linked to the overall poor outcomes. Thus, it is important for IHF Hemodialysis units to ensure that the highest and most up to date quality care is provided to all its patients. Given the advanced technology of hemodialysis, the nature of such treatments, the circulation of blood outside patients' bodies, and other factors, attention to details of safety, for both patients and staff, is also of paramount importance.

As is the case with any patient with any medical condition, the decision as to where a patient should receive care is an individual one, based on the patient's unique circumstances, and made by his or her physician in consultation with other health care professionals providing services to the patient. Clearly the specific services and resources available at specific IHF Hemodialysis Units will be important factors in this regard. To be more specific, the decision of an IHF to provide or not provide hemodialysis to a patient cannot be based solely on a "category" or "level" assigned to the patient based on any classification scheme.

In relation to the above, many patients requiring hemodialysis have other comorbidities and inter-current illnesses that require medical and/or allied health professional interventions. These conditions do not necessarily affect the patients' medical stability while on hemodialysis. Present day reality is that many of these interventions can be, and are provided, in the hemodialysis units while patients are receiving their treatments. These interventions include (not exclusively) wound care, administration of intravenous antibiotics, provision of appropriate isolation and other precautions to prevent spread of infection, supply of oxygen, etc. None of these interventions alter patients' stability on hemodialysis. These patients are just as suitable for treatment in an IHF. Thus wherever and whenever possible, recognizing that resource and other constraints may be limiting, these patients should also be considered for treatment in an IHF.

The issues related to quality and safety noted above makes it incumbent on IHF Hemodialysis units to ensure the following:

- Maintain close working relationships with their regional renal program(s) – This will help ensure patient access to various medical and allied professional services and/or resources not available at the IHF. In addition, sharing and collaboration between health care professionals at the IHF and the regional renal program will help ensure high quality, safe care.
- The time since the last edition of this document has seen the evolution of the Ontario Renal Network (ORN) into a strong organization that continues to develop guidelines, best practices, and benchmarks related to various aspects of quality of care of hemodialysis patients. While the relationship of the ORN with IHF hemodialysis units may not be as formalized as it is presently with hospital-based units, IHF hemodialysis units are encouraged to utilize the ORN outputs made available to IHFs to help guide their clinical and allied practices.
- Similarly, other organizations such as the Canadian Society of Nephrology (CSN), the National Kidney Foundation Kidney Disease Outcomes Quality Initiative (KDOQI), and Kidney Disease / Improving Global Outcomes (KDIGO) produce guidelines covering various aspects of hemodialysis-related care. In developing its Quality Assurance and Continuous Quality Improvement programs, IHF Hemodialysis units should avail themselves of these and/or other documented resources.
- When regional renal programs are unable to offer services or resources needed by the IHF, the IHF should work with the regional renal program to find alternative providers. The IHF may also wish to develop their own formal written guidelines, procedures, or protocols based whenever possible on best practices, and the services the IHF itself is able to provide.

# Chapter 2                      Staffing a Facility

## 2.1 Overview

---

Each licensee in consultation with the Quality Advisor (QA) ensures the following:

- There is a current written plan describing the organization of the facility and its services.
- There are sufficient numbers of qualified physicians, registered nurses, and other staff, to meet the facility's stated goals and objectives.
- Physicians must be licensed to practice in Ontario by the CPSO in order to refer to themselves as physicians or doctors in any setting, including an IHF. Similarly, in order to practise as a registered nurse or registered practical nurse in Ontario, the individual must be registered with the College of Nurses of Ontario (CNO).
- The duties and responsibilities of all staff are specified in job descriptions. They are kept up to date and on site.
- Documentation relating to staff credentials, certifications, courses, and other training must be kept up-to-date and on site.
- Quality Advisors, physicians, unit manager, registered nurses (RNs), registered practical nurses (RPNs), dietitians, pharmacists, social workers and licensees review their legal obligations to obtain professional liability insurance, and if it is legally required, it must be documented and maintained on site. If it is not a legal requirement, obtaining professional liability insurance may be considered, as there is potential for liability issues in IHFs.
- The Licensee, Quality Advisor and staff working in the IHF are up-to-date on the standards for infection prevention and control, and have an ongoing process to ensure current infection and prevention control practices are reflected in staff orientation/training (4.2.2), infection prevention and control policies and procedures (4.2.11), as well quality management (6.1). To meet this requirement, facilities must, at a minimum, review the following:
  - Public Health Ontario's newsletter, which informs subscribers about updates to Provincial Infectious Diseases Advisory Committee (PIDAC) documents. To sign up for newsletters, use the following link:  
<https://www.publichealthontario.ca/en/EUM/Pages/Register.aspx>
  - Public Health Ontario's Infection Prevention and Control online training courses: [IPAC Core Competencies Course](#) and [Reprocessing in Community Health Care Settings Course](#).
- Staff responsible for cleaning, disinfecting, sterilizing, and/or reprocessing of medical equipment must complete adequate education and training, including manufacturer's training. To determine appropriate training, the Quality Advisor must complete the [Checklist for Infection Prevention and Control \(IPAC\) CORE Elements in Clinical Office Practice](#) and if applicable, also complete the [Checklist for Reprocessing of Medical Equipment/Devices in Clinical Office Practice](#).
- Staff obtains education/training (which is documented and maintained on site) in areas mandated by the Ontario Government, such as the following:

- Workplace Hazardous Materials Information System 2015 (WHMIS 2015);
- Health and safety awareness;
- Workplace violence and sexual harassment, and;
- Accessibility for Ontarians with Disabilities
- There is a Joint Health and Safety Committee (based on number of workers). Refer to the [Guide for Health and Safety Committees and representatives](#).
- Staff is familiar with and understand privacy and confidentiality legislation and applicable site policies.
- At least one staff member with current Basic Life Support (BLS) certification is on site at all times during hours of operation. Documentation regarding BLS certification is maintained on site. It is expected that the training includes being certified in both theory and hands-on components.

Facilities do not need to employ all of the staff listed in this Chapter. However, at a minimum, patients receiving hemodialysis at a facility must have access to services provided by Registered Nurses, Hemodialysis Technologists, Dietitians, Social Workers, and Pharmacists. Where the facility does not employ providers of these services, agreements must be in place for provision of these services elsewhere, most likely by allied professionals at the regional renal program (also refer to 4.2.5).

## **2.2 Qualifications of Physicians providing Hemodialysis services**

---

Physicians must have a current, valid and active certificate of registration with the College of Physicians and Surgeons of Ontario.

Hemodialysis services are provided by physician(s):

- certified by the Royal College of Physicians and Surgeons in Nephrology  
or
- approved by the Registration Committee of the College of Physicians and Surgeons of Ontario to practice independently in Nephrology (Refer to the [CPSO Specialist Recognition Criteria in Ontario policy](#) for more information).

### **2.2.1 Duties and Responsibilities of Physicians providing Hemodialysis Services**

Physicians are responsible for:

- maintaining a level of competence for the range of services being offered. This is accomplished by attending courses or conferences, reviewing current literature, etc.
- contacting the Quality Advisor for advice regarding quality of care matters.
- managing any complications or problems that arise, either clinically and/or by informing the Quality Advisor as needed.
- participating in the education, training, and support of all staff.

## 2.3 Medical Director

---

The Medical Director is a physician with qualifications as a Nephrologist and is a member licensed to practice in Ontario by the College of Physicians and Surgeons of Ontario.

The Medical Director can also be the Quality Advisor (see 2.4). If the roles of Medical Director and Quality Advisor are filled by two different physicians, then either the Medical Director or the Quality Advisor must provide services in the facility.

### 2.3.1 Duties and Responsibilities

The Medical Director's responsibilities include, but are not limited to the following:

- Ordinarily providing insured services in the facility (i.e. performing patient rounds in the facility as the primary nephrologist or as part of a group practice) in order to be able to comment on the quality and standards of services provided in the facility.
- Ensuring that the policies, tools and appropriate personnel are available at the IHF to properly determine short and long-term suitability of patients receiving treatment in an Independent Health Facility (IHF), either due to medical status or the degree of medical supervision available at the IHF.
- Ensuring that all patients have access to all available forms of end-stage kidney disease management including kidney transplantation as appropriate.
- Regularly supervising the review of the clinical, biochemical, social, and psychiatric status of all patients at regular intervals (e.g. monthly unit meetings post bloodwork) by the medical team including a nephrologist and ensuring that the most responsible physician and or referring program is aware of any concerns and is addressing or has a plan to address such concerns.

---

***Note: If the Medical Director is not the patient's most responsible nephrologist, the Medical Director ensures and documents that the nephrologist is aware of any problems and is responding appropriately.***

---

- Ensuring that for each patient dialyzed at the IHF there is an established relationship with a regional renal program to transfer patients for acute hemodialysis or hospitalization. It is understood that transfers via ambulance from the IHF are based on the discretion of a paramedic dispatch, which may lead to patients being transferred to regional programs that may be unfamiliar with the patient. In such cases the Medical Director will ensure the IHF ensures a safe transfer of care to such hospital.
- Acting as a resource for patients and staff with respect to medical issues within the unit.
- Ensuring that the practice applied to all patients in the IHF meets all current standards.
- Setting the medical policies for the facility, including the physician model of care.
- Playing an active role in decisions concerning equipment and disposable purchases.
- Ensuring that all medical complications experienced by patients that compromise their ability to remain at the IHF are being addressed, documented, and tracked for statistical purposes to identify their frequency.

- Ensuring the delivery of safe patient care, including hemodialysis water quality.
- Ensuring that all medical advances in the management of ESKD patients receiving hemodialysis are assessed and implemented in the facility.
- Reviewing policies and procedures and ensures that they are in keeping with current legislative standards.
- Participating in the education, training and support of all staff.

## 2.4 Quality Advisor

---

The Quality Advisor (QA) must be a physician licensed to practice in Ontario by the College of Physicians and Surgeons of Ontario and must be:

- certified by the Royal College of Physicians of Canada (FRCPC) in Nephrology
- or**
- approved by the Registration Committee of the College of Physicians and Surgeons of Ontario to practice independently in Nephrology (Refer to the CPSO [Specialist Recognition Criteria in Ontario](#) policy for more information).

The Quality Advisor must submit the *Notice of Appointment of Quality Advisor* and *Quality Advisor Acknowledgement* forms to the Director, IHF. These forms are available at <http://www.health.gov.on.ca/en/public/programs/ihf/forms.aspx>

---

**NOTE: In instances where a facility provides more than one type of service and the Quality Advisor does not possess the appropriate specialty background associated with a particular service, then he or she must appoint a Medical Lead for each additional service (refer to 2.5).**

---

The Quality Advisor can also be the Medical Director. If the roles of Quality Advisor and Medical Director are filled by two different physicians, then either the Medical Director or the Quality Advisor must provide services in the facility.

### 2.4.1 Role of the Quality Advisor

The role of the Quality Advisor is an important one. Quality Advisors play a vital role in the overall operation of the IHF to ensure that the services provided to patients are being conducted appropriately and safely.

Each IHF licensee is responsible for operating the facility and providing services in accordance with the requirements of the IHFA. Pursuant to Ontario Regulation 57/92 under the *Independent Health Facilities Act (see Appendix I)*, “every licensee is required to appoint a Quality Advisor to advise the licensee with respect to the quality and standards of services provided in the IHF. The Quality Advisor must be a **physician** who ordinarily provides insured services in or in connection with the facility and whose training enables him or her to advise the licensee with respect to the quality and standards of services provided in the facility”.

## **2.4.2 Duties and Responsibilities of a Quality Advisor**

The Quality Advisor is responsible for advising the licensee with respect to the quality and standards of services provided. To fulfill this duty the Quality Advisor:

- Shall personally attend the facility at least twice each year, and may attend more frequently, where in the opinion of the Quality Advisor, it is necessary based on the volume and types of services provided in the facility. The visits may be coordinated as part of the Quality Advisory Committee (QA Committee) meetings.
- Shall document all visits to the facility made in connection with the Quality Advisor's role.
- Shall ensure that a qualified physician be available for consultation during the facility's hours of operation.
- Shall seek advice from other health professionals where in the opinion of the Quality Advisor it is necessary to ensure that all aspects of the services provided in the facility are provided in accordance with generally accepted professional standards and provide such advice to the licensee.
- Shall chair the QA Committee. The QA Committee shall meet at least twice a year, or more often, as needed. Regular agenda items should include: infection prevention and control; review of cases; policies and procedures; quality control matters on equipment; incidents, medical and technical issues.
- Shall ensure all QA Committee meetings are documented.
- Obtain copies of assessment reports from the licensee/owner/operator. If deficiencies were identified in the assessment, the Quality Advisor shall review same with the QA Committee and document such review. The Quality Advisor's signature is required on any written plan submitted by the licensee to the College.

The Quality Advisor shall advise the licensee on the implementation of an ongoing Quality Management (QM) Program, which should include, but not be limited to, the following:

- Ensuring ongoing and preventive equipment maintenance.
- Follow-up of interesting cases.
- Follow-up of patient and/or medical and technical staff incidents.
- Continuing education for medical and technical staff.
- Ensuring certificates of registration, BLS, etc. are current.
- Regular medical and technical staff performance appraisals.
- Patient and referring physician satisfaction surveys.

The Quality Advisor will advise the licensee, and document the provision of such advice, in connection with the following:

- **Health professional staff hiring decisions**, in order to ensure that potential candidates have the appropriate knowledge, skill and competency required to provide the types of services provided in the facility.

- **Continuing education** for all health professional staff members employed in the facility, as may be required by their respective regulatory Colleges or associations.
- **Appropriate certification** for all health professional staff members employed in the facility with the respective regulatory Colleges or associations.
- **Leadership** as may be required to address and resolve any care-related disputes that may arise between patients and health professional staff.
- **Appropriate resources** for health professional staff members employed in the facility.
- **Formal performance appraisals** for all health professional staff.
- **Technology** used in the facility, in order to ensure it meets the current standard(s) and is maintained through a service program to deliver optimal performance.
- **Establishment and/or updating of medical policies and procedures** for the facility, e.g., consultation requests, performance protocols, infection control, and standardized reports, and other issues as may be appropriate.
- **Equipment and other purchases** as may be related to patient care.
- **Issues or concerns** identified by any staff member, if related to conditions within the facility that may affect the quality of any aspect of patient care.
- **Establishing and/or updating system(s)** for monitoring the results of the service(s) provided in the facility.

#### **2.4.2.1 Quality Advisor Duty to Report to Director IHF**

If the Quality Advisor has reasonable grounds to believe the licensee is not complying with the licensee's obligation to ensure that services are being provided in accordance with the generally accepted standards and to ensure that the persons who provide services in the facility are qualified to provide those services, the Quality Advisor must inform the Director of Independent Health Facilities forthwith in accordance with the provisions and Regulations under the *Independent Health Facilities Act*.

The Quality Advisor should acknowledge, in writing, his/her role in connection with Quality Assurance.

#### **2.4.2.2 Quality Advisor Duty for Infection Control**

In order to determine appropriate infection prevention and control training of staff, the Quality Advisor must annually complete [Infection Prevention and Control's Checklist for Infection Prevention and Control \(IPAC\) CORE Elements in Clinical Office Practice](#), and, if applicable, also complete annually the [Checklist for Reprocessing of Medical Equipment/Devices in Clinical Office Practice](#) and must verify completion of relevant training by all staff. Evidence of completion of the Checklists must be maintained on file at the facility.

### **2.5 Medical Lead(s) for IHFs licensed by the MOHLTC for more than one service**

---

According to the *Independent Health Facilities Act*, facilities are required to have one Quality Advisor noted on the IHF license. For IHFs that have been licensed for more than one service such as Diagnostic Imaging/Pulmonary Function Studies/Nuclear Medicine/Sleep Medicine,



where the Quality Advisor is not a specialist in the field associated with the particular service(s), then he or she must appoint Medical Lead(s) for each additional applicable service. The Medical Lead must be a physician and either be certified by the Royal College of Physicians of Canada (FRCPC) in the specialty associated with the service, or be approved by the Registration Committee of the College of Physicians and Surgeons of Ontario to practice independently in that specialty.

The Medical Lead's role is to **assist** with IHF staff compliance with policies and procedures set out by the Quality Advisor, especially as it relates to monitoring and reporting on the quality of services.

## **2.6 Unit Manager**

---

The Unit Manager must hold a current certificate of registration as a registered nurse from the College of Nurses of Ontario and also be a certified Nephrology Nurse (CNeph(c)) or possess equivalent.

### **2.6.1 Duties and Responsibilities**

The Unit Manager's responsibilities include, but are not limited to the following:

- Overseeing the logistics for the provision of patient care.
- Facilitating patient and staff education.
- Ensuring adequate staffing based on patient acuity, occupancy and standards of care.
- Developing all the nursing policies and procedures in keeping with current legislative standards and ensuring that they are followed.
- Adhering to standards of nursing practice in accordance with the College of Nurses of Ontario and conducting regular reviews to ensure that they are met.
- Defining and maintaining clear lines of communication with all members of the health care team, community groups and organizations outside of the facility.
- Ensuring that necessary certifications are in place for nursing personnel to perform Controlled Acts as required by the *Regulated Health Professions Act* and ensuring documentation of such.
- Adhering to IPAC best practices
- Making decisions concerning equipment and disposable purchases in collaboration with the Medical Director/Quality Advisor.
- Adhering to PIDAC Best Practices for proper vaccine and medical storage; this includes maintaining a medication log to ensure that all medications administered are current, and not expired, and reordering when required
- Establishing and maintaining a quality management program in collaboration with the Medical Director/Quality Advisor.
- Managing data collection, analysis and reporting.
- Ensuring that quality standards are met and that the activities are documented.

- Balancing the conflict between fiscal responsibility to management and clinical responsibility to patients. Documents these conflicts and justifies the decisions reached.
- Participating in the education, training and support of all staff.

## **2.7 Registered Nurse (RN)**

---

The Registered Nurse must hold a current and valid certificate of registration from the College of Nurses of Ontario (CNO), and have current certification in Basic Life Support (BLS), as well as current designation from the DeSouza Institute Vascular Access Education Program for Cannulating Nurses.

### **2.7.1 Duties and Responsibilities**

The Registered Nurse's responsibilities include, but are not limited to the following:

- Providing comprehensive, quality patient/family centred health care services.
- Meeting the standards and exercising judgement for providing safe, competent and ethical care as outlined in the College of Nurses of Ontario Standards of Nursing Practice and Guidelines.
- Assisting the patient and family in adaptation to and management of their kidney disease, therapy and lifestyle changes.
- Providing nursing care in collaboration with the patient, significant others and the multidisciplinary team.
- Carrying out complex nursing assessments and evaluate outcomes of care provided in the facility.
- Establishing a patient care plan based on the patient's bio-psychosocial needs assessment and integrating the other health professional's recommendations.
- Involving patients, and their families in assisting them to understand the plan of care and in facilitating choice among care options so that care is individualized according to each patient's needs.
- Soliciting patient and family input to evaluate their own care and to improve care for all patients.
- Coordinating nephrology nursing care with the care provided by other health care personnel; this includes communicating nursing assessments and patient outcomes with the nephrologist in order to coordinate and facilitate patient care.
- Maintaining a medication log sheet to track expiry dates on medications, and also ensure appropriate storage of all medications.
- Acting as a liaison between individuals and community services.
- Following clinic policies, procedures, protocols, and medical directives.
- Providing leadership by appropriately delegating and supervising specific tasks to unregulated care providers.
- Participating in the education, training and support of all staff.

## **2.8 Registered Practical Nurse (RPN)**

---

The Registered Practical Nurse must have a current and valid certificate of registration with the College of Nurses of Ontario, and possess current certification in Basic Life Support (BLS).

### **2.8.1 Duties and Responsibilities**

The Registered Practical Nurse's responsibilities include, but are not limited to the following:

- Being the primary caregiver for select, stable, noncomplex patients with predictable outcomes in collaboration with the patient, significant others and the multidisciplinary team.
- Assisting the patient and family in adaptation to and management of their kidney disease, therapy and lifestyle changes.
- Carrying out basic nursing assessments and evaluating outcomes of care in collaboration with the RN; this includes communicating nursing assessments and patient outcomes with the Nephrologist in order to coordinate and facilitate patient care.
- Developing and implementing patient care plans and evaluating the outcome in collaboration with the RN.
- Acting as a liaison between individuals and community services.
- Following clinic policies, procedures and protocols and medical directives.
- Meeting the standards and exercising judgement for providing safe, competent and ethical nursing care as outlined in the College of Nurses of Ontario Standards and Guidelines.
- Maintaining a medication log sheet to track expiry dates on medications, and also ensure appropriate storage of all medications.
- Participating in continuous quality improvement activities.
- Participating in the education, training and support of all staff.

## **2.9 Administrative Support Personnel**

---

If a facility has retained staff for administrative support, the administrative support personnel's responsibilities include, but are not limited to the following:

- Clerical, administrative and data base functions to support patient care and regulatory body requirements of data collection and reporting quality metrics and initiatives to ORN.

## **2.10 Hemodialysis Technologist**

---

The Hemodialysis Technologist must possess a minimum of a three (3) year post-secondary community college diploma in a clinical/technical/scientific program.

### **2.10.1 Duties and Responsibilities**

The Hemodialysis Technologist's responsibilities include, but are not limited to the following:

- Maintaining positive communications with patients and responding appropriately to their questions.
- Performing as required, the activities of machine and accessory preparation, operation, maintenance and inventory control, to assist clinical staff with unit patient care activities.
- Participating in the evaluation of new equipment and supplies.
- Responding to hemodialysis equipment problems as they arise and determine if equipment can be repaired on site or removed from service.
- Testing, repairing, calibrating and performing preventive maintenance on all hemodialysis and related equipment while assuring compliance and performance to manufacturer specifications and available standards.
- Identifying and acting on possible safety hazards involving hemodialysis equipment.
- Developing, modifying and practicing procedures for equipment maintenance.
- Performing upgrades to the equipment as per manufacturer's specifications.
- Reporting chronic equipment problems and possible solutions to the manager.
- Taking samples and keeping a log of the feed and treated water, hemodialysis concentrate and dialyzing fluid for organic, inorganic, microbiological and endotoxin contamination as per CSA standards. Reviewing and communicating test results and making recommendations to the Medical Director.
- Testing, repairing, calibrating and performing preventive maintenance on the water treatment systems utilized in hemodialysis therapy.
- Sampling dialysate for temperature, pH and conductivity on all hemodialysis machines as per manufacturer standards.
- Maintaining a log of the maintenance for all hemodialysis and related equipment with regards to preventive maintenance and repairs.
- Periodically measuring and evaluating the quality of technical services provided and adjusting these services as necessary to maintain established standards.
- Maintaining an inventory of supplies and parts for all equipment and reports shortages to the Unit Manager.
- Ensuring the maintenance and ordering of hemodialysis and clinic equipment and supplies.
- Assisting the manager and medical director in making informed decisions on the acquisition, use, and replacement of hemodialysis equipment.
- Providing the Unit Manager with a monthly report of activities.
- Attending and participating in staff meetings.
- Attending mandatory in-services and participating in educational programs regularly.
- Participating in continuous quality improvement activities.
- Participating in the education, training and support of all staff.

## **2.11 Hemodialysis Aide**

---

The Hemodialysis Aide should have adequate knowledge, skill and judgement.

### ***2.11.1 Duties and Responsibilities***

The Hemodialysis Aide assists the Registered Nurse with patient care and responsibilities include, but are not limited, to the following:

- Aseptically prepares hemodialysis machines for treatments.
- Cleaning and disinfection of hemodialysis equipment, including hemodialysis machines.
- Assisting patients in and out of the clinic.
- Weighing patients.
- Providing refreshments/ice to patients.
- Observing and recording fluid intake.
- Responding to patient requests.
- Holding patient needles sites post removal of needle by RN.
- Assisting with the dispatching of laboratory specimens.
- Ensuring adequate supplies are available.
- Maintaining and ensuring that the treatment area is kept clean and items are discarded at the end of hemodialysis treatment.
- Participating in continuous quality improvement activities.
- Participating in the education, training and support of all staff.

## **2.12 Dietitian**

---

The Dietitian must have a current and valid certificate of registration with the College of Dietitians of Ontario.

### ***2.12.1 Duties and Responsibilities***

The Dietitian's responsibilities include, but are not limited to the following:

- Performing comprehensive assessments.
- Supervising/leading/coaching and mentoring patients and their families.
- Developing nutrition care plans for individual patients that include: selection of appropriate nutrition interventions, designing and implementing nutritional support regimes and, on an annual basis, establishing parameters/strategies to monitor and assess nutrition plan outcomes.
- Communicating assessments and patient outcomes with the nephrologist in order to coordinate and facilitate patient care.
- Counselling the patient, family, significant other or caregiver on prescribed diet and monitoring adherence and response to therapy.

- Reviewing lab work on an individual basis and intervening, as appropriate, in collaboration with the patient’s physician and registered nurse.
- Developing or obtaining patient education materials.
- Maintaining competence in the provision of dietetic service to a patient.
- Attending mandatory in-services and participating in educational programs regularly.
- Participating in continuous quality improvement activities.
- Participating in the education, training and support of all staff.

## **2.13 Pharmacist**

---

The Pharmacist must have a current and valid certificate of registration with the Ontario College of Pharmacists. Experience in CKD and ESKD clinics and/or inpatient nephrology is preferred.

### ***2.13.1 Duties and Responsibilities***

The Pharmacist’s responsibilities include, but may not be limited to:

- Patient medication assessments involving reconciliation of all home medications and resolution of any discrepancies. Documenting the patient’s Best Possible Medication History (BPMH) in the medical chart, as well as patient allergies.
- Identifying any drug related issues (dose adjustment, drug interactions, adverse effects, contraindications to specific medications, etc.) and liaising with physicians or other team members to resolve these issues.
- Assessing medication adherence and recommending tools to improve adherence if needed.
- Monitoring patient’s response to medication therapy, including pertinent laboratory values and adverse effects.
- Providing patient education/counselling about various medications ,including indications, adverse effects, and proper administration.
- Disseminating pharmacotherapeutic information to members of the health care team.
- Answering drug information questions that arise from patients.
- Answering drug information questions that arise from nephrologists, nurses, and other allied health team members.
- Communicating recommended changes in medication regimens/doses to nephrologists based on best practices of CKD and ESKD management.
- Collaboration on development of drug protocols.
- Attending mandatory in-services and participating in educational programs regularly.
- Participating in continuous quality improvement and continuing education activities.
- Participating in the education, training and support of all staff.

## **2.14 Social Worker**

---

The Social Worker must have a current and valid certificate of registration with the Ontario College of Social Workers and Social Service Workers.

### ***2.14.1 Duties and Responsibilities***

The Social Worker's responsibilities include, but may not be limited to:

- Evaluating each patient at admission and formulating an appropriate treatment plan as required.
- Providing ongoing casework and advocacy services for the patient to improve medically related, social or emotional problems.
- Facilitating discussions as appropriate on end of life, advance care planning and comprehensive conservative renal care.
- Informing and clarifying for patients and their families, the facility policies and resources.
- Identifying and addressing areas of concern related to accessing required resources such as gaps or delays in service availability.
- Providing an explanation of patient rights and responsibilities.
- Assisting patients in securing financial assistance, obtaining transportation, home health care, and any other public and private resources deemed necessary.
- Re-evaluating at appropriate intervals those patients not seen on a regular basis.
- Maintaining records in accordance with the professional practice standards of the Social Service Department and of the facility.
- Participating in the development of long and short term care plans for all patients.
- Communicating to physician assessments and patient outcomes with the Nephrologist in order to coordinate and facilitate patient care.
- Providing direction to staff on approaches to be used in complex cases.
- Serving as the point of contact for external agencies and community resources.
- Attending mandatory in-services and participating in educational programs regularly.
- Participating in the education, training and support of all staff.

# Chapter 3 Facilities, Equipment and Supplies

## 3.1 Overview

---

Hemodialysis units must meet the physical requirements as outlined below.

All [Canadian Standards Association \(CSA\) standards](#) related to the operation of a Hemodialysis facility must be followed.

## 3.2 Facilities, Equipment and Supplies

---

Facilities have sufficient space to meet workload requirements and ensure the effective care and privacy of patients.

Appropriate safety precautions are maintained and documented against electrical, and mechanical, hazards as well as against fire and explosion, so that personnel and patients are not endangered. Facilities that are not latex-free must have latex-free alternative products.

There are appropriate emergency facilities/equipment for the types of services provided. The following must be available:

- Fire extinguisher
- Safety Data Sheets (SDS) information
- First Aid Kit
- Appropriate emergency cart and resuscitation equipment

### 3.2.1 Infection Prevention and Control

Basic supplies and personal protective equipment (PPE) (e.g. alcohol-based hand rub (ABHR), gloves, gowns, mask, eye protection) for infection prevention and control are on-site and readily available at point of care and used appropriately as per IPAC best practice documents. Resources are available through [the Provincial Infectious Diseases Advisory Committee of Public Health Ontario](#).

In particular, for additional precautions regarding how to deal with infectious diseases, please specifically refer to the following PIDAC documents:

[PIDAC's Routine Practices and Additional Precautions documents](#)

[PIDAC's Annex A: Screening, Testing and Surveillance for Antibiotic-Resistant Organisms \(AROs\) document](#)

[PIDAC's Clinical Syndromes/Conditions with Required Level or Precautions](#)



### **3.2.2 Nursing Station**

The nursing station is, if possible, placed centrally with the hemodialysis stations surrounding it. Thus, all patients are in line-of-sight of the nursing staff, so achieving economy in staffing numbers.

There is enough space for storage of patient records, pharmaceutical supplies, and office supplies. In addition, an adequate work area for writing notes is available.

### **3.2.3 Hemodialysis Machines**

Preventive maintenance, as well as daily cleaning and disinfection between patients, should be carried out according to manufacturer's recommendations.

### **3.2.4 All Ancillary Equipment**

All ancillary equipment (scales, blood pressure monitors, thermometers, glucose monitors, ultrasound, access blood flow monitoring device, body composition monitors, etc.) have a regular program of preventive maintenance. Preventive and routine maintenance and inspection of the equipment is conducted as per the manufacturer's recommendations. All equipment must be cleaned between each patient use.

Written records of preventive maintenance and equipment calibration are maintained.

Ultrasound and other gels are in use in accordance with Infection Prevention and Control (IPAC) Position Statement on Medical Gels (January 2017) recommended practices (see [Appendix II](#)).

### **3.2.5 Hemodialysis Treatment Area**

The standard of practice in Canada is a minimum of 80 square feet, but more typical is 90 to 100 square feet for hemodialysis stations. A facility may require 110 square feet for stations where "acute" patients requiring a stretcher or a bed instead of typical outpatient chair.

---

***Note: A central nursing station with a clear view of the entire treatment area is preferred.***

---

The hemodialysis area is free of extraneous materials such as boxes and supplies.

Adequate sinks, based on CSA standards, including eyewash stations, are available. Alcohol based sanitizer should also be available at point of care.

Walls and floors are smooth and washable so that decontamination procedures are easily carried out. Ideally, the floor is impermeable to water to prevent water damage to areas below.

### **3.2.6 Eye Wash Stations**

An eyewash station must be located in the reprocessing area. For more information about eye wash stations, refer to the [Canadian Centre for Occupational Health and Safety](#).

### **3.2.7 Additional Space Requirements**

Additional space is needed for:

- clean supply room, e.g. for linens, single use items, etc.
- equipment storage
- water treatment area, as required
- separate dirty storage area is required
- lockers and bathrooms for patient and staff
- [chemical storage and handling](#)
- [biomedical waste](#)
- [medication storage and handling according to Ontario College of Pharmacists guidelines](#)

---

**Note:** *This area is adjacent to the hemodialysis area and includes a change room facility for patients and staff.*

---

- general reception area and waiting room for patients and visitors

---

**Note:** *All patient care areas must be handicap accessible.*

---

- assistive devices (wheelchairs, walkers, etc.).

### **3.2.8 Electrical Supply**

Electrical systems must have an isolated power supply.

### **3.2.9 Building and Fire Codes**

The facility complies with all applicable provincial fire and building codes.

### **3.2.10 Water Quality**

The quality of the water used in the manufacture or dilution of dialysing fluid or concentrate, or manufacture or dilution of substituent fluid, is in accordance with *CSA Standards*.

Documentation must be kept on file at the facility, including testing frequency, test results, and follow-up actions, as per *CSA Standards*.

#### **3.2.10.1 Requirements for Concentrate**

Commercial or non-commercial concentrate conforms to *CSA Standard CAN/CSA for Hemodialysis*.

### **3.2.11 Additional Services/Supplies**

Hemodialysis units may provide any of the following procedures or services commonly used in hemodialysis patients provided that appropriate resources, space, personnel, policies, procedures and staff training exist:

### **3.2.11.1 Medications**

3.2.11.1.1 Medications that are routinely part of hemodialysis treatment, and should be available to patients to ensure optimal care:

- Intravenous iron preparations
- Erythropoiesis stimulating agents
- Thrombolytics for catheter dysfunction
- Intravenous antibiotics (e.g. for hemodialysis-related infections)
- Glucose (for emergency use only)
- Heparin and other anticoagulants.

3.2.11.1.2 Additional medications that could be administered:

- Intravenous vitamin D analogue(s)
- Vaccinations
- Bisphosphonates
- Insulin (as supplied by the patient)
- Other prescribed medications as supplied by the patient.

### **3.2.11.2 Hemodialysis and medical supplies that may be provided:**

- A variety of dialysate concentrates providing different potassium and calcium concentrations
- Tools or equipment to facilitate delivery of quality and safe hemodialysis
- Oxygen saturation monitor
- Supplemental oxygen
- Supplies for wound care and dressing changes
- Supplies for central venous catheter removal
- Space and supplies to provide for isolation of patients who require contact precaution for Methicillin-resistant Staphylococcus aureus (MRSA), Vancomycin-resistant Enterococci (VRE), or other bacterial colonization or infection that require more than “Routine Precautions”(For more information, refer to [Carbapenemase-producing Enterobacteriaceae \(CPE\) Sample fact sheet for health care staff](#)).
- Beds rather than chairs for patients who cannot sit comfortably or safely.

### **3.2.11.3 Monitoring**

All units should have:

- Hemodialysis access flow monitoring equipment
- Monitoring systems for hemodialysis equipment as per CSA Standards.

Units may have:

- Blood volume monitor.

### **3.3 Aging Equipment**

---

In general, equipment age should conform to the recommendations of the Ontario Renal Network, which suggests a life span of approximately 10 years or 35,000 working hours for a hemodialysis machine. In addition, technologic advances continue to occur in hemodialysis-related equipment. Consideration must be given to appropriate replacement or updating of hemodialysis-based equipment or technology. A clear upgrade pathway, including up-to-date software, defined to keep the technology current must be implemented by the facility to ensure current standards of care are met.

# Chapter 4 Policies and Procedures

## 4.1 Overview

---

Current written policies and procedures are required to provide staff with clear direction on the scope and limitations of their functions and responsibilities for patient care.

## 4.2 Developing Policies and Procedures

---

The procedure manual is available for consultation by all facility staff. The manual is reviewed and signed off by all staff, licensee, and Quality Advisor annually, revised as necessary, and dated to indicate the time of the last review or revision.

There is documentation to indicate who makes the policies, sets the standards, and who supervises physicians, RNs, RPNs, and other staff. In addition, it should also include a copy of the MOHLTC form outlining the name of the Quality Advisor.

The procedure manual contains all policies and procedures, including those described below.

### 4.2.1 Facility

Policies and procedures include, but are not limited to the following:

- a description of the scope and limitations of hemodialysis services provided by the facility
- patient-booking systems
- patient requests for a chaperone for intimate examinations, or any other common patient requests related to examinations/procedures; facilities must provide options where possible;
  - procedures must include specific chaperone signage posted in the facility; for example:
    - Chaperone Policy: Are you being examined? If you wish, we can provide another member of staff to be present; or a friend or family member can accompany you. PLEASE ASK THE DOCTOR OR NURSE. In the event that we are unable to provide you with a chaperone, you will be given the option of rebooking for a new date.
- orientation for patients and their families to the facility's program(s)/service(s), including telephone advice.

### 4.2.2 Facility Staff

Policies and procedures include, but are not limited, to the following:

- professional guidelines, such as:
  - [College of Nurses of Ontario Standards and Guidelines](#)
  - [Canadian Association of Nephrology Nurses and Technologists Standards of Nephrology Technical Practice, 2013](#)

[National Association of Pharmacy Regulatory Authorities Practice and Regulatory Standards](#)

- delegated acts and medical directives. Refer to [CPSO policy on Delegation of Controlled Acts](#)
- supervision of staff, e.g. staff in process of orientation and training
- all nursing staff must have current designation from the DeSouza Institute Vascular Access Education Program for Cannulating Nurses.
- At least one staff member with current Basic Life Support (BLS) certification is on site at all times during hours of operation
- staff roles for emergency procedures, which are appropriate to the role they would assume in an emergency (e.g. fire, power failure, other emergency evacuation, etc.)
- The Licensee, Quality Advisor and staff working in the IHF are up-to-date on the standards for infection prevention and control, and have an ongoing process to ensure current infection and prevention control practices are reflected in staff orientation/training ([4.2.2](#)), infection prevention and control policies and procedures ([4.2.11](#)), as well quality management ([6.1](#)). To meet this requirement, facilities must, at a minimum, review the following:
  - Public Health Ontario’s newsletter, which informs subscribers about updates to Provincial Infectious Diseases Advisory Committee (PIDAC) documents. To sign up for newsletters, use the following link:  
<https://www.publichealthontario.ca/en/EUM/Pages/Register.aspx>
  - Public Health Ontario’s Infection Prevention and Control online training courses: [IPAC Core Competencies Course](#) and [Reprocessing in Community Health Care Settings Course](#).
- Staff responsible for cleaning, disinfecting, sterilizing, and/or reprocessing of medical equipment must complete appropriate training, including manufacturer’s training. To determine appropriate training, the Quality Advisor must complete [Infection Prevention and Control’s Checklist for Infection Prevention and Control \(IPAC\) CORE Elements in Clinical Office Practice](#), and if applicable, also complete the [Checklist for Reprocessing of Medical Equipment/Devices in Clinical Office Practice](#). Refer to [4.2.11 Infection Prevention and Control policies and procedures for links to PIDAC/IPAC best practices](#).
- safety education/training for medical and non-medical staff (which is documented and maintained on site) that addresses areas mandated by the Ontario Government, such as the following:
  - Workplace Hazardous Materials Information System 2015 (WHMIS 2015);
  - Health and safety awareness;
  - Workplace violence and sexual harassment, and;
  - Accessibility for Ontarians with Disabilities

For more information, please refer to the [Guide to the Occupational Health and Safety Act](#).

- There is a Joint Health and Safety Committee (based on number of workers). Refer to the [Guide for Health and Safety Committees and representatives](#).
- orientation for all new staff to ensure adequate training. This must include a review of policy and procedure manuals, modality specific protocols, infection prevention and control practices and all safety training. The employee must sign off indicating that they have successfully completed all of the above training.

- written performance evaluations for all staff at completion of probationary period, and annually thereafter, or as defined by the facility.
- annual review of continuing professional development (CPD) of all regulated health professionals to ensure that the CPD is compliant with their regulatory body.

### **4.2.3 General Procedures**

Policies and procedures include, but are not limited to, the following:

- Laboratory and diagnostic testing, including blood sampling techniques, and quality assurance mechanism (Refer to Chapter 6 on Quality Management for more details)
- safe medications handling and inventory
- transfer of patients (urgent and elective)
- waste and garbage disposal.

### **4.2.4 Hemodialysis Services**

Policies and procedures include, but are not limited to, the following:

- hemodialysis orders and patient-specific care
- initiating and discontinuing hemodialysis treatment
- dialyzer selection and priming
- preparing and verifying the hemodialysis delivery system
- nursing care during hemodialysis
- managing complications
- fluid management of hemodialysis
- anticoagulation regimes
- adequacy of hemodialysis, including techniques used to assess the adequacy and frequency of measurement
- managing vascular access, both peripheral and central
- referral for management of vascular access
- provision of patient access to qualified and trained renal dietitian, social worker, renal pharmacist, and other health care professionals.
- protocols to ensure patients have access to all treatment modalities for ESRD including kidney transplant.
- water treatment procedures, including on-going monitoring of water quality (frequency), as well as process, to document test results, and follow-up
- preparing and monitoring dialysate and/or substituent fluid (i.e. fluid administered directly into or via the blood tubing)
- inventories/lists of equipment to be maintained
- combustible and volatile materials

- equipment routine maintenance and calibration
- contracted services, including services to be provided, qualifications of service provided, reporting mechanism, and compliance with relevant standards.
- Relevant standards and guidelines:
  - [Canadian Standards Association](#)
  - [Canadian Society of Nephrology](#)
  - [National Kidney Foundation](#)
  - [Kidney Disease: Improving Global Outcomes \(KDIGO\)](#)

---

***Note: The re-use of dialyzers is not recommended.***

---

#### **4.2.5 Regional Renal Programs**

Policies and procedures include, but are not limited to, the following:

- Collaborating with the Regional Renal Program(s) to develop:
  - service plans and standards
  - access to medical, surgical, allied professional and radiological services
  - quality standards
  - data collection
  - Regional Renal Program(s)' Emergency Management Plan
  - provincial strategies to explore and develop safety initiatives and tools to prevent avoidable harm
- Regional Renal Program transfer policies.

#### **4.2.6 Records and Communication/Reporting & Privacy Principles**

Policies and procedures include, but are not limited to, the following:

- Special considerations with regard to emergency requests and reportable diseases, e.g. communication of critical lab results received from outside laboratories by the IHF.
- Confidentiality of patients and staff, including a policy for use of cameras and videos to take pictures and videos are not permitted in the clinical setting – unless mutually agreeable to the parties involved
- Patient consent, written or verbal, based on the scope of practice in the facility and in accordance with the Health Care Consent Act
- Goals of care and advanced directives
- Privacy and release of health record information, including Bill 31 the Personal Health Information Protection Act 2004. (PHIPA). Information available at [www.ipc.on.ca](http://www.ipc.on.ca)



#### **4.2.7 Medication Storage and Handling Policies**

Policies and procedures include, but are not limited to, the following:

- Safe handling and administration of medications
- Safe management of patients on medications that may be hazardous to others

#### **4.2.8 Equipment Maintenance**

Policies and procedures include, but are not limited to, the following:

- routine maintenance, calibration, and evaluation of all equipment, including point of care equipment. This should include frequency of testing, responsibility for following up on recommendations, documentation and maintenance of records for all of the above. Please refer to Chapter 3 on Facilities, Equipment and Supplies for more details.

#### **4.2.9 Emergency Procedures and Safety Policies**

Policies and procedures include, but are not limited to, the following:

- Specific first aid measures to be followed in an adverse health event, including a description of the arrangements for transferring patients to an acute care facility when required
- A copy of the regional emergency preparedness plan
- Protocol to be followed to deal with emergencies, e.g. fire, evacuation, disaster, violent/behavioural situation, cardiac arrest, bomb threats, missing patient, hazardous spill, hostage situation, etc.
- At least one staff member with current Basic Life Support (BLS) certification is on site at all times during hours of operation.
- Availability of 70-90% alcohol-based hand rub for staff and patients at all points of care
- A hands-free eyewash station be installed in the facility (as per WHMIS 2015). If HLD is used, then a reprocessing sink as per PIDAC.
- Anaphylaxis (if facility not latex free).
- Safety Data Sheets (SDS) for all chemicals maintained in the facility .
- Workplace safety and sexual harassment.

#### **4.2.10 Quality Management (See Chapter 6)**

#### **4.2.11 Infection Prevention and Control**

Policies and procedures are up-to-date with PIDAC documents, and include, but are not limited to, the following:

- Routine Practices and Additional Precautions to prevent infection transmission are in keeping with infection prevention and control best practices. Resources are available through the [Provincial Infectious Diseases Advisory Committee's \(PIDAC's\) Infection Prevention and Control for Clinical Office Practice](#) document.
- Hand hygiene – see [PIDAC Best Practices for Hand Hygiene in Health Care Setting](#)

- Environmental Cleaning – see [PIDAC Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings, 3<sup>rd</sup> Edition, April 2018](#)
- Cleaning, Disinfection, Sterilization and Reprocessing of reusable medical devices and equipment – see [PIDAC Best Practices for Cleaning, Disinfection and Sterilization in Health Care Settings](#) and [PIDAC Infection Prevention and Control for Clinical Practice Settings](#)
- Adequate education and training of staff responsible for the sterilization and reprocessing of medical equipment. Please visit the [CPSO website for an approved list of courses specific to reprocessing and sterilization](#)

#### **4.2.11.1 Infection Prevention and Control related to Equipment**

Policies and procedures include, but are not limited to:

- cleaning and disinfection of all hemodialysis equipment (hemodialysis machines, chairs, beds, scales, blood pressure monitors, thermometers, glucose monitors, ultrasound, access blood flow monitoring device, body composition monitors, etc.) based on PIDAC best practices, including any CSA standards and manufacturer recommendations/manuals that apply.

#### **4.2.11.2 Infection Prevention and Control related to Use of Medical Gel**

Policies and procedures related to the use of multi-use gel containers (if used at the facility), which comply with the IPAC Position Statement on Medical Gels – January 2017 (see [Appendix II](#)). Single-use packets or containers are recommended.

#### **4.2.11.3 Infection Control related to Hand Hygiene**

Policies and procedures include but are not, limited to:

- Education of staff and patients about Public Health Ontario’s “Hand Washing Methods” can be found in [PIDAC Infection Prevention and Control for Clinical Office Practice Settings](#). This includes posting of the document for IHF staff and patients in designated areas
- Documentation attesting to annual staff compliance. (Refer to [PIDAC’s Best Practices for Hand Hygiene in All Health Care Settings, 4th edition](#))

#### **4.2.11.4 Infection Control related to Infectious Patients**

Policies and procedures include, but are not limited to:

- Handling of infectious patients, for example, those who have any possibility of transmitting infection, at the initial contact with the patient. Refer to Additional Precautions in [PIDAC Infection Prevention and Control for Clinical Practice Settings](#).

#### **4.2.12 Personal Protective Equipment**

Policies and procedures include, but are not limited to:

- Indications for and use of PPE (gloves, masks, gowns and eye-protection) based on personal risk assessment
- Proper disposal of PPE
- Documentation attesting to annual staff compliance.

### **4.2.13 Disposal of Sharps**

Policies and procedures include, but are not limited to:

- Appropriate precautions to prevent injuries from sharps
- Disposal guidelines and requirements for dedicated sharps containers

#### **4.2.13.1 Needle Safety**

- Under the Occupational Health and Safety Act, the Needle Safety section states, “when a worker is to do work requiring the use of a hollow-bore needle, the employer shall provide the worker with a safety-engineered needle that is appropriate for the work. O. Reg. 474/07, s. 3(1)”. Therefore, IHFs shall provide appropriate access to safety-engineered needles as required.

# Chapter 5

# Procedure Standards

## 5.1 Overview

---

The patients are assessed and equipment is checked, with appropriate documentation before, during and after hemodialysis.

## 5.2 Pre and Post-Hemodialysis Assessment

---

Pre and post-hemodialysis assessment of the patient and documentation includes, but is not limited to, the following:

- Absolute weight

---

**Note:** *Post-hemodialysis weight is compared to the predicted weight loss*

---

- Achievement of desired fluid removal
- blood pressure, recumbent (lying or sitting) and upright (when possible)
- pulse, recumbent and upright
- temperature
- pre hemodialysis self-screening for febrile illnesses
- pre hemodialysis assessment of risks for potential / active bleeding inclusive of injuries

## 5.3 During Hemodialysis

---

During hemodialysis, patient assessment and documentation includes, but is not limited to:

- hemodialysis circuit arterial pressure (a minimum of once per hour)
- hemodialysis circuit venous pressure (a minimum of once per hour)
- transmembrane pressure (ultra-filtration rate), (a minimum of once per hour)
- blood flow rate (a minimum of once per hour)
- litres of blood processed per treatment (where available on equipment)
- dialysate flow rate (mL/ min)
- ultra-filtration rate (UFR)
- condition of access
- blood pressure (a minimum of once per hour)

---

**Note:** *The blood pressure may be monitored more often if the patient is hypotensive, or less often if blood pressure is stable and the patient is sleeping. If the patient is to be awakened for blood pressure monitoring, this is indicated on the patient's Care Plan.*

---

The patient is given an anticoagulation drug at an appropriate dose and rate determined in the Plan of Care (unless patient's condition warrants change) and this is documented on the hemodialysis record every hour, as applicable.

## Chapter 6

# Quality Management

### 6.1 Overview

---

The Quality Management Program is intended to monitor the work of the facility to continuously improve all aspects of the services provided.

Each facility must have a Quality Management Program supervised by a Quality Advisory Committee (QAC) as set out in the IHFA regulations (see Appendix I).

The requirements for, and responsibilities of, the Quality Advisor (QA) are as detailed in Chapter 2 Staffing a Facility.

The Quality Advisory Committee must consist of at least the Quality Advisor, licensee, and a minimum of 2 site-specific health professionals (e.g. nurse, technologist) who provide health services at the IHF.

---

***Note: An exception to this is where the physician is the sole provider of the services, is owner/operator and Quality Advisor, and the services provided are part of his/her office practice.***

---

The Quality Advisory Committee (QAC) shall meet at least twice a year (or more as needed).

[QAC meeting agendas](#) must, at a minimum, include:

- Approval of minutes from previous meetings
- Business arising from Minutes (confirmation of completed items, and discussion of outstanding actions)
- Goals and objectives:
  - i. Staff changes/New staff
  - ii. Staff under supervision - progress on examinations/courses/accreditation
  - iii. Expansion/relocation plans
  - iv. General practice goals
- Recommendations from Assessment/Accreditation Visit/Ministry of Health X-ray Inspection Services and HARP (if applicable). Such issues are to remain on the agenda until they are clearly finalized
- Policies and procedures (including but not limited to):
  - i. Policy and Procedures Manual – general updates, staff sign-off
  - ii. Technical – general practice guidelines for facility
  - iii. Infection Prevention and Control
  - iv. Safety Data Sheets
  - v. Other
- Review of IPAC requirements and staff orientation/training
- Equipment – problems, upgrades, training or facility configuration issues
- Incidents or complaints, adverse drug reactions, complications
- Review of the results of the Facility’s quality review process
  - Review of current statistics on the time between patient referral and examination/treatment
  - Review of difficult or inconclusive cases and how they were dealt with
  - Patient/Referring survey results (see sample patient satisfaction surveys in Appendix III)

- Staff performance appraisals and training – when, who, how often

## **6.2 Quality Management Program Goals**

---

The goals of the program include but, are not limited to, ensuring that:

- The services planned and provided are consistent with the patient needs and assure therapeutic reliability and patient safety.
- Services conducted in the facility are safe.
- Services conducted are appropriate to the problem(s) being treated.
- Where services are not provided by the facility, appropriate patient referrals to multidisciplinary team services at regional hemodialysis programs are being made to address: dietary, medication and personal/social concerns; vascular access creation, monitoring and servicing; potential self-care and home hemodialysis options; transplant referrals and work-up facilitation, and; comprehensive conservative renal management and palliative care discussion and management. The availability of the above services needs to be reviewed and discussed at the Quality Advisory Committee meeting.

## **6.3 Providing Quality Care**

---

Hemodialysis services are carried out in a manner in which patient privacy is respected to the degree possible. It may be necessary for patients to be evaluated in a separate space within the unit when not actually undergoing treatment.

## **6.4 Components of a Quality Management Program**

---

The facility establishes and maintains a system to regularly monitor the results of the services provided.

The facility establishes a Quality Management Program appropriate for its size, volume and types of services provided. It is recognized that Quality Management Programs will vary depending on the facility size, scope of practice, and geographical considerations.

Quality Management Program activities are documented and maintained on-site.

To ensure that the goals of the Quality Management Program are met, the Committee's tasks include, but are not limited to:

1. Review quality management goals and objectives annually.
2. Supervise and document a systematic ongoing review of the facility policy and procedures manual.
3. Review safety data on any equipment new to the facility since the last meeting, and ensure that all equipment in the facility meets safety standards.

4. Review any incident or accident reports since the last meeting and document any such actions to prevent similar incidents or accidents. Provide a report of all proceedings to the facility's Quality Advisor.
5. Review and implement recommendations from other assessing bodies such as the Ministry of Health and Long-Term Care, and Ministry of Labour.
6. Supervise and document a program of annual performance reviews for all staff who have patient contact, including documentation of action taken to correct any significant deficiencies in performance.
7. Ensure all registration certificates, BLS certificates, etc., are valid and current for all staff.
8. Ensure that the CPD activities of the technical and medical staff meet the relevant College or Society requirements. For example, all specialist physicians have fulfilled their annual RCPSC Maintenance of Certification (MOC) requirements.
9. The QAC arranges regular discussions of interesting/challenging cases ascertained at the facility at least annually, and ensures any teaching points are disseminated to the staff.
10. The QAC reviews the results from regular surveys of patient and staff satisfaction surveys at least annually, and shall document actions to address any suggestions, problems or issues raised.
11. Implements a quality review and improvement process to deal with quality indicators (see [7.5 Aggregate Patient Outcomes](#)) that evaluates the quality of care provided by all regulated health professionals involved in patient care.

## 6.5 Monitoring the Program

---

The Quality Advisor is responsible for all aspects of the quality management program including any aspect delegated to any other staff member.

Minutes of each QAC meeting shall be circulated to all members of the QAC for comment and revision, and once finalized by the QA they shall be circulated to all staff.

Recommendations from the QA Committee shall be circulated to all staff once they are finalized. These recommendations shall be reviewed at a general staff meeting including all health care professionals who provide services in or in connection with the IHF. Quorum for such staff meetings shall be 2 or 50% of the staff, whichever is greater. Staff may attend by secure conference call. Staff members who cannot attend are to review and sign off on the minutes of that meeting.

Records are to be maintained at the facility in a form that is clear and easily accessible to a reviewer, and shall include:

- Minutes of the Quality Advisory Committee
- Minutes of General Staff meetings
- All the reviews and surveys noted above and any subsequent commentary/suggestions/recommendations/follow-up



# **Independent Health Facilities: Clinical Practice Parameters and Facility Standards**

## **Hemodialysis**

---

### **VOLUME 2 CLINICAL PRACTICE PARAMETERS**

---



# Chapter 7

# Analyzing Patient Outcomes

## 7.1 Overview

---

End-stage renal disease (ESRD) is associated with decreased patient survival. Hemodialysis treatments improve survival, independent of the modality chosen. Patients may need to switch modalities for personal or medical reasons. Guideline driven patient outcome measures provide a surrogate for patient survival. Patient choice and comfort should also be a foundation of good care.

## 7.2 Patient Outcome Measures

---

### 7.2.1 Anemia

The target range of hemoglobin for hemodialysis patients receiving an erythropoiesis stimulating agent (ESA), as recommended by the Canadian Society of Nephrology (CSN) is 110 g/L, with recommendation to keep hemoglobin between 100 and 120 g/L. Targeting higher hemoglobin values with increased doses of ESA and intravenous iron has been associated with increased morbidity and mortality.

Patients receiving ESA may fail to achieve hemoglobin within the target range for a variety of reasons. In patients who fail to meet hemoglobin targets, appropriate investigation and intervention should occur and be documented.

Iron deficiency is suggested by a serum ferritin of less than 100 ug/L or a transferrin saturation of less than 0.20.

Patients receiving ESA should have ferritin >200ug/l and a Transferrin-Saturation (TSAT) of >20%. Higher targeted ferritin levels can result in lower ESA dosing requirements but should not exceed 1000ug/l. If supplemental iron is not offered to patients with TSAT or ferritin levels below target, the reason(s) should be documented.

### 7.2.2 Infection

The presence of end-stage kidney disease confers an increased risk of infection from all causes due to the immunosuppressive effect of uremia. Hemodialysis confers additional risks because of repeated access to the circulation necessary for the hemodialysis procedure which can lead to blood infection (bacteremia). In addition, the nature of a hemodialysis unit where patients and staff are in close proximity to each other and have environmental exposure to blood potentially contaminated with pathogens, increases the risk of nosocomial infection.

Bacteremia and related complications including sepsis, endocarditis, septic arthritis, epidural abscesses, etc. are much more common in hemodialysis patients than in the general population or peritoneal hemodialysis patients. The major risk factor for bacteremia is the presence of a

central venous catheter (CVC). The rate of infection-related hospitalization or death is 2-3 fold higher in hemodialysis patients with a CVC compared to a fistula or graft.

In view of the importance of bacteremia in this population, hemodialysis programs should implement the following as part of their policies and procedures:

- A multidisciplinary approach to reducing the number of patients with CVCs.
- Protocols for diagnosis and management of patients with documented or suspected bacteremia including antibiotic choice, duration of therapy and management of infected CVCs.
- Protocols for prevention of bacteremias using clinical practice guidelines including those of the CSN (2006).
- A quality management program which mandates regular review of bacteremia rates per 1000 catheter days.
- The major health care associated infection (HAI) of concern in hemodialysis units are hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV). The most important preventive measures with respect to these infections include application of current standards of body substance precautions; hemodialysis unit design including safe injection practice and use of single-dose vial wherever possible, adequate space for each hemodialysis station, appropriate hand washing facilities and appropriate handling of new and used disposable equipment including dialyzers and tubing; and environmental cleaning, including all areas which could be potentially contaminated with patient blood, especially hemodialysis machines.
- With regard to hepatitis B, each hemodialysis program should have the following as part of their policies and procedures:
  - Protocols for determination of HBV antigen and antibody status for all new patients and regular determination of antigen status of antibody-negative patients
  - A protocol for vaccination against HBV for all new patients, with regular determination of immunity in all patients through testing of blood for HBV antibody titres. The protocol should include criteria for revaccination when HBV antibody titres fall below protective levels.
  - Vaccination of hemodialysis staff should be strongly recommended.
- Protocols for screening of MRSA, VRE, tuberculosis and HCV should be in place and be consistent with the current best practices. For more information, refer to [Carbapenemase-producing Enterobacteriaceae \(CPE\) Sample fact sheet for health care staff](#).
- There should be protocols in place for vaccination against Influenza and Streptococcal pneumonia.

### **7.2.3 Blood Pressure Control**

Hypertension is associated with adverse consequences in hemodialysis patients. Although no controlled trials demonstrate that control of blood pressure (BP) reduces mortality or morbidity in this population, it is reasonable to generalize from the general population that control of hypertension in this population is of benefit. Blood pressure varies considerably in hemodialysis patients depending on time of measurement, method of measurement, and presumably other factors. While there is no consensus as to which blood pressure (pre-, post- or interdialytic) should be targeted, CSN Guidelines recommend use of pre-hemodialysis BP, with target BP <

140/90. Home (or other outside) BP measurements and/or 24 hour or longer ambulatory BP monitoring may be helpful in evaluation of blood pressure. A facility should decide in consultation with their Quality Advisor which blood pressure measurement and target range will be used.

The approach to control hypertension in hemodialysis patients should include dietary salt restriction, fluid management on hemodialysis by reduction of patient weight gradually by ultra-filtration, avoidance of positive sodium balance during hemodialysis, prevention of hypotension, and use of pharmacologic agents based on pharmacokinetics in hemodialysis patients and patient co-morbidities.

Patients whose blood pressure cannot be controlled to target should be reviewed to ensure all approaches have been exhausted, with appropriate documentation.

### **7.2.4 Patient Nutrition**

There is evidence that malnutrition is highly prevalent in the ESKD population and that it contributes to significant morbidity and mortality. The hemodialysis patient risks malnutrition because of appetite interference caused by elevated levels of uremic toxins, frequent gastrointestinal (GI) upset and other inter-current catabolic illnesses.

It is essential that close attention to various nutrition indicators are followed including a regular assessment by a dietitian, where clinically indicated. Changes in dry body weight, low serum albumin and low protein catabolic rates may be indicators of malnutrition in hemodialysis patients.

Patients with any of the following require documented evidence of intervention including a review of the hemodialysis prescription and a nutritional assessment:

- A significant decrease of the serum albumin concentration.
- Unexplained weight loss of more than 5% of post-hemodialysis weight over the most recent 3 months.
- A pre-hemodialysis potassium level of >6 mmol/ or <3mmol/l.
- Low serum phosphate (< 0.8 mmol/L).
- low pre hemodialysis urea (< 15 mmol/L, assuming 3x/wk HD and no residual renal function) or other evidence of protein malnutrition.
- Protein catabolic rate (PCR) level < 1g/kg/day.
- An inadequate hemodialysis dose (which may be associated with poor nutritional status).

## 7.3 Adequacy of Hemodialysis

---

Evidence exists showing that mortality rates improve with urea reduction ratios (URR or PRU) up to 65% and/or single pool variable volume estimated Kt/V of 1.2 for 3 times per week hemodialysis, and in keeping with the CSN Guidelines, this should be the minimum target for all patients. The CSN Guidelines provide advice on the technique for drawing the post hemodialysis blood samples to minimize the possibility of recirculation resulting in misleading results. Procedures and protocols for monitoring adequacy of hemodialysis should follow the CSN Guidelines and be done at least every two months.

To facilitate longitudinal comparisons, the sampling technique for the unit should be clearly stated, documented and consistent from treatment to treatment and between patients.

Patients with URR less than 65% or Kt/V less than 1.2 must have documented evidence of intervention.

A low hemodialysis dose should result in an assessment of:

- a) The hemodialysis prescription, including blood flow, treatment time, dialysate flow, dialyser type and volume of blood processed.
- b) Adequacy of anticoagulation.
- c) Blood sampling technique.
- d) Vascular access and needle placement.
- e) Compliance of the patient with the prescribed hemodialysis prescription.

---

**Note:** *There is a correlation between the dosage of hemodialysis and the probability of morbid events. Shorter hemodialysis time is associated with higher rates of morbidity and mortality. Patients on three times weekly hemodialysis receiving less than 3.5 hours per treatment require careful monitoring of their PCR, urea kinetics and urine output.*

---

### 7.3.1 Mineral Metabolism

Disordered bone and mineral metabolism is almost universal in patients on hemodialysis. Serum calcium and phosphate should be measured at least every 6 weeks and intact parathyroid hormone at least every 4 months.

Hyperphosphatemia is associated with increased cardiovascular mortality and is one of the stimuli for increased parathyroid hormone (PTH) secretion. An elevated calcium-phosphate product is also associated with increased mortality. The Canadian Society of Nephrology (CSN) Guidelines (2006) recommends maintaining serum phosphate and calcium within the normal range. Hyperphosphatemia should be managed by a reduction in dietary phosphorus intake, oral phosphate binders and an adequate hemodialysis dose. Parathyroid levels less than 10 pmol/L should be avoided and levels above 50 pmol/L should be treated if accompanied by symptoms or clinical signs of hyperparathyroidism. High levels of parathyroid hormone may be treated by the use of vitamin D or vitamin D analogues, calcimimetic agents or parathyroidectomy. The CSN recommends focusing more on normalizing phosphate and

calcium levels than on PTH levels and discontinuing vitamin D or analogues if serum phosphorus or calcium levels rise, or if parathyroid hormone levels fall.

## **7.4 Analyzing Treatment Options**

---

Patients with ESRD have a high number and severity of symptoms. These symptoms may be present for several years before death. An unadjusted mortality rate of 20% is to be expected in hemodialysis patients and withdrawal from hemodialysis before death occurs in at least 20% of those dying. The vast majority of hemodialysis patients die in acute care facilities, without accessing palliative care, despite indicating a preference for home death. It is therefore imperative for the renal physician to apply the principles of palliative care in dealing with patients and their symptoms. For additional information, refer to:

<http://cjasn.asnjournals.org/content/7/12/2049.full.pdf>

<https://www.ncbi.nlm.nih.gov/pubmed/?term=Serious+Illness+Conversations+in+ESRD>

The “Advancing High Quality, High Value Palliative Care in Ontario: A Declaration of Partnership and Commitment to Action” document defines palliative care as “a holistic approach to active and supportive care for patients and their families facing a life-threatening illness. The aim is to prevent and ease suffering, while promoting an excellent quality of life right up until the end of life.”

Palliative care is best delivered by the combined care of nephrology professionals, family and community care specialists, and hospice and palliative care specialists.

Models for predicting 3 and 6-month hemodialysis patient survival are readily available and should be used to identify those who may benefit from palliative care.

As per recent ORN directives and guidelines, advanced care planning should occur with each patient and their family within 3 months of their first entry into a hemodialysis program. This should be reviewed regularly. This should include, where possible their wishes regarding identification of a substitute decision maker, hemodialysis withdrawal and preferred place of death. The documentation of the discussion should be attached to the patient’s medical record.

Approximately 50% of ESRD patients experience chronic pain, and analgesia should be provided using clinical algorithms based on an adapted W.H.O. Analgesic Ladder. Drugs with active metabolites, which are excreted by the kidney, should be avoided or appropriately dose adjusted.

Specialist palliative care consultation may be required for control of complex pain or other symptoms, unresolved psychosocial or family issues, those patients requesting home care in the last few weeks of life and where patients and their families are experiencing difficulty in decision making.

### **7.4.1 Kidney Transplantation**

Kidney transplantation is a highly successful means of treatment for ESKD. While not all hemodialysis dependent patients are medically suited for a transplant, the patient has the right to receive from the physician, information necessary to make an informed decision regarding kidney transplantation as a treatment option.

The physician needs to ensure that:

- Patients/ families are informed of transplantation as a treatment option.
- Appropriate patients are referred to and assessed by a transplant team. If transplantation is contraindicated for a specific reason, this reason is documented on the health record.
- Patient status is assessed as indicated for inclusion on the transplant list.

### **7.4.2 Home Hemodialysis**

Home hemodialysis is a proven treatment option for a number of hemodialysis dependent patients. It is a cost efficient method of providing maintenance hemodialysis for patients who are:

- medically and psychologically stable and have a suitable home environment. This treatment option is considered and discussed with patients who require maintenance hemodialysis.
- appropriate patients/families are offered home hemodialysis/peritoneal dialysis as a treatment option.
- patients are referred for assessment for home/self-care hemodialysis therapies. If home/self-care hemodialysis therapies are considered unsuitable, the reasons are documented on the health record.

## **7.5 Analyzing Aggregate Patient Outcomes**

---

Each facility has a mechanism in place to analyze aggregate patient outcomes. Aggregate patient outcome activities include, but are not limited to, the following:

Number of new patients transferred to facility by referral centre.

Number of patients returned permanently to referring centres and by reason for return, such as

- access problems
- surgery
- medically unstable
- complication of treatment
- other

Number of incidents of vascular access infection (line/fistula/graft)

Number of referrals back to referral centers for interim treatment and by reason for return, such as

- access problems
- surgery



- medically unstable
- complication of treatment
- other

Number of medication errors

Number of patient falls

Number of patients on transplant list

Number of patients transplanted

Number of deaths

Number of patients transferred out to other centers

Number of patients receiving ESA

Number of patients transferred to peritoneal hemodialysis

Number of no shows



# Independent Health Facilities: Clinical Practice Parameters and Facility Standards

## *Hemodialysis*

---

## **APPENDICES**

---



# Appendix I                      Independent Health Facilities Act - Ontario Regulation 57/92

---

*Note: Ontario Regulation 57/92 has previously been amended. Those amendments are listed in the Table of Regulations - Legislative History Overview which can be found at [www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca). Facilities are encouraged to check the Government Website for updates.*

---

## Quality Advisor and Advisory Committee

---

1(1) Every licensee shall appoint a quality advisor to advise the licensee with respect to the quality and standards of services provided in the independent health facility.

(2) If the quality advisor dies or ceases to be the quality advisor, the licensee shall appoint a new quality advisor forthwith.

(3) The quality advisor must be a health professional who ordinarily provides insured services in or in connection with the independent health facility and whose training enables him or her to advise the licensee with respect to the quality and standards of services provided in the facility.

(4) It is a condition of a licence that the quality advisor be a physician if all the insured services provided in the independent health facility that support the facility fees that the licensee may charge are provided by physicians.

(5) In subsection (4), an insured service supports a facility fee if the facility fee is for or in respect of a service or operating cost that supports, assists or is a necessary adjunct to the insured service.

(6) A licensee who is qualified under subsection (3) may appoint himself or herself as the quality advisor only if there is no other health professional who is qualified to be the quality advisor who will consent to be the quality advisor. O. Reg 57/92, s.1.

2(1) Every licensee shall appoint an advisory committee to advise the quality advisor.

(2) The advisory committee shall consist of health professionals who provide health services in or in connection with the independent health facility.

(3) The quality advisor shall be the chair of the advisory committee.

(4) Every licensee shall use his or her best efforts to ensure that there is a representative on the advisory committee from the health profession and each specialty and sub-specialty of medicine, practitioners of which provide health services in or in connection with the independent health facility. O.Reg. 57/92, s.2.

3(1) Every licensee shall give the Director the name of the quality advisor in writing forthwith after the quality advisor is appointed.

(2) If the quality advisor dies or ceases to be the quality advisor, the licensee shall inform the Director in writing forthwith.

(3) Every licensee shall give the Director, on request, the names of the members of the advisory committee in writing. O. Reg. 57/92, s.3.

## **Standards**

---

4 (1) Every licensee shall ensure that all aspects of the services provided in the independent health facility are provided in accordance with generally accepted professional standards.

(2) Every licensee shall ensure that the persons who provide services in the independent health facility are qualified, according to generally accepted professional standards, to provide those services.

(3) If the quality advisor has reasonable grounds to believe that this section is not being complied with, he or she shall inform the Director forthwith. O. Reg. 57/92, s.4.

5 Every licensee shall keep a system to monitor the results of the services provided in the independent health facility. O. Reg. 57/92, s.5.

6(1) Every licensee shall ensure that all tissues removed from a patient during an operation or curettage performed in an independent health facility are sent to a laboratory for examination and report unless the physician performing the operation or curettage is of the opinion that it is not necessary according to generally accepted medical standards.

(2) The licensee shall ensure that a short history of the case and a statement of the findings of the operation or curettage are sent with the tissues. O. Reg. 57/92, s.6.

## **Records of Employees**

---

7 (1) Every licensee of an independent health facility shall maintain, for each employee of the facility who is not a physician, an employment record setting out the employee's qualifications and employment history including a record of any registration with or licensing by the governing body of a health profession.

(2) Every licensee shall retain an employee's employment record for at least two years after the employee ceases to be an employee. O. Reg. 57/92, s.7.

8 (1) Every licensee of an independent health facility shall maintain a record of qualifications and work history for:

(A) each person the licensee contracts with to manage the facility; and

(B) each person who is not a physician who the licensee contracts with to provide patient-related services in the facility.

(2) The record shall include a record of any registration with or licensing by the governing body of a health profession.

(3) Every licensee shall retain the record for a person the licensee contracts with for at least two years after the licensee ceases to contract with the person. O. Reg. 57/92, s.8.

9 (1) Every licensee shall maintain a declaration of professional standing for each physician who provides professional services in the independent health facility.

(2) A declaration of professional standing must include the following information:

1. The physician's name
2. The physician's registration number with the College of Physicians and Surgeons of Ontario
3. The physician's number registered with the Health Insurance Division of the Ministry of Health.
4. The class of the physician's licence issued under Part III of the Health Disciplines Act and any terms and conditions attached to it.
5. The physician's specialty.

(3) Every licensee shall give the Director a copy of each declaration of professional standing, forthwith after the obligation to maintain it begins under subsection (1).

(4) Every licensee shall give the Director a written statement of any change in a declaration of professional standing forthwith after the change.

(5) Subsections (3) and (4) do not apply with respect to physicians providing services on a temporary basis for less than twelve weeks. O.Reg. 57/92, s.9.

## **Patient Records**

---

10 (1) Every licensee of an independent health facility shall keep, for each person who is or was a patient, a health record relating to the health services provided in the facility.

(2) A patient's health record must include:

- (a) the patient's name and home address
- (b) the patient's date of birth
- (c) the patient's health number
- (d) the name of any attending physician or practitioner and his or her number as registered with the Health Insurance Division of the Ministry of Health
- (e) the name of any referring physician or practitioner and his or her number as registered with the Health Insurance Division of the Ministry of Health

(f) a history of the patient

(g) a written record of any orders for examinations, tests, consultations or treatments

(h) particulars of any examination of the patient

(i) any reports of examinations, tests or consultations including any imaging media from examinations and any physicians' interpretive or operative reports

(j) any reports of treatment including any physicians' operative reports

(k) any orders for and reports of any discharge of the patient from supervised care

(l) any consents; and

(m) any diagnoses of the patient.

(3)A patient's health record need not contain a history of the patient if the patient came to the independent health facility for diagnostic services only and received on such service.

(4)Every licensee shall ensure that every part of a patient's record has a reference on it identifying the patient or the record.

(5)If information in a patient's record is kept in the form of a chart, each entry in the chart must be dated and it must be initialled by the person authorizing the entry. O.Reg. 57/92, s.10.

11 (1) Every licensee shall retain a patient's health record or a copy of it for at least six years following:

(a) the patient's last visit; or

(b) if the patient was less than eighteen years old when he or she last visited the facility, the day the patient became or would have become eighteen years old.

(2)Despite subsection (1), a licensee is not required to retain imaging media from any examination other than a mammography for more than three years following:

(a) the patient's last visit; or

(b) if the patient was less than eighteen years old when he or she last visited the facility, the day the patient became or would have become eighteen years old.

(3)Every licensee shall retain the film from a mammography for at least ten years following the patient's last visit. O.Reg. 57/92, s.11.

(4)On the transfer of a licence under section 11 of the Act, the transferor of the licence shall transfer to the transferee of the licence, in a manner that will protect the privacy of the records, the records maintained under section 10 of this Regulation, and the transferee of the licence shall retain those records in accordance with this section.



Section 12 of the Regulation is revoked and the following substituted:

12 (1) No licensee shall allow any person to have access to any information concerning a patient that is not subject to the Personal Health Information Protection Act, 2004 except in accordance with subsection (3).

(2) The reference to “information concerning a patient” in subsection (1) includes information or copies from a health record, even if anything that could identify the patient is removed.

(3) A licensee may provide information described in subsection (1) to the following persons if anything that could identify the patient is removed from the information:

1. Any person, if the information is to be used for health administration or planning or health research or epidemiological studies and the use is in the public interest as determined by the Minister.

2. Cancer Care Ontario. O Reg. 346/04, s.2.

## **Books and Accounts**

---

12.1(1) This section applies to licensees of independent health facilities that are funded under section 24 of the Act, other than independent health facilities whose funding is based solely on the Ministry of Health publication titled “Schedule of Facility Fees”.

(2) Every licensee shall keep the following records in relation to the independent health facility:

1. Current financial records showing:

(i) the amounts paid by the Minister to the licensee under section 24 of the Act.

(ii) the revenue earned by the licensee from facility fees charged by the licensee for or in respect of services or operating costs that support, assist or are a necessary adjunct to the primary insured services set out in the licensee’s licence, and

(iii) the expenditures, assets and liabilities of the facility that relate to the costs paid by the Minister under section 24 of the Act.

2. A reporting record listing each service provided in the facility that is a primary insured service set out in the licensee’s licence and each service provided in the facility that is a funded service under section 24 of the Act and showing how many of each of such services are provided.

3. An annual income and expense statement showing the income received and the expenses incurred by the licensee in connection with the services mentioned in paragraph 2.

4. An annual inventory of the assets of the facility that have an acquisition cost exceeding \$3,500 and that relate to the costs paid by the Minister under section 24 of the Act.

(3) Every licensee shall ensure that the records required under section (2):

(a) are kept in the independent health facility; and

(b) are kept in a bound or loose-leaf book or are recorded by a system of mechanical or electronic data processing or any other information storage device.

(4) Every licensee shall ensure that any part of a record required under subsection (2) that relates to a period of time is retained for at least six years following the end of the period.

(5) Every licensee shall ensure that the accounts of the independent health facility are audited by a person licensed under the *Public Accountancy Act*. O.Reg. 283/94, s.1, *part*.

12.2 Every licensee of an independent health facility shall furnish such information and accounts as the Director may require. O. Reg. 283/ 94, s.1, *part*.

## Notices

---

13 Every licensee of an independent health facility,

(a) who decides to cease operating the facility at a future date shall give the Director, as soon as possible, written notice of the date; and

(b) who ceases to operate the facility shall give the Director, within seven days after the date the licensee ceases to operate the facility, written notice of the date. O. Reg. 57/92, s.13.

14 Every licensee of an independent health facility shall give the Director:

(a) if the licensee is a corporation, written notice of any change in the location of the licensee's head office within ten days after the change; and

(b) written notice of any change in the name under which the licensee carries on business within ten days after the change. O.Reg. 57/ 92, s.14.

## Miscellaneous

---

15 It is a condition of a licence that the licensee post the first page of the licence in a conspicuous place in the independent health facility. O. Reg. 57/92, s.15.

16(1) The fee for a licence is \$100.

(2) The fee for the transfer of a licence is \$100.

(3) The fee for the renewal of a licence is \$100. O. Reg. 57/92, s.16.

17 The administrative charge for the purposes of section 36 of the Act is \$50. O. Reg. 57/92, s.17.

# Appendix II Infection Prevention and Control (IPAC) Position Statement on Medical Gels – December 2017

Last Accessed: February, 2018



## POSITION STATEMENT



### Medical Gels

#### Background

Medical gels\* are used routinely in clinical practice during physician exams and diagnostic procedures. Contamination of medical gels from improper handling can result in serious health care associated infections such as bacteremia and septicemia.<sup>1-13</sup>

\*Medical Gels include ultrasound gels, lubricating gels, and medicated gels.

#### Position Statement

To provide for safe handling of medical gels, the following is recommended.

##### 1. INDICATIONS FOR PARTICULAR GELS

Indication	Type of Gel	
	Sterile	Non-sterile
Whenever a biopsy, puncture of any kind, or imminent surgery is to be performed regardless of body site	√	
Near a fresh surgical wound	√	
Procedure penetrating mucous membrane	√	
Endoscopies on intact mucous membranes	√	
Non-endoscopic procedure on mucous membranes (e.g., vaginal/ rectal exam)	√	
Non-intact skin	√	
Intact skin		√
Babies in NICUs and critical pediatric patients <sup>(11)</sup>	√	

##### 2. GENERAL CONSIDERATIONS

###### a) Sterile gel:

- Single use packaging is required for sterile gel as once opened, the contents are no longer sterile
- Sterile product should be used, employing the principles of asepsis

- Discard the opened package at end of procedure

#### **b) Non-sterile gels:**

- If multi-dose containers of non-sterile gel are used on intact skin, the container should be sealed correctly when not in use.<sup>11</sup>
- Dispensing nozzles must not come into direct contact with patients, staff, instrumentation, or the environment.<sup>5</sup>
- Non-sterile gel containers should never be topped up (i.e., refilled when partially empty).
- Containers of gel should never be washed and refilled for use but should be discarded when empty.<sup>11</sup>
- When a new bottle is opened, the bottle should be initialled by the opener, dated and discarded after 30 days or the manufacturer's expiry date if earlier.<sup>5</sup>
- Bulk containers of gel should not be used due to risk of contamination.

#### **c) Warming of Gel**

- Do not warm gel due to the increased risk of bacterial growth<sup>12</sup>.
- Gels are generally stored at room temperature unless manufacturer's recommendations state otherwise.

#### **d) Storage of Gels**

- Products must be stored in clean areas where they are protected from sources of contamination such as moisture, dust, insects, etc.
- Discard the medical gel if in doubt about integrity.

This position statement was developed by Standards and Guidelines Committee:

Chair: Madeleine Ashcroft

Principal Authors: Clare Barry, Madeleine Ashcroft, Brenda Dewar, Colleen Lambert, Anne Augustin, Mary-Catharine Orvidas

**Original Date:** March 2003

**Reviewed/Revised:** March 2005, 2008, 2016, December 2017

#### **Glossary/Definitions**

##### **As per the Canadian Standard Association (CSA):**

“SHALL” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard;

“SHOULD” is used to express a recommendation or that which is advised but not required; and

“MAY” is used to express an option or that which is permissible within the limits of the standard, an advisory or optional statement.

## References

1. Gaillot, O, Maruéjols, C, Abachin, E, et al. Nosocomial outbreak of *Klebsiella pneumoniae* producing SHV-5 Extended-Spectrum  $\beta$ -lactamase, originating from a contaminated ultrasonography coupling gel. *Journal of Clinical Microbiology*. [Online] 1998;36(5): 1357-1360. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC104828/> [Accessed 15 December 2017].
2. Weist, K, Wendt, C, Petersen, L.R, Versmold, H, Rüden, H. An outbreak of pyoderma among neonates caused by ultrasound gel contaminated with methicillin-susceptible *Staphylococcus aureus*. *Infection Control & Hospital Epidemiology*, 21(12). [Online] 2000;21(12): 761-764. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/11140910> [Accessed 15 December 2017].
3. Laboratory Center for Disease Control. Hand Washing, Cleaning, Disinfection and Sterilization in Health Care. *Canada Communicable Disease Report*. [Online] 1998;24(S8): . Available from: [http://publications.gc.ca/collections/collection\\_2016/aspc-phac/HP3-1-24-S8-eng.pdf](http://publications.gc.ca/collections/collection_2016/aspc-phac/HP3-1-24-S8-eng.pdf) [Accessed 15 December 2017].
4. Association for Professionals in Infection Control and Epidemiology, Inc. APIC text of infection control and epidemiology. (4th ed.). Washington, DC: APIC; 2016.
5. Health Canada. Notice to hospitals: Important safety information on ultrasound and medical gels: October 20, 2004. [Online]. Available from: [http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2004/14290a-eng.php?\\_ga=2.122675147.1796390989.1508201301-1911943693.1451929294](http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2004/14290a-eng.php?_ga=2.122675147.1796390989.1508201301-1911943693.1451929294). [Accessed 15 December 2017].
6. Capital Health Nova Scotia. Infection Prevention & Control (IPAC) Position Statement: Safe use of medical gels. December 2011. [Online]. Available from: <https://www.cdha.nshealth.ca/system/files/sites/94/documents/position-statement-medical-gels.pdf>. [Accessed 15 December 2017].
7. Hutchinson, J, Runge, W, Mulvey, M et al. *Burkholderia cepacia* infections associated with intrinsically contaminated ultrasound gel: the role of microbial degradation of parabens. *Infection Control & Hospital Epidemiology*. [Online] 2004;25(4): 291-296. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/15108725> [Accessed 15 December 2017].
8. Jacobson, M, Wray, R, Kovach, D, et al. Sustained endemicity of *Burkholderia cepacia* complex in a pediatric institution associated with contaminated ultrasound gel. *Infection Control & Hospital Epidemiology*. [Online] 2006;27(4): 362-366. Available from: <http://www.jstor.org/stable/10.1086/503343> [Accessed 15 December 2017].
9. Provenzano, D.A, Liebert, M.A, Steen, B, Lovetro, D, Somers, D.L. Investigation of current infection-control practices for ultrasound coupling gel: A survey, microbiological analysis, and examination of practice patterns. *Regional Anesthesia and Pain Medicine*. [Online] 2013;38(5): 415–424. . Available from: <https://www.ncbi.nlm.nih.gov/pubmed/23974866>

[Accessed 15 December 2017].

10. CDC Emergency Communication System. Safety communication: Bacteria found in other- sonic generic ultrasound transmission gel poses risk of infection. Clinician Outreach and Communication Activity (COCA) Clinician Resources: Clinical Reminder. [Online] 2012; April 20. Available from: <https://emergency.cdc.gov/coca/reminders/2012/2012apr20.asp> [Accessed 15 December 2017].
11. Oleszkowicz SC, Chittick P, Russo V, et al. Infections associated with use of ultrasound transmission gel: Proposed guidelines to minimize risk. *Infection Control & Hospital Epidemiology*. [Online] 2012;33(12):1235-1237. Available from <https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/infections-associated-with-use-of-ultrasound-transmission-gel-proposed-guidelines-to-minimize-risk/05EEBF7FC2B14778C3D0B1249D60425>. [Accessed 15 December 2017].
12. Spratt, H.G, Levine, D, Tillman, L. Physical therapy clinic therapeutic ultrasound equipment as a source for bacterial contamination. *Physiotherapy Theory and Practice*. [Online] 2014;30(7): 507–511. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/24678757> [Accessed 15 December 2017].
13. Shaban, R.Z.H.G, Maloney, S, Gerrard, J. Outbreak of health care-associated Burkholderia cenocepacia bacteremia and infection attributed to contaminated sterile gel used for central line insertion under ultrasound guidance and other procedures. *American Journal of Infection Control*. [Online] 2017;45(9): 954-958. Available from: <https://www.sciencedirect.com/science/article/pii/S019665531730843X> [Accessed 15 December 2017].



**Assessment of Care for Chronic Conditions  
Évaluation des soins lors de maladies chroniques**

If you want to fill out the survey online instead, please go to: [www.nrchealth.ca/PACIC2017](http://www.nrchealth.ca/PACIC2017) and enter your Web Access Code:

Pour répondre au sondage en ligne, allez à [www.nrchealth.ca/PACIC2017](http://www.nrchealth.ca/PACIC2017) et entrez votre code d'accès Web:

**Staying healthy can be difficult when you have a chronic illness. We would like to learn about the support you get from your kidney care team. This might include your kidney doctor, nurse, and any other member of your kidney care team. Your answers will be kept confidential and will not be shared with anyone else.**

Rester en bonne santé peut être difficile lorsqu'on a une maladie chronique. Nous aimerions savoir quel type d'aide avec votre maladie rénale chronique que vous recevez de votre équipe de soins. Cela peut inclure votre médecin pour les reins, votre infirmier/ère et tout autre membre de votre équipe de soins néphrologiques. Vos réponses seront traitées de manière confidentielle et ne seront pas partagées avec des tiers.

Think about the chronic kidney disease care you have received over the past 6 months. (If it's been more than 6 months since you've seen your doctor or nurse, think about your most recent visit.)

Pensez aux soins de la maladie chronique des reins que vous avez reçus au cours des 6 derniers mois. (Si cela fait plus de 6 mois que vous avez vu votre médecin ou votre infirmier/ère, pensez à votre dernière visite.)

Over the past 6 months, when I received care for my kidneys, I was:

Au cours des 6 derniers mois, lorsque j'ai reçu des soins pour mes reins:

1. Asked for my ideas when we made a treatment plan. On m'a demandé mon avis lors de l'élaboration du plan de traitement.
  - Almost Never Jamais
  - Generally Not Rarement
  - Sometimes Quelquefois
  - Most of the Time Très souvent
  - Almost Always Toujours

2. Given choices about treatment to think about. On m'a proposé diverses options de traitement auxquelles réfléchir.
  - Almost Never Jamais
  - Generally Not Rarement
  - Sometimes Quelquefois
  - Most of the Time Très souvent
  - Almost Always Toujours
3. Asked to talk about any problems with my medicines or their effects. On m'a demandé de parler de tout problème lié à mes médicaments ou à leurs effets.
  - Almost Never Jamais
  - Generally Not Rarement
  - Sometimes Quelquefois
  - Most of the Time Très souvent
  - Almost Always Toujours
4. Given a written list of things I should do to improve my health. On m'a donné une liste écrite des choses que je devrais faire pour améliorer ma santé.
  - Almost Never Jamais
  - Generally Not Rarement
  - Sometimes Quelquefois
  - Most of the Time Très souvent
  - Almost Always Toujours

5. **Satisfied that my care was well organized.** J'étais satisfait(e) de l'organisation des soins.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
6. **Shown how what I did to take care of my illness influenced my condition.** On m'a expliqué en quoi la manière dont je m'occupe de ma maladie influençait mon état de santé.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
7. **Asked to talk about my goals in caring for my illness.** On m'a demandé de parler des objectifs que je vise pour prendre soin de mon état de santé.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
8. **Helped to set specific goals to improve my eating or exercise.** On m'a aidé(e) à établir des objectifs personnels pour améliorer mon alimentation ou mon activité physique.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
9. **Given a copy of my treatment plan.** On m'a donné un exemplaire de mon plan de traitement.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
10. **Encouraged to go to a specific group or class to help me cope with my chronic illness.** On m'a encouragé(e) à participer à un groupe ou à un cours pour m'aider à gérer ma maladie chronique.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
11. **Asked questions, either directly or on a survey, about my health habits.** On m'a posé des questions sur mes habitudes de vie, soit directement, soit par questionnaire.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
12. **Sure that my doctor or nurse thought about my values and my traditions when they recommended treatments to me.** J'étais certain(e) que mon médecin ou mon infirmier(ère) tenait compte de mes valeurs et traditions lorsqu'ils me recommandaient des traitements.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
13. **Helped to make a treatment plan that I could do in my daily life.** On m'a aidé à établir un plan de traitement adapté à ma vie quotidienne.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
14. **Helped to plan ahead so I could take care of my illness even in hard times.** On m'a aidé(e) à m'organiser pour être en mesure de prendre soin de mon état de santé même dans les moments difficiles.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours



15. **Asked how my chronic illness affects my life.** On m'a demandé comment ma maladie chronique affecte ma vie.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
16. **Contacted after a visit to see how things were going.** On m'a contacté(e) après une consultation pour voir comment les choses allaient.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
17. **Encouraged to attend programs in the community that could help me.** On m'a encouragé(e) à participer aux programmes organisés localement, qui pourraient m'aider.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
18. **Referred to a dietitian, health educator, or counselor.** On m'a adressé à un(e) diététicien(ne), un(e) infirmier(ère) spécialisé(e) ou un(e) autre professionnel de la santé.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
19. **Told how my visits with other types of doctors, like the eye doctor or surgeon, helped my treatment.** On m'a expliqué comment mes consultations chez d'autres médecins, comme l'ophtalmologue (spécialiste des yeux), contribuaient à mon traitement.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
20. **Asked how my visits with other doctors were going.** On m'a demandé comment se déroulaient mes consultations avec d'autres médecins.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
21. **Asked what I would like to discuss about my illness at that visit.** On m'a demandé quels aspects de ma maladie je souhaitais aborder lors de cette consultation.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
22. **Asked how my work, family, or social situation related to taking care of my illness.** On m'a demandé comment mon travail, ma famille ou ma situation sociale influençait/jouait un rôle dans la prise en charge de ma maladie.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
23. **Helped to make plans for how to get support from my friends, family or community.** On m'a aidé(e) à m'organiser pour obtenir le soutien de mes amis, de ma famille, ou de ma communauté.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours
24. **Told how important the things I do to take care of my illness (e.g., exercise) were for my health.** On m'a dit combien mes efforts pour prendre soin de ma maladie (p.ex. activité physique) étaient importants pour ma santé.
- Almost Never** Jamais
  - Generally Not** Rarement
  - Sometimes** Quelquefois
  - Most of the Time** Très souvent
  - Almost Always** Toujours

25. **Set a goal together with my team for what I could do to manage my condition.** On a fixé ensemble un objectif pour ce que je pouvais faire pour gérer mon état de santé.

- Almost Never** Jamais
- Generally Not** Rarement
- Sometimes** Quelquefois
- Most of the Time** Très souvent
- Almost Always** Toujours

26. **Given a book or monitoring log in which to record the progress I am making.** On m'a donné un cahier ou carnet de bord dans lequel noter les progrès que je fais.

- Almost Never** Jamais
- Generally Not** Rarement
- Sometimes** Quelquefois
- Most of the Time** Très souvent
- Almost Always** Toujours

27. **Is there anything else you would like to share about your kidney care?**

Y a-t-il autre chose dont vous aimeriez nous faire part au sujet de vos soins rénaux?

---

---

---

---

---

---

---

*Copyright 2004 The MacColl Center for Health Care Innovation, Group Health Cooperative. The Improving Chronic Illness Care program is supported by The Robert Wood Johnson Foundation, with direction and technical assistance provided by Group Health's MacColl Center for Health Care Innovation.*

**Shared Decision Making Questionnaire (SDM-Q)**  
**Questionnaire sur la prise de décision partagée (SDM-Q)**

---

If you want to fill out the survey online instead, please go to: [www.nrchealth.ca/SDM2017](http://www.nrchealth.ca/SDM2017) and enter your Web Access Code:

Pour répondre au sondage en ligne, allez à [www.nrchealth.ca/SDM2017](http://www.nrchealth.ca/SDM2017) et entrez votre code d'accès Web:

---

The statements below relate to your decision-making process and the type of treatment you will receive if your kidneys stop working. This is also known as your modality choice. Les énoncés ci-dessous sont liés à votre processus décisionnel visant à déterminer le type de traitement que vous recevrez si vos reins cessent de fonctionner. Ceci est aussi connu comme votre choix de modalité de traitement.

For each statement please indicate how much you agree or disagree. Veuillez indiquer la mesure dans laquelle vous êtes d'accord ou en désaccord avec chaque énoncé.

1. **My kidney team made clear that I need to make a treatment modality choice.** Mon équipe de soins néphrologiques m'a dit clairement que je dois choisir une modalité de traitement.
  - Completely disagree Totalement en désaccord
  - Strongly disagree Largement en désaccord
  - Somewhat disagree Plutôt en désaccord
  - Somewhat agree Plutôt d'accord
  - Strongly agree Largement d'accord
  - Completely agree Totalement d'accord
  
2. **My kidney team wanted to know how I want to be involved in making the decision.** Mon équipe de soins néphrologiques voulait savoir comment je voudrais participer au processus décisionnel.
  - Completely disagree Totalement en désaccord
  - Strongly disagree Largement en désaccord
  - Somewhat disagree Plutôt en désaccord
  - Somewhat agree Plutôt d'accord
  - Strongly agree Largement d'accord
  - Completely agree Totalement d'accord
  
3. **My kidney team told me that there are different options for treating kidney failure.** Mon équipe de soins néphrologiques m'a dit qu'il existe différentes options pour soigner l'insuffisance rénale.
  - Completely disagree Totalement en désaccord
  - Strongly disagree Largement en désaccord
  - Somewhat disagree Plutôt en désaccord
  - Somewhat agree Plutôt d'accord
  - Strongly agree Largement d'accord
  - Completely agree Totalement d'accord

4. **My kidney team explained the advantages and disadvantages of each type of treatment.** Mon équipe de soins néphrologiques m'a expliqué les avantages et les inconvénients de chaque type de traitement.
- Completely disagree** Totalemment en désaccord
  - Strongly disagree** Largement en désaccord
  - Somewhat disagree** Plutôt en désaccord
  - Somewhat agree** Plutôt d'accord
  - Strongly agree** Largement d'accord
  - Completely agree** Totalemment d'accord
5. **My kidney team helped me understand all the information.** Mon équipe de soins néphrologiques m'a aidé à comprendre toute l'information pertinente.
- Completely disagree** Totalemment en désaccord
  - Strongly disagree** Largement en désaccord
  - Somewhat disagree** Plutôt en désaccord
  - Somewhat agree** Plutôt d'accord
  - Strongly agree** Largement d'accord
  - Completely agree** Totalemment d'accord
6. **My kidney team asked me which treatment option I prefer.** Mon équipe de soins néphrologiques m'a demandé l'option de traitement que je préfère.
- Completely disagree** Totalemment en désaccord
  - Strongly disagree** Largement en désaccord
  - Somewhat disagree** Plutôt en désaccord
  - Somewhat agree** Plutôt d'accord
  - Strongly agree** Largement d'accord
  - Completely agree** Totalemment d'accord
7. **My kidney team and I thoroughly weighed the different treatment options.** Mon équipe de soins néphrologiques et moi avons soigneusement pesé le pour et le contre des différentes options de traitement.
- Completely disagree** Totalemment en désaccord
  - Strongly disagree** Largement en désaccord
  - Somewhat disagree** Plutôt en désaccord
  - Somewhat agree** Plutôt d'accord
  - Strongly agree** Largement d'accord
  - Completely agree** Totalemment d'accord
8. **My kidney team and I selected a treatment option together.** Mon équipe de soins néphrologiques et moi avons choisi ensemble une option de traitement.
- Completely disagree** Totalemment en désaccord
  - Strongly disagree** Largement en désaccord
  - Somewhat disagree** Plutôt en désaccord
  - Somewhat agree** Plutôt d'accord
  - Strongly agree** Largement d'accord
  - Completely agree** Totalemment d'accord
9. **My kidney team and I reached an agreement on planning next steps.** Mon équipe de soins néphrologiques et moi sommes entendus sur la planification des prochaines étapes.
- Completely disagree** Totalemment en désaccord
  - Strongly disagree** Largement en désaccord
  - Somewhat disagree** Plutôt en désaccord
  - Somewhat agree** Plutôt d'accord
  - Strongly agree** Largement d'accord
  - Completely agree** Totalemment d'accord

10. **My kidney team informed me that hemodialysis in a dialysis unit is an option for treating chronic kidney disease.** Mon équipe de soins néphrologiques m'a informé(e) que l'hémodialyse dans une unité de dialyse était une option pour le traitement de l'insuffisance rénale chronique.
- Completely disagree **Totalement en désaccord**
  - Strongly disagree **Largement en désaccord**
  - Somewhat disagree **Plutôt en désaccord**
  - Somewhat agree **Plutôt d'accord**
  - Strongly agree **Largement d'accord**
  - Completely agree **Totalement d'accord**
11. **My kidney team informed me that home hemodialysis is an option for treating chronic kidney disease.** Mon équipe de soins néphrologiques m'a informé(e) que l'hémodialyse à domicile était une option pour le traitement de l'insuffisance rénale chronique.
- Completely disagree **Totalement en désaccord**
  - Strongly disagree **Largement en désaccord**
  - Somewhat disagree **Plutôt en désaccord**
  - Somewhat agree **Plutôt d'accord**
  - Strongly agree **Largement d'accord**
  - Completely agree **Totalement d'accord**
12. **My kidney team informed me that peritoneal dialysis is an option for treating chronic kidney disease.** Mon équipe de soins néphrologiques m'a informé(e) que la dialyse péritonéale était une option pour le traitement de l'insuffisance rénale chronique.
- Completely disagree **Totalement en désaccord**
  - Strongly disagree **Largement en désaccord**
  - Somewhat disagree **Plutôt en désaccord**
  - Somewhat agree **Plutôt d'accord**
  - Strongly agree **Largement d'accord**
  - Completely agree **Totalement d'accord**
13. **My kidney team informed me that kidney transplantation is an option for treating chronic kidney disease.** Mon équipe de soins néphrologiques m'a informé(e) que la transplantation rénale était une option pour le traitement de l'insuffisance rénale chronique.
- Completely disagree **Totalement en désaccord**
  - Strongly disagree **Largement en désaccord**
  - Somewhat disagree **Plutôt en désaccord**
  - Somewhat agree **Plutôt d'accord**
  - Strongly agree **Largement d'accord**
  - Completely agree **Totalement d'accord**
14. **My kidney team informed me about my options to choose not to include any dialysis as part of my care plan (comprehensive conservative renal care).** Mon équipe de soins néphrologiques m'a informé(e) que mes options me donnaient le choix de n'inclure aucune dialyse dans le cadre de mon plan de soins (traitement rénal conservateur).
- Completely disagree **Totalement en désaccord**
  - Strongly disagree **Largement en désaccord**
  - Somewhat disagree **Plutôt en désaccord**
  - Somewhat agree **Plutôt d'accord**
  - Strongly agree **Largement d'accord**
  - Completely agree **Totalement d'accord**

15. Is there anything else you would like to share about your kidney care?

Y a-t-il autre chose dont vous aimeriez nous faire part au sujet de vos soins rénaux?

---

---

---

---

---

---

---

---

---

---

Questions 1 - 9

© Martin Härter & Isabelle Scholl, University Medical Center Hamburg-Eppendorf, Germany February 2012

